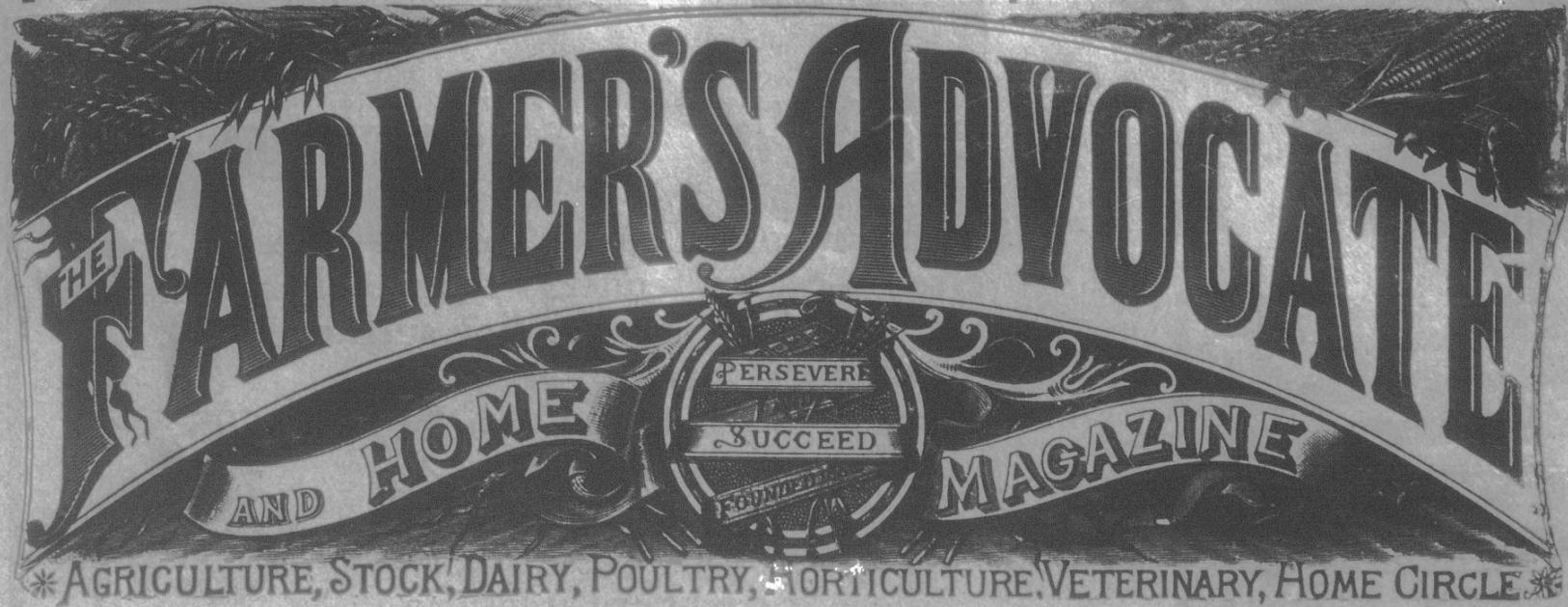


PUBLISHED EVERY WEEK. \$1.50 PER YEAR.

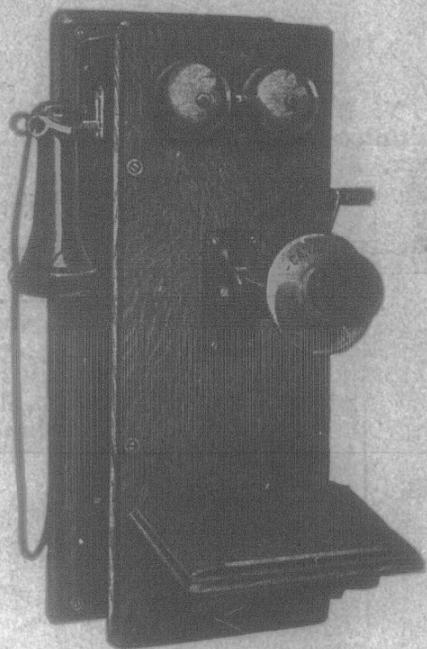


ENTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1876.

VOL. LI.

LONDON, ONTARIO, OCTOBER 12, 1916.

No. 1255



High Quality First, Last and All The Time

The maintenance cost of a rural telephone system depends on the quality of the equipment. The better the equipment the lower the cost for repairs and the better the service rendered the subscribers. The big point to remember first, last and all the time in buying telephones is high quality.

The system that installs Canadian Independent Telephones puts the very highest quality instruments on their lines and insures the highest class service at the lowest maintenance cost.

Canadian Independent Telephones

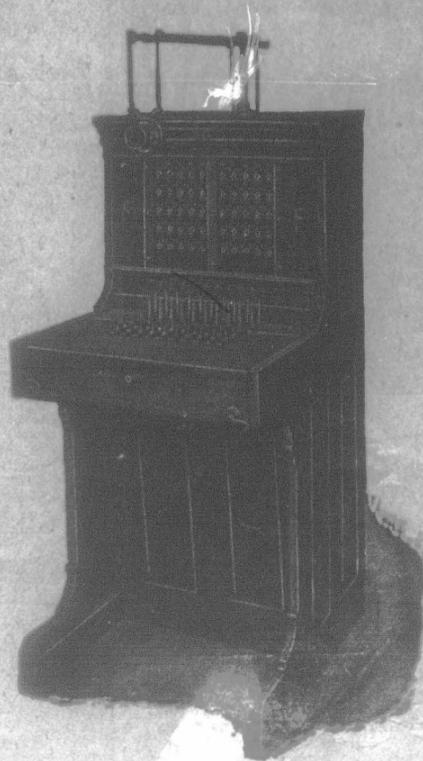
have earned a reputation for high quality by years of satisfactory service on independent rural telephone systems in Ontario. We would be pleased to refer you to the secretaries of these systems, or have you test our telephones alongside other makes on your own lines. Ask about our Free Trial Offer.

Canadian Independent Telephones are "Made in Canada" and fully guaranteed. We make everything in telephones—magneto telephones for rural, party line service; automatic telephone systems for factories, public buildings, etc.

We supply everything in telephone equipment and materials and guarantee them to be of first quality.

Our switchboards are of the latest and most up-to-date design, and enable the operator to give the quickest and most efficient service.

Write for our No. 6 Bulletin. It completely describes our modern rural telephones. Also other literature describing our automatic systems, switchboards, etc., mailed free on request.



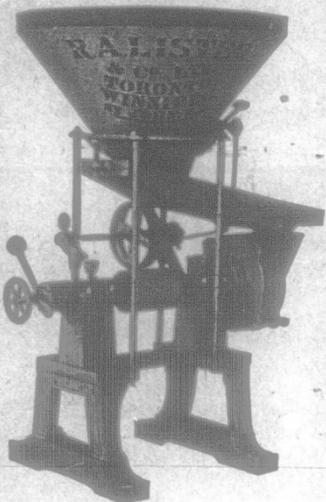
Canadian Independent Telephone Co., Limited

261 Adelaide Street West, Toronto



Lister Engines, Threshers, Silos, Ensilage Cutters, Milkers, Sprayers, Electric Light Plants, Melotte Separators.

The Grinder with the Guarantee



R.A. Lister & Co., Ltd.
Dept. G,
58-60 Stewart St., TORONTO

TRAPPERS!
Send your
RAW FURS
to **JOHN HALLAM**

and receive highest cash prices. We send money the same day the furs are received. Charge no commissions—and pay all charges. We have paid out millions of dollars to thousands of trappers in Canada who send their furs to us because they know they get a square deal, and receive more money for their furs. You will also. We buy more furs from trappers for cash than any other five firms in Canada. Hallam's Trapper Guide (56 pages) Hallam's Sportsmen's Catalogue Hallam's Raw Fur Quotations Hallam's Fur Style Book (32 pages) **FREE** Sent free on request. Address as follows: **JOHN HALLAM Limited**
117 Hallam Building, Toronto.



LONDON CONCRETE MACHINERY CO., Ltd.
Dept. B, London, Ontario
World's Largest Manufacturers of Concrete Machinery

OATS AND POTATOES

For Sale in Car Lots
LAING BROS., Winnipeg, Man.

The 1917 Ford Touring Car

THE old, reliable Ford Chassis—Stream line effect—crown fenders—tapered hood—new radiator with increased cooling surface.

Chassis - \$450	Coupelet - \$695
Runabout 475	Town Car 780
Touring Car 495	Sedan - 890

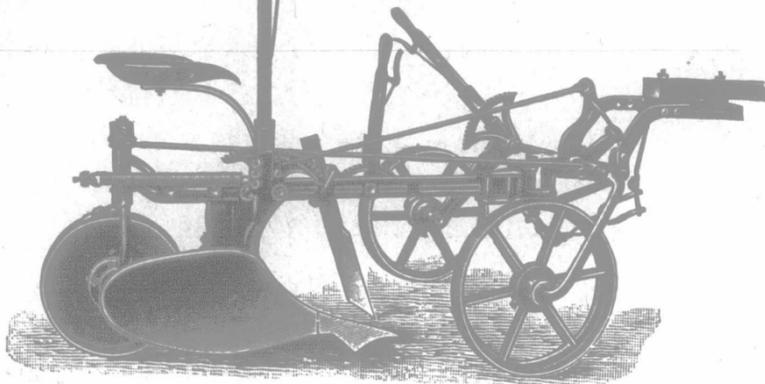
f.o.b. Ford, Ontario

Ford Motor Company of Canada, Limited
Ford, Ontario

Assembly and Service Branches at St. John, N. B.; Montreal, Que.; Toronto, Ont.; Hamilton, Ont.; London, Ont.; Winnipeg, Man.; Saskatoon, Sask.; Calgary, Alta.; Vancouver, B. C.

No. 9
ROB ROY RIDING PLOW

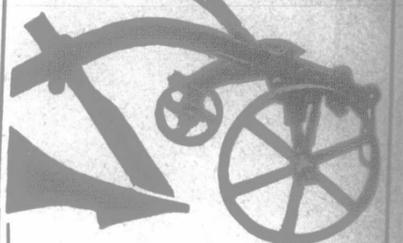
Direct from manufacturer to farmer. Save the agents commission. Write for catalogue and prices.



Dick Agricultural Works, Bolton, Ontario

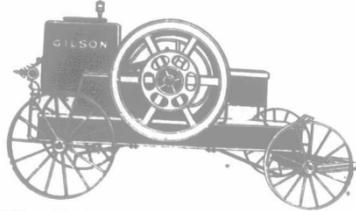
THE DICK

Lever Plow Wheel Attachment



will fit all makes of single walking plows. Any boy that can drive a team is capable, with this Attachment, of doing as good work as the best plowman. Write for full particulars and illustrated catalogue.

DICK AGRICULTURAL WORKS
Bolton, Ontario



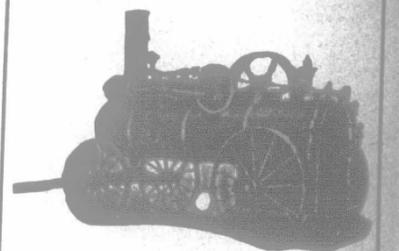
This Engine Will Cost You Nothing

You need an engine—get a Gilson on our new easy payment plan, and it will pay for itself. You have the work for it to do this fall and winter, help is scarce and high-priced—save yourself a lot of worry and enjoy that "feeling of security" which is such a definite part of the staunch, reliable

Gilson Engine.

Gilson Engines have long enjoyed an indisputable reputation for dependability, power, simplicity and economy. This year finds us with an even more attractive proposition for the discriminating buyer. Prices of everything you have been buying have been soaring, but, by careful management, we are able to furnish Gilson Engines at remarkably low prices. Write to-day for catalogue, price, and easy payment plan, stating what size you are interested in.

GILSON MFG. CO., LIMITED, 259 York St., Guelph, Ont.



Rebuilt Portable, Traction Engines and Threshers

A number of good rebuilt Portable and Traction Engines suitable for silo filling and Threshing, also a few good separators for sale cheap.

The Robt. Bell Engine & Thresher Company, Limited
SEAFORTH ONTARIO

"1900" Gravity Washer

Sent free for one month's trial. Write for particulars.

"1900" WASHER COMPANY
357 Yonge Street Toronto, Ont.
(Factory, 79-81 Portland St., Toronto)

H. Fraleigh, Forest

LINSEED MEAL
FLAX SEED
OIL CAKE
COTTON SEED MEAL

Write For Prices

YOU CAN ASSURE YOUR FAMILY A MONTHLY INCOME FOR LIFE

or assure yourself an income during your old age by means of an **Imperial Monthly Income Policy**

Write for particulars now and mention the Farmer's Advocate. Address: **IMPERIAL LIFE ASSURANCE CO.,** of Canada, Head Office: TORONTO



Make that Stump Lot Earn a Profit,

Blast out the boulders, blow up the stumps—and you have a fertile field where waste land existed before.

Use C.X.L. Stumping Powder

the most effective and economical means of blasting out stumps, digging ditches and tree holes and doing excavating work on the farm.

There is big money in agricultural blasting. Write for proposition. Send for our Free Booklet "Farming with Dynamite".

Canadian Explosives, Limited

808 Transportation Bldg., Montreal. Western Office, Victoria, B.C. 5



NEPONSET Paroid ROOFING

You cannot afford to experiment with cheap roofings, when Paroid, though it may cost a little more, is the least expensive roofing in the world.

WRITE FOR BOOKLET

Paroid Roofing is made of the best felt, thoroughly saturated through and through with nature's own Waterproofing—Asphalt, and is finished in Grey, Red, or Green. Burning embers dropped on it, die out—Paroid is a positive fire-resistant, and is easy to lay. Look for the Paroid Roll—there are 2,000 Neponset dealers throughout Canada.

Write for FREE Booklet—"Repairing and Building."

BIRD & SON
Dept. B
70 King St.
Hamilton,
Ont.



Look for the Paroid Roll

When Building—specify

MILTON BRICK

Smooth, Hard, Clean-Cut. Write for booklet.

MILTON PRESSED BRICK COMPANY
Milton, Ontario

SEED WANTED

We are buyers of ALSIKE, RED CLOVER, ALFALFA, WHITE BLOSSOM, SWEET CLOVER, and TIMOTHY Seed. If any to offer send samples and we will quote you our best price F.O.B. your station.

TODD & COOK
Seed Merchants
Stouffville, Ont.

Bales at Highest Speed—Lowest Cost

UNBEATABLE records for baling greatest amount of hay in the shortest amount of time and at lowest expense for power and crew being made constantly with

The Admiral Motor Hay Press—The Hay Press With the Hustle

Has the hurry built right into it. Simple as A.B.C. Free from needless parts. Smooth running—easy on the engine that runs it. Engine absolutely dependable, thoroughly tested for all conditions of field work. Plunger operates on the power which comes through a long lever working against the sharp grip behind the plunger head. Result, each stroke is powerful, with no back kick. Many exclusive features. A big money maker for the man who uses one. J.N. Inman & Sons, (Haybalers), Independence, Mo., say: "Bales 90-95-lb. bales in 55 minutes from windrow, and 70-lb. bales in 50 minutes from stack. Have made big money." Hundreds have had the same experience.



Admiral Hay Press Co., Box F Kansas City, Mo.

AGRICULTURAL LIME

The farmers of England have limed their meadows and pasture lands in the fall for hundreds of years. Why?

You lime yours and the question will be answered; also lime your plowed clay land this fall. You will find it more tillable and earlier to get on to. That means earlier seeding, and be sure to seed clover where you put lime. Write us for prices, if we have no agent in your locality.

HENDERSON FARMERS' LIME CO., WOODSTOCK, ONT.

R.M.S.P.

FORTNIGHTLY SAILINGS

BY Twin-Screw Mail Steamers

FROM ST. JOHN (N.S.) AND HALIFAX (N.S.)

TO THE WEST INDIES

Excellent Accommodation for 1st, 2nd and 3rd Class Passengers.

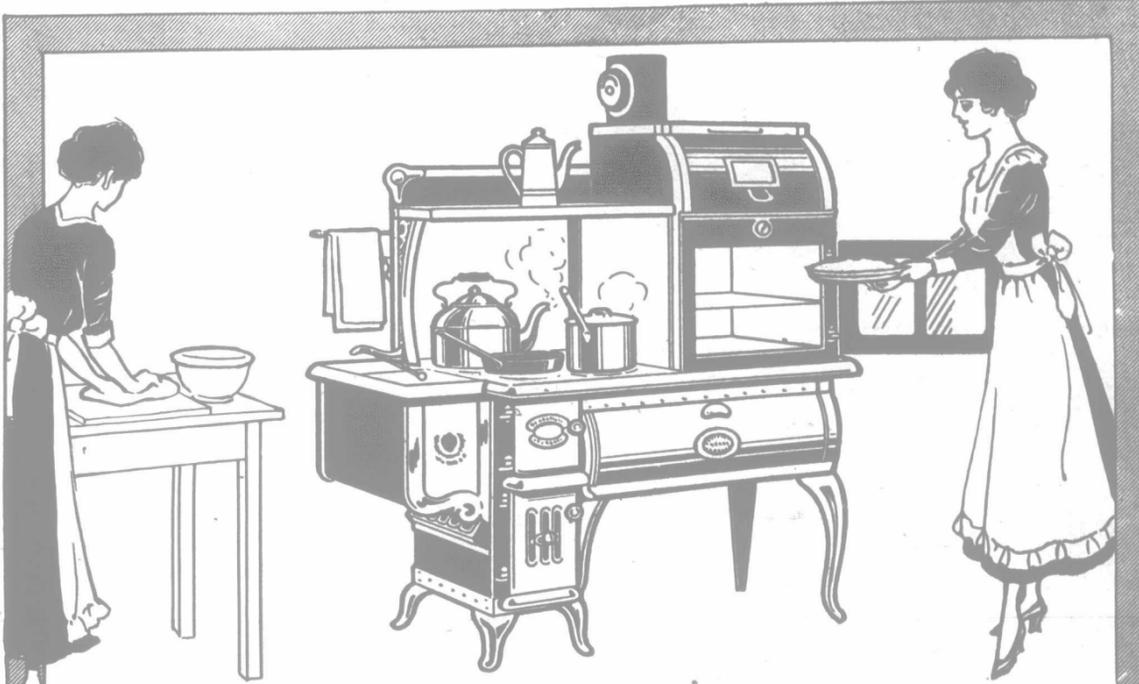
SPECIAL FACILITIES FOR TOURISTS

NEXT SAILING FROM HALIFAX:

R.M.S.P. "Chignecto" October 20, 1916

APPLY TO The Royal Mail Steam Packet Co., 57-59, Granville St., HALIFAX (N.S.)

OR TO THE Local TICKET AGENCIES.



The Handy-height Oven makes a world of difference

Here is a big step in Kitchen reform. Ranges with bend-over ovens made tired backs. Just try to count the many, many times dishes have to be lifted in and out of an oven. Count the times one had to stoop to see how things were baking. Modern woman has voted that stooping out of existence. The range of to-day must have a Handy-height oven.

For, a Lighter Day has dawned in the kitchen.

This new coal range has an oven that meets you at standing height. There is no bending over. Once things are placed in the oven they stay there until they are done. You don't bend down from time to time to see how they are doing. You simply watch them through the Clearview Door. Stooping is done away with absolutely. The thermometer, too, is up in plain sight.

And that Clearview Oven Door! Cakes have a far better chance when there is no jarring of the door. Isn't it a fine idea to save the constant disturbing of light cookery?

The Lighter Day Coal Range burns either coal or wood. It has six pot-holes, two of which are fully enclosed. Cooking odors can be kept from floating through the house.

This Lighter Day range is now in thousands of Canadian homes. Over 700 stores carry them in stock.

If you have not yet seen one, you can hardly realize the world of difference a Lighter Day would make in your work. Let us show you as well as we can in our Booklet, "A Lighter Day in the Kitchen."

This is a booklet of photos showing a housewife using the many new labor-saving ideas of this wonderful range.

LIGHTER DAY HIGH OVEN COAL RANGE

Mail the coupon for a free copy.

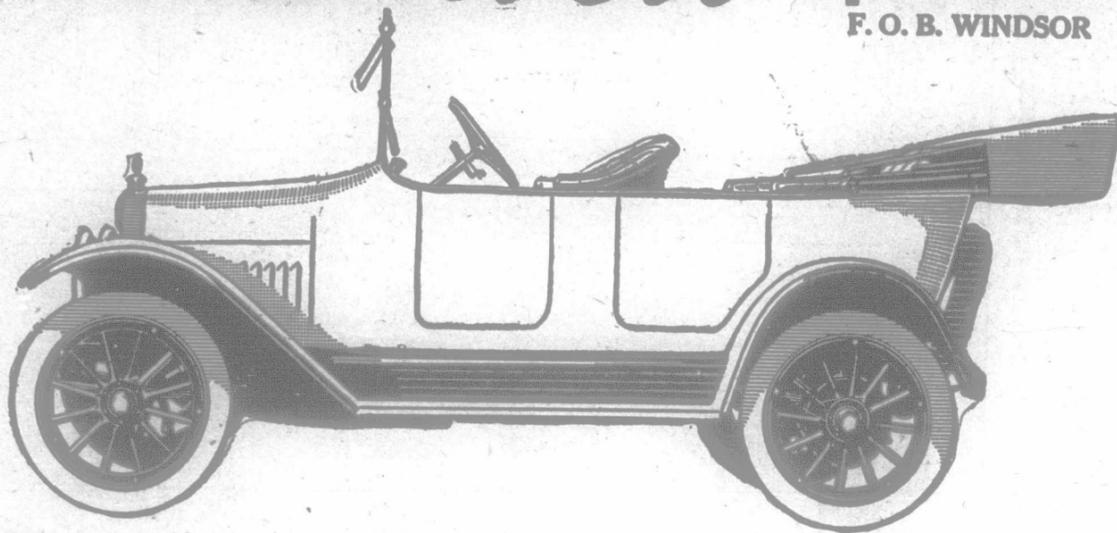
CLARE BROS., & COMPANY, LIMITED, PRESTON, ONT.

Send free book of photos of Lighter Day Range

F. A. Clare Bros. & Co., Limited, Preston

Maxwell \$850

F. O. B. WINDSOR



*We make it better—
sell it for less—*

*—that's why the
Maxwell is so popular!*

A good, honestly built car, designed and constructed to stand continuous hard usage—and to give such service at the lowest possible cost—that is the Maxwell.

In addition you have every convenience, such as electric starter and lights, demountable rims, one man top, irreversible steering gear, speedometer, instrument board, gasoline gauge, dash lamp, rain-proof windshield, etc.

You enjoy driving the Maxwell. It is so very easy to operate, has so much life, quick pickup—and power for any road. Your wife or daughter can drive it with perfect satisfaction, too.

Next comes the price: \$850 for the touring car, and \$830 for the roadster. Compare these prices with those you pay for other cars offering the same advantages.

And the upkeep expense is in keeping with this low first cost. Twenty-five miles per gallon of gasoline—and from six to eight thousand miles per set of tires—surely that eliminates any thought of extravagance in driving the Maxwell.

Remember that the Maxwell is in no way a compromise. It is the kind of a car you have in mind—the ultimate car. And the price enables you to own such a car without the heavy investment required for most cars offering the same features of construction and equipment.

We probably have a dealer near you who will gladly show you the Maxwell and explain all about it. If you will let us hear from you, we will put you in touch with him quickly.

Write for catalogue—C6



Maxwell
Motor Company of Canada, Ltd.
WINDSOR, ONTARIO





Note the construction of the Klosed-Krotch Union Suit—sensible, comfortable, convenient.

A WATSON Klosed-Krotch union suit can by no chance prove uncomfortable. The Krotch is closed like a pair of drawers. Therefore, there is no binding, gapping or sagging. And there are no buttons between the legs, no loose bunching folds to rub and get into the crease of the seat. And yet as you see the seat flap is so constructed that it folds back, opening the entire seat.

Sold by nearly all good haberdashers.

Watson's SPRING NEEDLE RIBBED Mfg. Co.
UNDERWEAR

The Watson Manufacturing Company, Limited, Brantford, Ontario. 104

"Take No Thought For The Morrow"

A modern life insurance policy will make it easily possible for any man to obey this precept.

Most of our worry is due to dangers that threaten those who are dependent upon us rather than to concern for our own fate.

Many brave men, who would not lose a wink of sleep thinking over their own future, spend anxious hours dreading what may happen their helpless children should death make them orphans.

The Mutual of Canada issues a policy protecting both the assured and his family. It is payable to the assured's dependents should he die before reaching a specified age, say 60, 65 or 70 years.

But should he attain that age, by which-time his family would be self-dependent, the proceeds of the policy are payable to the assured himself.

This modern policy makes it possible to lay aside anxious thought both for one's self and for others. We will gladly furnish rates on application.

Is there a Mutual Policy in Your Home?

The Mutual Life
Assurance Company of Canada
Waterloo, Ontario

82

Official Experiments

Have proved conclusively that an application in the Fall of

Sydney Basic Slag

to grass lands, enormously increases their meat and milk producing value.

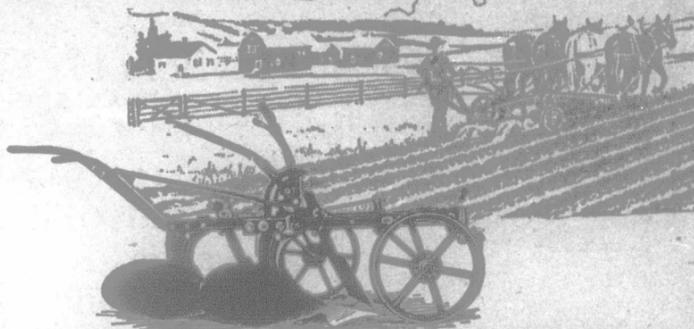
Prof. Somerville of Oxford University experimented on acre plots, and during a period of nine years the plot treated with BASIC SLAG produced an increase of 456 lbs. mutton over that of any other plot. This plot had received one application of Basic Slag at a cost of \$8. Do you know of any investment that will yield such returns?

You are keenly interested in producing at the greatest profit possible, and whether it be meat or dairy products that interest you most, one thing is certain, SYDNEY BASIC SLAG will help you to make more money.

Do not let this fall go by without making a trial of these goods. If we have no agent in your locality we will ship freight prepaid to your nearest station at \$20 per ton, cash with order.

We have just published a very interesting and descriptive booklet, which will be sent free on application to

The Cross Fertilizer Co., Limited
Sydney, Nova Scotia



See This Oliver Plow

PLOWING is hard work any way you look at it. Hard on the plowman, hard on the horses, hard on the plow. To make it easier without lowering the quality of the work or increasing the price of the outfit is the aim of the men who build Oliver plows for Eastern Canada.

To this end, the Oliver walking gang plow is designed. Two good horses and one man can plow two furrows at a time with this plow. By means of two levers with fine-notched quadrants, the depth and width of cut can be instantly adjusted to suit varying conditions in the field. The height of both furrow and land wheel can be changed, one at a time or both together, giving the driver absolute control of the depth and width of this cut at all times, without stopping the team. Another arrangement enables him to shift the furrow wheel sideways to straighten a furrow. Large or small bottoms may be used, and the distance between the beams changed to accommodate the change in bottoms.

See this plow first when you are ready to buy. It may save you lots of looking. If your work demands some other design, the IHC local agent who shows you the walking gang can show you an Oliver plow, either walking or riding, which will meet your needs and do for you the kind of work you want. But, whatever plow you are using, see the Oliver walking gang or write the nearest branch house for full information.

International Harvester Company of Canada, Ltd.

BRANCH HOUSES

At Brandon, Calgary, Edmonton, Estevan, Hamilton, Lethbridge, London, Montreal, N. Battleford, Ottawa, Quebec, Regina, Saskatoon, St. John, Winnipeg, Yorkton



Hard-Hitting Big Game Cartridges

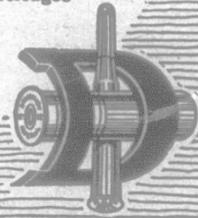
are the only sure kind to make your hunting trip the success you expect it to be. Velocity and accuracy are the two important features in big game ammunition.

Dominion Cartridges

embody fully these requirements and supplement them with the reliability that comes from high quality materials, skillful workmanship and careful testing. A sensitive primer that flashes deep into the powder gives instant response to trigger and aim and makes Dominion the high-power ammunition for caribou, moose, bear, deer and all Canadian big game. A sure "hit and stop" is loaded into each cartridge to back up the sportman's aim. No matter what the shooting conditions Dominion Cartridges meet the requirements.

Write today for our attractive picture "A Chip of the Old Block."

Dominion Cartridge Co., Limited,
829 Transportation Bldg., Montreal.
Dominion—the only Canadian-made ammunition.



Simonds Crescent Ground Cross-Cut Saws

This saw will cut 10 per cent. more timber, same time and labor being used, than any other brand of Cross-Cut Saw made. This guarantee has stood for thirty years.

There are two reasons for the superiority of the Simonds Saw—grinding and steel.

A saw that does not bind in the kerf cuts easy; a saw that binds is a bother. Crescent grinding insures saws ground so that the teeth are all of even thickness throughout the length of the saw, and the blade tapered for clearance to the greatest degree consistent with a strength of blade which enables the operator to push as well as pull the saw. Crescent grinding is an exclusive process, used only on Simonds Cross-Cut Saws.

Simonds Canada Saw Company, Limited, Montreal, Que. Vancouver, B.C. St. John, N.B.
Always buy a saw with a sharp cutting edge—not a soft saw—because the former lasts longer and keeps its edge better

Simonds Steel will take a temper to hold a cutting edge and stay sharp for a longer time than any saw not made of Simonds Steel.

There are two reasons why you should buy Simonds Crescent Ground Cross-Cut Saws—Quality and Price.

Superior quality makes your cutting as easy as cutting can be.

The price is moderate for the saw value given. It is about the same as you would pay for an inferior saw; therefore, why not get the best for your money—a saw with the manufacturer's name, "Simonds" on it. It is your guarantee and your protection. The saw illustrated, Simonds Crescent Ground Saw, No. 22, is the most satisfactory saw for all usual sawing purposes. Insist on your hardware dealers supplying you with Simonds Saws. Write to the factory for further particulars.

My Dad wears 'em

THE UNION DAILY
GREAT CANADIAN SUCCESS
Bob Long's epic north industry

BOB LONG
UNION MADE
GLOVES OVERALLS

Known from Coast to Coast
R.G. LONG & CO. LIMITED
WINNIPEG TORONTO

EVERY FARMER SHOULD HAVE A
MARTINDITCHER
AND ROAD GRADER

PRICE ONLY \$47.50

Own your own Ditching Machine

Do your draining when you need it. Send to-day for full particulars of this machine. 1854

CATALOGUE FREE

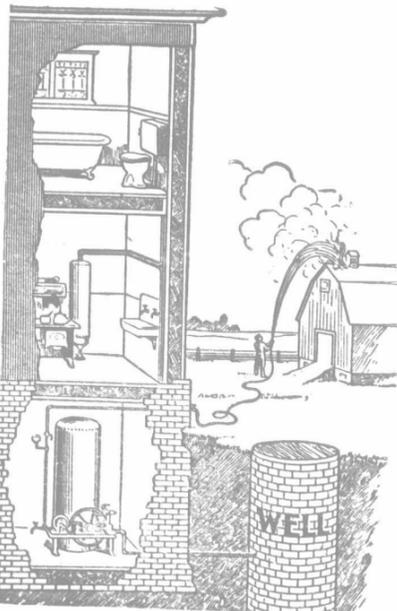
Preston Car & Coach Co. Limited
97 DOVER STREET, PRESTON, ONTARIO

RUNNING WATER FOR EVERY FARM NEED

A strictly modern hot and cold water system for your home and farm

No matter where you live, we can send you an Empire Outfit that will not only give your home a modern bathroom with all fittings, but will provide running water for all other farm needs as well. To-day is the day to find out how an

Empire WATER SUPPLY System



can be adapted to your particular requirements. Wouldn't you like to have hot and cold water always ready in the kitchen? Wouldn't you like running water in the barn and out-buildings, water at good pressure for fire protection, water to lighten farm work? It is easier and cheaper to get than you think. The Empire Outfit, including all piping, is sent complete, ready to set up. Do away with the disease-breeding outdoor cesspool and the hard water-lugging methods.

Write for our free booklet. Tell us your needs, and let us give you a free estimate.

Empire Mfg. Company Limited
East London Ontario

The Gurney-Oxford SENIOR



\$38.50 Freight paid as far West as Fort William.

Straight from the great Gurney-Oxford foundries, this splendid Gurney-Oxford "Senior" steel range with divided flues, special fire box, heat-enveloped oven, is by far the best value you can buy in Canada to-day. Six 9" covers, 20" oven, right hand reservoir, warming closet, weight 420 lbs., best blue steel body, immensely strong and durable.

Send for our new complete Catalogue with prices

Shows everything in the stove, range and heater line of the famous Gurney-Oxford make, admittedly Canada's best since 1845. Write for a copy today.

Gurney Foundry Co. Ltd.
Dept. 323 TORONTO
Montreal Hamilton Winnipeg
Calgary Vancouver S.I.B.

This Guarantees Your

If your Gurney-Oxford stove, for any reason fails to give satisfactory results, we agree to refund the price paid us for the Stove any time within 100 days of the date of purchase. Could you be safer?



Don't Haul Bricks IN JANUARY

Now is the time to haul while the weather and roads are good. Then you are all ready to start building that new home or barn away ahead of the other fellows next Spring. We might also say that

Interprovincial Pressed Brick

is the brick you should haul, that is, if it is a faced brick you are looking for. They are made of extra heavy shale, natural colors, and have fine cut edges and a very smooth surface.

Write for a set of samples and see for yourself what a strong, handsome brick "Interprovincial" really is.

Write to-day—all charges paid by us.
Interprovincial Brick Co. of Canada Limited
GOODYEAR BLDG., TORONTO, ONT.

CHURCH BELLS CHIMES AND PEALS

MEMORIAL BELLS A SPECIALTY FULLY WARRANTED
McSHANE BELL FOUNDRY CO.
BALTIMORE, Md., U. S. A.
Chicago Office: Room 84, 154 W. Randolph St.
Established 1856



STAMMERING

or stuttering overcome positively. Our natural methods permanently restore natural speech. Gradual pupils everywhere. Write for free advice and literature.

THE ARNOTT INSTITUTE
BERLIN, CANADA

Oxford
OR



eight paid
far West as
t William.

at Gurney's
splendid
"steel
es, special
ed oven, is
ou can buy

right hand
set, weight
steel body,
durable.

plete
es
e stove,
of the
I make,
st since
today.

Co. Ltd.

Winnipeg
over 5.15.8

is YOUR

ve, for any
ory results,
paid us for
days of the
ou be safer?

WILLY-OXFORD

ricks

RY

e the weather
you are all
new home or
r fellow next
that

ncial

pick

that is, if it
ig for
heavy shale
it edges and

and see for
some brick

paid by us.

ck Co.

ited

TO, ONT. at



ING

natural mo-
ch. Gradu-
advice and

TUTE

DA

The Farmer's Advocate and Home Magazine

PERSEVERE AND SUCCEED

ESTABLISHED 1866

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875

LI.

LONDON, ONTARIO, OCTOBER 12, 1916.

1255

EDITORIAL.

Keep the plow going daily.

He who plans best farms best.

Be patriotic—be a true Canadian.

If in need of extra winter feed, buy early.

Pork is dear, but so is feed. Feed carefully.

Read the account of the corn experiment in this issue.

Do not forget the farm when planning careers for the boys.

If you must cut down the stock cull carefully. Keep the best.

Winter will be along in about six weeks. Will the stable be ready?

A flock of hens without a hen-house is generally a neglected nuisance.

Four Zeppelins dropped in England within a month. The trip is not as safe as it was.

Keep the hired man and keep the stock rather than sell the stock and "sack" the man.

Organize for a profitable winter. Start the Farmers' Club or literary society early this fall.

England's live stock has increased since the war began; Canada's has decreased. Buck up Canada!

No farmer can afford to feed stock and poultry vermin at the present price of all kinds of feed. Clean up.

There are rumors of an election coming next spring. Do not forget that you are an independent Canadian voter.

If the average farmer could see half as much in farming as the average city man does, what a difference there would be!

Boarder cows will be more expensive than ever this winter. Make them prove in advance that they can pay their way.

It is not hard to figure out what is received for a crop, but it is a different proposition when it comes to estimating the cost of a crop.

It is too bad more of the country-bred city leaders could not have exercised their ability toward the promotion of agriculture and country affairs.

School Fairs are accomplishing two things at least: children are learning to speak in public, and weed-naming contests are making them familiar with Ontario's noxious weeds.

Judging by the difference in price of potatoes in the Maritime Provinces and in Ontario, it costs considerable to transport them here. When the consumer in London was paying from \$2 to \$2.20 per bushel for tubers they were selling at 40 to 65 cents per bushel in P. E. I. and New Brunswick.

Organize—Co-Operate.

Fall and winter are the best times of the year for farmers to get together and organize their efforts so that they may reap greater benefits from the work of production and marketing of farm products. Students of political economy are agreed that unless agriculture is organized, first locally, and then provincially or country-wide, farmers cannot reap the net returns which should be theirs. Without organization the producer must always be more or less at the mercy of the man who handles his goods on the way to the consumer. Many instances of the value of standing together can be cited by most of those who have followed the ups and downs of agriculture through the past decade. When it costs the manufacturer more to produce his goods he immediately charges more for them and generally adds an extra percentage profit, but when the cost of producing milk on the farm runs up rapidly what chance has the dairyman to increase the price unless the milk producers in the area affected stand together—which means organization. When fruit is plentiful who has the least trouble in disposing of his crop, and who gets the highest price? Every time it is the member of a growing fruit growers' organization. There is nothing to hinder farmers who feed pigs, lambs and cattle on a small scale from getting together on the marketing end of the business at least, and also, possibly, in the purchase of feed. Through a Farmers' Club or local society or organization a saving might be effected in the marketing of the stock as well as in the feed. There is no department of farm work which cannot be benefited through the proper kind of organization, and now is the time to start and to push this essential to the greatest success in Canadian agriculture. The long fall and winter evenings afford an opportunity for meetings at which these matters may be discussed and action taken. Decide to start and to start right, and eventually something big may grow out of all the local organizations scattered here and there over the country.

A Duty to the Boy.

Someone has estimated that eighty-five per cent of America's great or eminently successful city men were born in the country. Whether this is an entirely correct estimate or not we are not prepared to state, but it is nevertheless a fact known to all that a very large proportion of the few men who go to the top in city business were born on the farm. We sometimes wonder how many of these would have been great successes had they remained in the country and put the same thought and energy into scientific agriculture that they have into their chosen walks of life. Surely some could have been made into good farmers and satisfied farmers. It would be a pity to spoil a good storekeeper, a hustling manufacturer, a successful physician or an eminent professor by making a second or third-rate farmer of him, but the fact which stands out is that all these men have been wooed away or driven from the farm and few really great farmers are known. The pity of it all is that the basic industry of this continent is not considered of sufficient importance to attract the great men in their earlier days to make it a life-work. True, after they have amassed a fortune in other business, they like to play at farming. Their return to the farm is generally to make the farm a "sink-hole" for some of their surplus wealth. They make it a "hobby."

When one stops to think of it agriculture can ill afford to lose all the leaders. It is all very fine to talk of the way men born on the farm strengthen city industry, and how the men and women from the

land keep the race strong and virile, but has it not been carried a little too far? Very good use could be made of the brains and ability of more leaders in the field of practical agriculture. Can the farm afford to lose so many? How can a change be brought about? It is the duty of every parent to give the best he can to his children as a start in life. They should be encouraged in whatever calling for which they show special aptitude. But why forget the farm? Too often farming is painted a rather dull picture for the boy, while education and trades are held up as the ideal occupations. Education is all right and every boy should get all he can. No one has too much of it to farm. But why not put the best side of farm life forward to the boy and then, if he decides on a city occupation, do not stand in his way. Give the farm a fair show with the other futures for the bright boy, and perhaps a few great men will grow up on and stay with the farm. Agriculture is a calling worthy of the best brains of the country.

Can You Splice a Rope?

We recently read twenty-four extracts from reports sent to the Assistant Deputy Minister of Agriculture for the Province by a number of District Representatives in the various counties. Here is one of them: "When out one day I ran across a man who had his horse-fork rope broken and was endeavoring to splice it. Having some little experience in properly splicing ropes, I did the work for him. He was evidently quite pleased, as he said he would see that I gave a rope-splicing demonstration at their Farmers' Club next winter." After reading the foregoing, we began to wonder where the Representative learned to splice a rope, and decided that it certainly was not at the Agricultural College. Now the question is, why shouldn't farmers' sons, in fact all those who seek their diploma or degree from the Agricultural College, be taught how to splice a rope and how to do much other just such necessary farm work, which many of them never have had an opportunity to learn at home and should know before they go out to aid in the advancement of Canadian agriculture. We often wonder what percentage of the graduates of the Ontario Agricultural College, who go back to the farm, or seek other employment, could splice a hay-fork rope if necessity arose. We know that only a small percentage of the practical farmers in this country can do it, and we know also that the college-trained men who can, learned the trick in practical work on the farm or elsewhere and not in the mechanical laboratory at the College. We are not seeking to criticise, but Ontario is getting a new agricultural school at the present time, and it would be a fine thing, especially for the two-year men who take the course, both there and at Guelph, if they were taught how to do well several of these odd jobs which turn up from time to time around a farm, and splicing a hay-fork rope is a very common one. We venture to say that this District Representative will get closer to the hearts of the farmers belonging to the Club, which he mentioned, by being able to show them how to splice a rope, than he would by two solid days' lecturing on how to farm, unless he could show something practical to back up what he said. When he has won them to him by the splicing process, he will then be in a much better position to impart to them his advanced knowledge of agriculture and they will be in a more receptive mood. The writer remembers putting in a few weeks of some of the best work he ever did, helping men who were new to the fruit-tree spraying business over some of the little hard places in connection with their spraying operations. The big box of tools which he carried, not only aided in repairing pumps and tanks but

The Farmer's Advocate AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE
DOMINION.

Published weekly by
THE WILLIAM WELD COMPANY (Limited).

JOHN WELD, Manager.

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

1. THE FARMER'S ADVOCATE AND HOME MAGAZINE is published every Thursday. It is impartial and independent of all cliques and parties, handsomely illustrated with original engravings, and furnishes the most practical, reliable and profitable information for farmers, dairymen, gardeners, stockmen and home-makers, of any publication in Canada.
 2. TERMS OF SUBSCRIPTION.—In Canada, England, Ireland, Scotland, Newfoundland and New Zealand, \$1.50 per year, in advance; \$2.00 per year when not paid in advance. United States, \$2.50 per year; all other countries, 12s.; in advance.
 3. ADVERTISING RATES.—Single insertion, 25 cents per line, agate. Contract rates furnished on application.
 4. THE FARMER'S ADVOCATE is sent to subscribers until an explicit order is received for its discontinuance. All payments of arrears must be made as required by law.
 5. THE LAW IS, that all subscribers to newspapers are held responsible until all arrears are paid, and their paper ordered to be discontinued.
 6. REMITTANCES should be made direct to us, either by Money Order, Postal Note, Express Order or Registered Letter, which will be at our risk. When made otherwise we will not be responsible.
 7. THE DATE ON YOUR LABEL shows to what time your subscription is paid.
 8. ANONYMOUS communications will receive no attention. In every case the "Full Name and Post-office Address Must be Given."
 9. WHEN A REPLY BY MAIL IS REQUIRED to Urgent Veterinary or Legal Enquiries, \$1.00 must be enclosed.
 10. LETTERS intended for publication should be written on one side of the paper only.
 11. CHANGE OF ADDRESS.—Subscribers when ordering a change of address should give the old as well as the new P. O. address.
 12. WE INVITE FARMERS to write us on any agricultural topic. We are always pleased to receive practical articles. For such as we consider valuable we will pay ten cents per inch printed matter. Criticisms of Articles, Suggestions How to Improve "The Farmer's Advocate and Home Magazine," Descriptions of New Grains, Roots or Vegetables not generally known, Particulars of Experiments Tried, or Improved Methods of Cultivation, are each and all welcome. Contributions sent us must not be furnished other papers until after they have appeared in our columns. Rejected matter will be returned on receipt of postage.
 13. ADDRESSES OF CORRESPONDENTS ARE CONSIDERED AS CONFIDENTIAL and will not be forwarded.
 14. ALL COMMUNICATIONS in reference to any matter connected with this paper should be addressed as below, and not to any individual connected with the paper.
- Address—THE FARMER'S ADVOCATE, or
THE WILLIAM WELD COMPANY (Limited),
London, Canada.

opened the way to a little talk on the reasons for spraying, and the insects and fungous diseases destroyed thereby, the whole taking place right in the orchard with the spraying outfit, the trees, and the pests explained as an object lesson. The mechanical end of farming is intricate, and it is necessary to master it in order to most successfully apply scientific knowledge. Men who go through an agricultural college, and those who have gone through realize that this is right, require to know first, last and all the time, thoroughly and well, the practical end of farming, and it is much easier for them, in whatever work they may be called upon to do, and particularly if that work is on a farm or in a District Representative office, or in an agricultural newspaper office, or in some other line in which the graduate is continually rubbing shoulders with the farmer and working in his interests, when they know all the little ins and outs of the practical side of agriculture, and particularly that part which we might call farm mechanics. Splicing a rope, putting a spray pump in working order when the valves have stuck and the new beginner does not know why it will not work, adjusting a gasoline engine, adjusting a knotter on a binder, making rope-halters, tying the various kinds of knots required in farm practice, lacing belts, and dozens of other little things which crop up on the farm, might be taught or demonstrated in agricultural schools and colleges to the benefit of all the students.

There may be a hint in this for the agricultural schools and colleges. It is not meant as a criticism of an already good course, but we believe there is something in the suggestion and that it would pay to teach the students how to do a number of these necessary tricks of the farm, not only because of the actual value it would be to them in knowing how to do the work but because of the weight it would carry and the easier it would make the road in opening up opportunities to impart the scientific knowledge gained at the college. While thinking it over, what percentage of the agricultural college graduates can splice a rope, something that sooner or later is necessary on every farm? It is not necessary nor yet advisable that agricultural colleges teach boys to plow and sow or to reap and to mow. They should

know those things when they enter, but how about the mechanics in connection with these and with other things? The boy's father may be a good farmer and yet unable to do many of these things himself. He cannot teach the boy. Then the agricultural school should.

Some Dark Corners in the Potato Market.

If there were a High Cost of Living Commission gathering data now relative to the prices of human foodstuffs, they could obtain some valuable and interesting information regarding potatoes in Ontario and the Eastern Provinces. While the growers were receiving from sixty to sixty-five cents per bushel in Nova Scotia, forty cents per bushel in Prince Edward Island, and sixty-five cents per bushel in New Brunswick, consumers in Ontario and Quebec were paying as high as \$2.00 per bushel, and so firm was the market that growers in the vicinity of the larger centres quoted them at that price even though the buyer would carry them away himself. If the dealers and transportation companies should deduct the price to the farmers from the \$2.00 and divide the remainder between themselves, the hauling and distributing interests would each receive more per bushel than the grower who produced them. When it costs twice as much to distribute an article as it does to produce it, there is something radically wrong. We cannot divide this \$2.00, after Euclid's plan, into three equal parts, for the hauling charge from New Brunswick to points as far West as London, Ontario, ranges around 20 cents per 100 pounds, in carload lots, or about 12 cents per bushel. Thus the grower gets 65 cents and the railroads 12 cents, making a cost of 77 cents. Let us be liberal or even extravagant and allow the buyer and shipper in New Brunswick 23 cents per bushel, which is more than a just profit, so the product laid down in Ontario cities would be \$1.00 per bushel, and it would be less in Quebec on account of the shorter haul. There is still \$1.00 to be divided, and we must confess we do not know where it is going. The small wholesalers and jobbers give no evidence of becoming excessively rich, neither do the corner grocers or dealers. Someone, somewhere, working quietly and unostentatiously must have been receiving the lion's share of the \$1.00 which was divided amongst the distributors.

J. E. A., Biron, Superintendent of the Montreal City Markets, was recently quoted in the Montreal Standard to the effect that he had indubitable evidence of the fact that there was a strong potato trust already in operation, while others, some of which were in process of formation, were controlling the butter, eggs and a considerable portion of the vegetable supplies coming into Montreal. We are inclined to believe that the conditions which prompted Mr. Biron to make this statement do not exist in that city alone. The price paid by the consumer has been out of all proportion to that received by the grower. Someone has been exacting all the "traffic will bear."

If the Commissions appointed to look into matters concerning the cost of living did not return void, why has not something been done to prevent just such a condition as has existed in the potato business this year? The Departments of Agriculture in the various provinces might have reported early in the season as to the character of the crops in their respective districts and what the growers were receiving. The Dominion Department of Agriculture has representatives in every province who could have reported to Ottawa, from whence advice could be sent out. Are our Governments the servants of the people at large or of the few? The Agricultural Departments might at least see to it that the grower received a price for his product consistent with that paid by the consumer. Anyone can say, "the public be damned," and there is no one to tell him nay.

Had the people of Ontario and Quebec known what the crop was bringing in the Maritime Provinces, it would have been difficult to rob them to the extent of \$2.00 per bushel. They would have gotten together and obtained their supplies independent of the distributing service now extant. Not knowing, they go quietly on paying what is charged them. "What is everybody's business is nobody's business," so the consuming population does not interfere with the operations of the distributor. Too much law is objectionable, and it is not wise for a Government to go meddling with any business when unnecessary.

We expect them to turn on the light, and the people will attempt to do the rest. Previous to the time of writing the grower has been receiving sixty-five cents and less for an article which has retailed at \$2.00 and, in some instances, as high as \$2.20. There are surely some dark corners in the potato market. Mr. Biron would probably call them "Trusts."

Nature's Diary.

A. B. KLUGH, M.A.

One of our most interesting animals is the Canadian Otter. This animal is really a big water Weasel, about forty inches in length; weighing about eighteen pounds, with a heavy coat of dark-brown fur and a thick layer of fat under the skin. Its range originally included the whole of the Dominion, from coast to coast and as far north as the Arctic circle, but because of the high price which its fur commands it is extinct in thickly settled regions and is scarce in many other parts of its range. The Otter is pre-eminently aquatic, as a swimmer and diver no mammal or bird is its equal, and by its swift progress and sudden turnings under water it is able to out-manoeuvre even the lightning-swift trout and salmon. For long distances it can swim at the rate of over six miles an hour, and it can swim a quarter of a mile under water without coming to the surface to breathe. Though most at home in the water it is a good traveller on land, and in winter takes long journeys in search of rapids and falls where the water is unfrozen. When travelling in the winter it bounds along for some distance and then throws itself forward with its front feet folded backwards and slides through the snow for a distance of several yards, thus making a very characteristic trail. The main food of the Otter consists of fish, though crayfish, frogs, clams, muskrats and water-fowl are also found on its menu. The Otter mates in February, and the young, which are usually from one to three in number, are born in the middle of April. The nest is made of grass and leaves, usually at the bottom of a burrow in the bank of a stream, but sometimes in the bottom of a hollow standing tree or in a hollow log. The young remain with the mother until December, by which time they are full grown.

So much fictitious nonsense has been written about the ways in which animals train their young, that we have to be extremely careful as to what statements we accept regarding such performances. There seems to be, however, plenty of good, sound evidence that the mother Otter does teach her young to swim, dive and catch fish. Seton, writing of this training of the young says, "It seems as though in very ancient forms retaining primitive habits the young need little or no instruction from parents. Thus an incubator duck will take to the water or snap at a fly when a day old. On the other hand, those animals with highly specialized habits are slow to learn, and need some sort of stimulus. The young hawk or weasel speedily learns to seize a bird, but the young Osprey and Otter have departed farther from the ancient way and are more in need of teaching. Whether this be conscious or unconscious on the part of the parents depends on our definition of these terms." An interesting fact which supports this idea of training is that young Otters raised in captivity and then set free do not seek their food in the water, but on land after the manner of a weasel, and only after a long time do they seem to find out that they are fitted for an aquatic life.

But the most interesting trait of all in connection with the Otter is the manner in which it indulges in the sport of tobogganing. Where steep banks slope down into a river or lake these animals make slides, in the summer in the mud and in winter on the snow. They climb up the bank and slide down these chutes into the water, one after another, in rapid succession. They never indulge in this sport alone, and as a rule it is a family, either a mother with two or three young, or two adults sometimes with two or three young, which are observed thus engaged. On this point Audubon and Bachman write, "The Otters ascend a bank suitable for their diversion and sometimes where the slope is very steep, so that they are obliged to make quite an effort to gain the top; they slide down in rapid succession where there are many at a sliding place. On one occasion when resting ourselves on the bank of Canoe Creek, which empties into the Ohio, a pair of Otters made their appearance and, not observing our proximity, began to enjoy their sliding pastime. They glided down the soapy-like, muddy surface of the slide with the rapidity of an arrow from a bow, and we counted each one making twenty-two slides before we disturbed their sportive occupation." Godman, quoted by Seton, after referring to their slides in winter, says, "In the summer this amusement is obtained by selecting a spot where the river bank is sloping, has a clayey soil and the water at its base is of a comfortable depth. The Otters then remove from the surface, for the breadth of several feet, the sticks, stones, roots and other obstructions, and render the surface as level as possible. After a few slides and plunges the surface of the clay becomes very smooth and slippery, and the rapid succession of the sliders shows how much these animals are delighted by the game." Play is indulged in by the young of most of the higher animals, but the Otter is the only animal of which we have any knowledge that has an organized pastime which is enjoyed by old and young alike at all seasons of the year.

THE HORSE.

A Few Horse Hints.

It is getting a little late for the hard-worked team to run out at night. It will be easier to keep them in condition if they are stabled and well fed.

Avoid washing the horses' legs; better let them dry and comb and brush out with currycomb and brush.

Fresh, cool air is necessary in the stable, but drafts on the heated team may cause colds and coughs.

The spring colt will do better weaned than running with his working dam.

It is a good time now, or between now and the middle of November, to breed for a fall colt.

Give the stallion plenty of exercise; it would do him good to take his place on the plow, provided he is carefully handled.

Two horses on a two-furrowed plow are not enough. Better make it three or four and accomplish more work with less strain.

Keep the team going steadily. It is not the man who drives fastest who accomplishes most, but he who keeps the horses moving from morning till night will do a good day's work.

Keep a little oxide of zinc ointment on hand. It is good for scratches and sores.

Do not allow the horses too much water after feeding. A little water and often, is a good rule while at the fall plowing.

When the ground gets soft in the fall is a very good time to start the colt; the plow being a very suitable implement for a beginning.

Do not sell all the good horses and keep the "plugs" for the boy to work. This is a poor way to encourage him to look after his team well.

Don't expect the hired man to keep his team fat without oats, and don't allow him to feed more than four or five quarts at a feed.

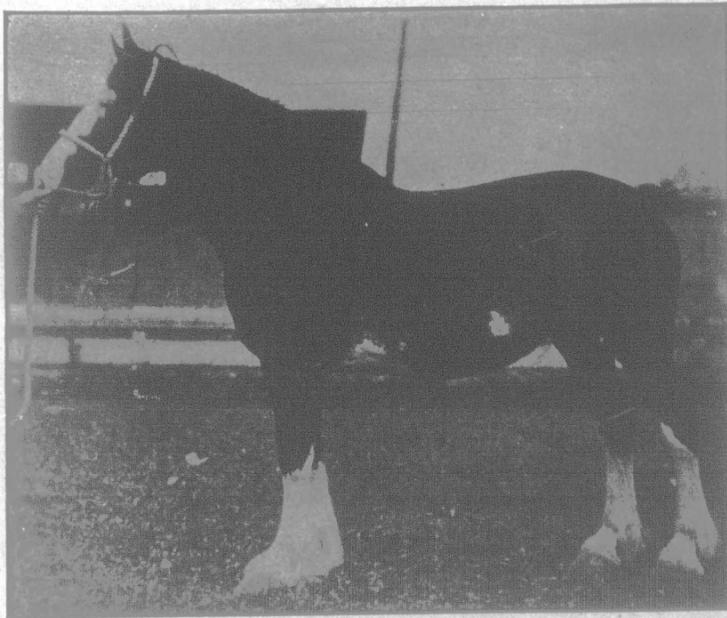
The colts in the pasture should have shelter on cold, stormy nights.

The Farm Chunk.

We have many times advised farmer horsemen to stick to the heavy draft horse as the best all-round proposition so far as his horse-breeding efforts are concerned. Weight has been emphasized time and again, and it has been the belief of many in close touch with horse breeding in this country that the heavier the animals were the better, provided quality was not lost. Quite recently we heard criticisms of the present-day Clydesdale as being a little too fine in the bone and not showing sufficient weight and constitution. We had all our theories upset not long since by a practical farmer who was watching the judging of a class for horses 1,400 pounds and under at the Western Fair. There were some good teams in this class, and one particularly outstanding pair. The farmer remarked that these were just the right kind of a farm team; not too big nor yet too small, and a pair that would require much less feed than a team which would weigh two or three hundred pounds per horse heavier. They were a good pair of farm chunks, but they were by no means a small team.

Now the question comes up: Is it a fact that the farmer can use a team of horses weighing thirteen or fourteen hundred pounds each to better advantage than he can a heavier team of drafters? There is no doubt but that they can be fed more cheaply, provided they are the thick kind of easy-feeding horses, and for considerable of the farm work, practically all of it, they will do just as much as the heavier horses. They are easier on themselves on the road; they will make better time, and for the lighter work, such as harrowing, shallow plowing, corn cultivation, etc., on the farm they will probably out-distance the heavier horse a little. On the other hand the heavy drafter, up to a good weight, is a better horse on the heavy work, such as deep plowing with a two-furrowed plow, cultivating with the spring-tooth or broad-shared cultivator, and hauling heavy loads. But where the heavy drafter has the greatest advantage over the farm chunk is in breeding. As a general thing it pays the farmer better to keep a large percentage of mares to do his farm work. With the mare he has two chances. If anything goes wrong with her she may still be valuable as a breeder, and

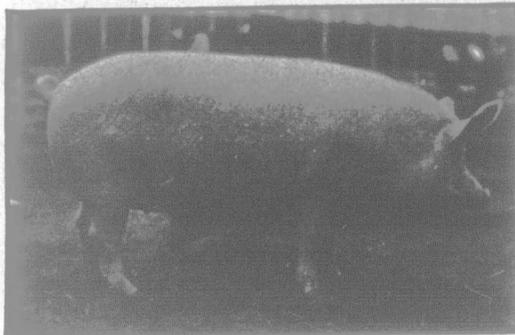
anyway she should do a fair share of the farm work and still raise a colt. The question is: Which is the more valuable a colt from a heavy draft mare, weighing say 1,600 pounds, or one from the handy farm mare, weighing say 1,300 pounds? We have always advised farmers to breed the heavy draft mare because market quotations have shown that the high-quality, heavy drafter was the horse in steadiest and keenest demand, and generally brought highest prices. In the past the surplus of farm horses has been used for heavy hauling in the cities, and for this heavy hauling nothing but the biggest of drafters can command the highest prices. It seems a safer proposition to depend upon the heavier mares to do the work and to use them for breeding purposes, than to trifle with the lighter mare. As a general thing, breeders get enough of the smaller kind, even from matings of the heavy horses.



Ruby Jen (Imp.)
Champion Clydesdale mare at Ottawa for R. Ness & Son, Howick, Que.

Some horsemen in England are boosting what they call a light, heavy draft horse at the present time, claiming that the Shire-Clydesdales are too big, heavy and slow. These men are urging a lighter, more active horse, a sort of general utility animal. Those who advocate the breeding of such an animal are finding opposition from the Shire and Clydesdale men, who still believe that weight is important.

Speed counts considerably in this country, and the average farmer likes a horse that can get over the ground. He wants a smart walker, but the gait of the horse, or at least the speed at which he walks is largely established through training in his early years. We will agree that a thirteen or fourteen-hundred-pound farm chunk is a very handy animal, and no one would blame a farmer for favoring this type to do his farm work, but until such time as these lighter horses are in as keen demand as the heavy drafter, it is doubtful whether as an all-round farm horse, taking breeding value into consideration, they are as profitable as the heavy drafter. They are nice to work and easy to feed, but do they pay as well in the long run? Discussion is invited.



Yorkshire Sow.
First prize in class over 12 and under 18 months at Toronto and Ottawa for John Duck, Port Credit.

Horse Stock of the United Kingdom.

Figures recently published in the Live Stock Journal indicate that Great Britain has not lost in horse stock so severely since the war began as was at first believed. Compared with figures collected just before the war, the horse stock of the United Kingdom shows a decrease of only 39,977, and the figures are still 69,695 in excess of the ten-year average, 1905 to 1914. As compared with last year, the United Kingdom's horse stock has increased by no fewer than 72,390 head, a recovery of nearly two-thirds of the losses in the first year of war. The recovery

is in every classification but largest in those used for agriculture. These figures are very satisfactory indeed, and no one would have believed that such a recuperation could have been possible this year.

LIVE STOCK.

The Outlook for Feed From the West.

The following letter from a Western Canada farmer, who is in touch with the grain situation, will be read with interest by those who contemplate purchasing feed from the West this winter.

"Threshing returns are showing yields of wheat all the way from 40 bushels down. The average yield in Manitoba of the area threshed will probably be about 10 bushels, and quite a large percentage of this will be feed wheat. There will be more feed wheat threshed in Manitoba than in either Saskatchewan or Alberta.

"In Saskatchewan the crop is very spotted, some splendid fields being harvested as well as some very poor stuff. There will be considerable feed wheat in Saskatchewan. In Alberta the crop is generally good, and there will be little feed wheat shipped from this province.

"There is a factor, however, in regard to feed wheat that must be taken into consideration, and this is the price. It is now quoted at over one dollar at Fort William for number 1 feed, and even very poor samples are quoted around 90 cents.

"The oat and barley crops are lighter than anticipated, and none too good quality on the whole. Prices for these grains, you will notice by market reports, are also very high. There is certainly plenty of feed wheat in the country, but a scarcity of milling wheat here and in the States, but some of this feed wheat will no doubt be used for milling purposes. In a letter from the chief grain inspector he said that much of it was being worked for export, which would probably indicate that our European Allies are using this feed wheat for a coarse flour."

English Live Stock News.

EDITOR "THE FARMER'S ADVOCATE":

That great dual-purpose Shorthorn cow, Darlington Cranford 21st, owned by the Rev. C. H. Brocklebank in Cambridgeshire, England, has just produced her eighth calf, a white bull to Salmon's Premier. She was bred by the late George Taylor, at Cranford. Born on April 26th, 1906, she was by Sir Barrington 5th, out of Darling 4th, a thousand-gallon cow. At the Cranford sale in 1909, Darlington Cranford 21st, then a three-year-old heifer, with her first calf at foot, was purchased by E. S. Godsell for 310 guineas, the same breeder taking her heifer calf at 30 guineas. She then went on tour and won at a lot of shows and took highest honors by carrying off the dairy Shorthorn championship at the Royal Show at Liverpool. In that year she gave over 800 gallons of milk, and at the time was about as perfect a specimen of dairy cow as one could wish to see, a nice roan, with a great frame, short legs, grand udder, and a perfect Bates' head and horn. The following is a record of her produce and the prices they have made in public:

	Guineas
Salmon's Darling 2nd, cow, c. May 4, 1909.....	66
Salmon's Heir, bull, c. May 7, 1910.....	600
Salmon's Darling 5th, cow c. August 5, 1911.....	130
Salmon's Darling 6th, cow, c. June 28, 1912.....	80
Salmon's Darling 10th, cow, c. July 11, 1913.....	80
Prince of Salmons, bull, c. June 7th, 1914.....	170
Salmon's Diamond, bull, c. May 9, 1915.....	400
Total.....	1,526

She cost the Rev. C. H. Brocklebank 200 guineas when he bought her. The 1916 "baby" should be worth quite that much.

There is another boomlet in dairy Shorthorns—Dual-purpose Shorthorns, I should say—in England. For 45 head of pure-bred dairy Shorthorns, sold on J. L. Shirley's behalf at Bletchley on Sept. 12th, an average of £84 9s. 4d. was secured, or a total of £3,801. The cows and heifers made £87 2s. 5d. apiece, and the bulls £76 5s. 4d. Six heifers of Shirley's own breeding made the praiseworthy average of £132 6s. They included Silverton Telluria, sold to Captain Buxton for 260 guineas.

At the first of two autumn sales of Shorthorns at Kingham, held by John Thornton & Co., trade

was little less than remarkable. Better lots of cattle have often been seen here, but such a demand has never been approached. One hundred and thirty-nine head, comprising 102 females and thirty-seven bulls, averaged over £49, and this result was obtained by consistently level prices, only three reaching three figures, with 125 guineas as top price.

I hear there are some Americans buying Short-horn dairy cattle in England at £25 per head. Such specimens are not going to do the breed any good over the water. History is bound to repeat itself, for English farmers have not forgotten the fact that U. S. A. was once flooded with cheap and nasty Shire horses, which also did that breed no good on your side of the Atlantic.

A. J. Balfour's herd of Shorthorns was sold by auction at Whittingehame, East Lothian. Hundreds of stockbreeders attended from all parts of the United Kingdom, and top price of 370 guineas was paid for the cow Goldie 32nd, which in June won the blue ribbon (first) at Edinburgh Agricultural Show. The purchaser was J. J. Moubay, of Naemoor. Two other animals, Goldie 33rd and Rosemary's Pride, were sold to Senor Casaras, of Buenos Aires (280 guineas), and R. Cornelius, of Eastham, Cheshire, (200 guineas) respectively. The highest-priced calf brought 220 guineas. In the two-year-old heifers, Bright Jewel headed the list at 250 guineas, G. C. Gunther, of Kent, being the buyer. The Royal Show winner, Roving Boy, made 220 guineas to J. Moore. He was a bargain.

Hereford cattle to the number of 420 have been exported to U. S. A., Canada, Argentina, Rhodesia and Brazil, so far as this year has gone, and the best trade on record for a number of years past.

The number of cattle exported from England in August last, i. e., 370 head, may be taken as fairly satisfactory. They show an increase of 132 per cent. over the number sent out during the same period of the previous year. A large proportion of the exported cattle went to the United States, yet it is hardly reasonable to expect, considering the high prices realized at auction sales, that so low a general average as £55 4s. 1d. per head would be the true value of the exported cattle. Although 270 head were exported to the United States at £36 9s. 4d., the Argentine was the next largest customer, taking thirty-nine head, as against ninety-one in August, 1915, at an average of £158 6s. 8d., which compares favorably with the average of the larger number in the previous year, i. e., £88.

Sheep shipments in August were the smallest sent out during the month for the past twenty-two years, with but two exceptions. The best customer last August was the Argentine, 278 head being shipped there at £22, 15s. 2d., as against 421 at £16 0s. 8d. in the same month of the previous year. Uruguay, which imported none in August, 1915, took twenty-one at £28 11s. 5d. last month. Canada took a dozen at £13.

Sheep are making high prices everywhere. Lincoln longwool rams made wonderful figures at Fred Ward's sale at Quarrington on September 13th. One hundred head averaged £31 16s. 6d. apiece and gave a total of £3,182 11s., which beats raising horses (or race horses particularly) into fits. One ram made 270 guineas to Molesworthy, a Lincolnshire farmer, and others sold freely at 135, 80 and 50 guineas each.

A good demand for yearling rams was experienced at the Chichester Southdown sheep sale. The average was £12 3s. 6d. for 258 head, compared with £10 8s. 10d. for 266 head last year. The top average this year was £27 7s. 6d., which was got by D. C. Millen. This notable consignment of Mr. Millen's won first for the best pen of five, also third in the same class, and h. c. in the single ram lamb class. The top-priced ram of the sale was also found in this consignment, and it realized 80 guineas. The Duke of Richmond and Gordon was the purchaser of the ram, a beautiful two-shear ram that won first and champion at Suffolk County Show.

Remarkable prices have been obtained at the ram sales in Central Scotland. Trade was booming at Lanark, and a record was set up for the black-faced breed. Seven years ago an Irish breeder got at the Lanark sale £250 for his well-known sire, St. Columba, but this year that record price was broken by a Perthshire lady, Mrs. Watters, Glenamphle, who had been latterly the owner of St. Columba. The record-priced shearling ram was bred in the Crossflatt flock, and his sire, Claggan, was purchased by James Clark at Perth sales in 1914 for £100. The shearlings averaged £16 7s. 9d. apiece. It is a great price, and may not occur again for some time.

Border Union Lamb Sales at Kelso saw more good prices made. In Leicester section the top price was £230, and the highest average £72, both made by Cameron, Westside, Brechin. The £230 sheep was bought by Robertson, Falahill, and another at £200 went to Cross, Knockdon. The Edinburgh winning sheep, which beat Royal Show winner there, went at £100 to Butters, Masterton. The highest for half-breeds was £44. The highest for Suffolks was £250, and the highest for Oxfords £57.

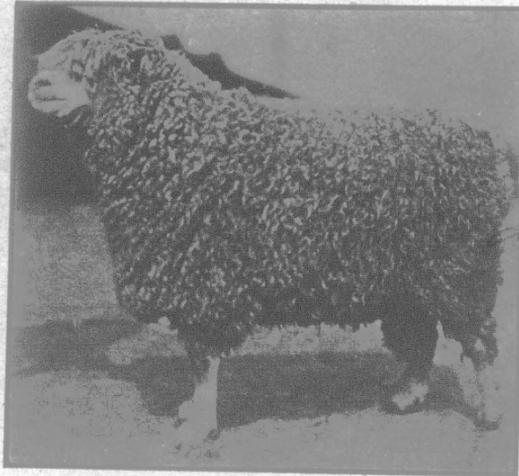
In a sale of Suffolk sheep, held by Messrs. R. Bond & Sons at Ipswich, 54 guineas, which was top price reached for rams, was for one of J. W. Eagle's, purchased by Herbert Smith, and for second best price of 37 guineas. Eagle secured one of Edwin Giles' rams. Rams from Herbert E. Smith sold up to 30 guineas. Shearling ewes from G. P. Watkins, sold up to £7 7s. 6d. each. Abbott Green's two-shear ewes sold up to £5. 16s. The entire flock of

Lord Inchcape's was dispersed and £6 5s., top price being given for best of the two-shears.

At the sale of South Devon rams, in South Brent, four from J. Hoare, Caddaford, sold up to 40½ guineas, average 21½ guineas, nine from J. H. Cornish, East Allington, 14 guineas to 28½ guineas, average £20 14s. 2d. Three Dartmoor rams from P. Luscombe & Sons, Cornwood, made 13½ guineas to £20, average £16 9s. 4d.

At a sale of "large" Shropshire sheep, held by Joseph Brown at Wolgarstone Farm, Penkridge, top figure for rams was 31 guineas, which was paid by C. S. Berry, of Shenstone, for a son of Wolgarstone Farewell, out of a Wolgarstone Berry ewe.

Shropshire rams are making an average of £12 7s. 6d. in Shrewsbury market sales. Welsh ewes are making 8s. per head more this year than they did last. Cotswold rams are freely making 21 guineas; Oxford Down rams, 30 guineas; Kerry Hill rams, 13 guineas; and so on the story goes—great days for sheepmen, high and low. ALBION.



Champion Cotswold Ram.

Winner at Toronto for Geo. Mark, Little Britain.

Silage and Roots Compared in a Nova Scotia Feed Lot.

Considerable corn is now being grown for silage purposes in Nova Scotia, and it may be of interest to readers there to know how the silage made from corn grown in the Maritime Provinces compares, in feeding value, with roots. At the Experimental Farm at Kentville, N. S., during the winter 1915-16, an experiment was carried on with feeding steers, in which test silage and roots were part of the ration. Readers, generally should take into consideration the fact that corn grown in the Maritime Provinces does not usually obtain the same degree of maturity that it does in the southern part of Ontario, consequently its feeding value will not range so high. However, the growing of corn has proved successful in a considerable portion of Nova Scotia, and silos have become an important factor.

In the test to which we refer, 24 steers were divided into two groups of 12 each. They were dehorned and divided into uniform lots and allowed to run loose.

The 12 steers fed on roots received 60 pounds each per day for the first six weeks, 50 pounds for the next two, 40 pounds for the next two, and 35 pounds for the remaining six weeks of the period. The 12 steers fed on silage received 40 pounds each per day for the first six weeks, 35 pounds for the next two, 30 pounds for the next two, and 25 pounds for the remaining six weeks of the period. The meal ration was the same for each lot, and was fed at the rate of 1 pound each per day for the first week, 2 pounds for the second week, 4 pounds for the next two weeks, 6 pounds for the next two weeks, 7 pounds for the next four weeks, and 9 pounds for the remaining four weeks. This averaged 6.17 pounds meal per steer per day for the feeding period. Ten pounds of mixed hay was given each steer per day during the whole period. The succulent feed was given first at 7

a.m. and on this the meal was scattered, and after this was eaten hay was given. This was repeated at 4.30 p.m. An equal amount was fed both morning and afternoon.

The grain mixture fed consisted of 200 pounds wheat bran; 200 pounds cottonseed meal; 100 pounds ground oats, and 100 pounds of corn meal. One pound of this combination cost 1.56 cents. One lot of steers was fed silage, meal and hay, while in the other lot roots were substituted for the silage.

The following statements show clearly the profit resulting from the feeding of roots versus silage:

Lot Fed on Silage.

First cost of 12 steers.....	\$556.32
Average cost per steer.....	46.36
Cost of feed for 12 steers.....	303.04
Total cost for 12 steers.....	859.36
Selling price of 12 steers.....	961.12
Average selling price per steer.....	80.09
Profit on 12 steers.....	101.76
Average profit per steer.....	8.48

Lot Fed on Turnips.

First cost of 12 steers.....	\$556.05
Average cost per steer.....	46.33
Cost of feed for 12 steers.....	300.43
Total cost for 12 steers.....	856.48
Selling price of 12 steers.....	957.37
Average selling price per steer.....	79.78
Profit on 12 steers.....	100.89
Average profit per steer.....	8.40

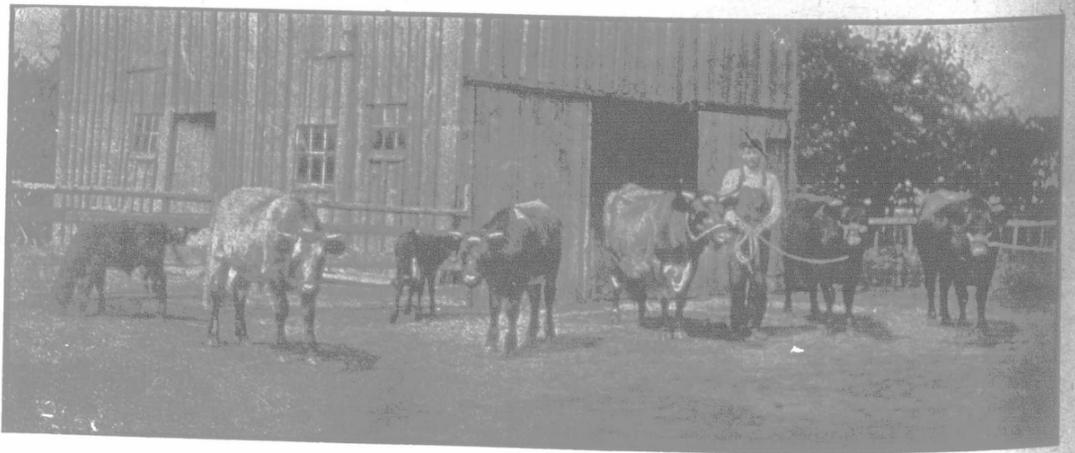
It will be observed that throughout the different periods of the feeding experiments roots were fed in more liberal quantities than the silage. It has been said that, pound for pound, roots and silage have the same feeding value, but the Kentville test proved that even the silage made from corn in Nova Scotia is superior to roots grown in a country very favorable to their production. The methods of feeding, the character of the ration, and the profits accruing therefrom are all of considerable interest.

In some parts of the Maritime Provinces corn is a risky crop, but fortunately roots do exceptionally well in these particular sections. Farmers there have no occasion to worry, in an average season, regarding their supply of succulent feed, for, as this test shows, by feeding a larger quantity of turnips they can obtain practically the same results as accrue where silage is used.

Fitting Stock For Sale.

Glancing through the local and agricultural papers, every week from now until spring the reader will see advertised a number of auction sales of farm stock. As a rule the stock is sold without reserve, and the price realized depends on various factors. At some sales even of pure-bred stock, the animals are brought into the sale ring in a thin, rough condition. The first glance at them gives a poor impression, consequently bids come slow, and the animal is sold at a lower figure than it would have brought had it been fitted and well halter-broken. As a rule the increase in price for well-fitted stock over those in ordinary condition will pay many times over for the cost of feed and extra attention entailed in fitting the animals. The breeder who places his stock on the market in a thin condition is the loser.

Any breeder contemplating having a sale of live stock, whether it be grade or pure-bred, should plan to fit the animals, clean them, and train them to lead and stand, as no one gets a satisfactory look at an animal that is constantly on the move. If short-handed it will pay to engage help, even at a good wage, to put the stock in condition for sale. Three weeks or a month of good feeding and proper care will make a vast difference in the appearance of the animal. Besides the ordinary roughage and coarse grains grown on the farm, it may pay to purchase concentrates, such as oil meal, cottonseed, etc., that tend to increase flesh and give the animal a sleek appearance. Crowding the animal for one or two weeks before the sale may prove detrimental, rather than beneficial. We have known animals so fed to be off their feed on the day of the sale. Commencing



Six Calves in 25 Months

This grade Shorthorn cow owned by W. E. Johns, Woodham, Ont., gave birth to the six young cattle here shown as follows: April 15 1914, two heifers; June 11, 1915, two bulls; May 25, 1916, a bull and a heifer. The cow is 14 years old.

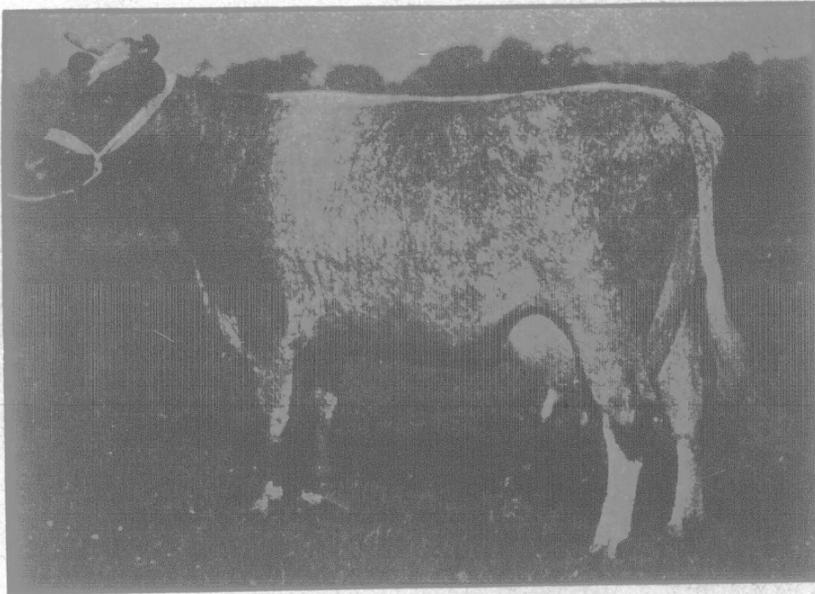
THE FARM.

"The Testing Time Will Soon be Here."

EDITOR "THE FARMER'S ADVOCATE":

I have read with great interest in two of your recent numbers Peter McArthur's comments on the two books, "The Farmer and the Interests," and "The History of Canadian Wealth." I have been purposing for some time to read both these books, but so far have not succeeded in getting the time: the pleasure (or pain) of reading them is therefore still in store for me. Mr. McArthur's comments are, however, so suggestive that I cannot resist the temptation of making some additional remarks along the same lines.

Nothing truer has been said by Mr. McArthur than that "Politics is part of the science of psychology, and those who succeed in it are not those who understand the facts and statistics of government, but those who understand the workings of the human mind." Anyone who studies critically the average stump-speech, who watches how shrewdly the clever politician appeals to the emotions, prejudices, ignorance and cupidity of his audience,—to all those traditions, instincts and feelings which are permanently embedded in the human race, and which are as old as the race itself—such a one knows only too well that Mr. McArthur speaks the truth. And if so what hope is there for the future? What chance for the supremacy of reason and right-



Darlington Cranford 24th.

This cow has given 1000 gallons of milk in a single lactation period, and when 9 years old weighed 17 cwt. The real type of dual-purpose Shorthorn.

eousness? The outlook is dark indeed if our "intelligent electors" have to keep on saying to themselves,

"I'm going to vote
Am I a goat?"

in order to preserve the correct attitude of mind when going to the polling booth.

But there is another side to this matter. If "political success depends less on logic than on human sympathy," let us remember that one may make the appeal to human sympathy in order to help our fellows just as well as to exploit them. Abraham Lincoln achieved political success, and, no doubt, largely because he appealed to human sympathy. But the results were, in the main, wholly good. He was a true leader, not a wolf in sheep's clothing. There are just the same opportunities now for the abolition of modern forms of slavery as there were in Lincoln's time, and just the same need for consecrated leaders.

Further let us remember that if logic counts for very little in politics it always works in the same direction. I recall, but cannot quote accurately, a very significant saying of the late Professor William James (of Howard University.) He said that reason was the feeblest of nature's forces, that human affairs were mainly directed by instincts, prejudices, passions, etc., Reason, he said, was like a small sandbank in a wild and hungry ocean, which, though it was threatened with destruction every moment by the stormy waves, yet often grew small accretions until it could withstand the buffets of the most furious hurricane. As the waves ebb and flow, and as the winds blow now in this direction and now in that, the little sandbank gradually raises its head above the waters, and may finally become so large and strong that it offers a permanent habitation for living plants and animals. Even so human

reason, threatened continually with destruction by the waves of passion, and often overpowered, always operates in the same direction, and may in time become of respectable magnitude in the direction of human affairs. The waves of passion and prejudice frequently neutralize one another. But with reason it is otherwise: the dictates of reason are cumulative.

Therefore the situation is not as hopeless as a cursory reading of Mr. McArthur's comments might lead one to believe. Progress is slow: there are many, many backward eddies: but, on the whole good seed is never lost, but is harvested in God's good time.

Mr. McArthur's revulsion of feeling on reading Mr. Myers' book is more or less of an antidote to a superficial reading of his first article. The "tales of homely fortitude and simple heroism" which, in spite of the "befouled" and sordid fortunes of special privilege, indicate the essential soundness of society at the core, are evidence of the first point which I raised; namely, that there is a vast fund of latent morality in society, which it is the duty and privilege of the true reformer to awaken.

Mr. McArthur concludes thus: "In spite of the revelations of this disquieting book, no one need fear for the future of Canada—if we do not lose the ideal and inspiration of our fathers. There is the only danger."

There is a real danger—that of the gradual degradation of our ideals, the permeation of society by false ideals of life and success. And there is a further danger, that is hinted at when Mr. McArthur says: "In doing our part to defend Canada and the Empire we are running the danger of introducing militarism—the one thing that might possibly make the oppressors enduringly powerful." Under the plea of "military necessity" even now freedom of speech is practically no more. A class is now in existence which panders to, and profits by the war-spirit. When the war is over will come the testing time, and we shall see whether or not we have enough courage and independence to preserve the liberties that our forefathers died for. Those liberties which are Britain's glory and her just claim to greatness. It is going to be an easy thing to lose these liberties—a very difficult matter to retain them, to say nothing of increasing them. And those who will, perhaps unconsciously, make tremendous efforts to fasten the additional curse of militarism upon the backs of Canada's toilers are those who have been instrumental in exploiting the masses in the manner outlined by Clarus Ager and Gustavus Myers. Edward Bernstein, member of the German Reichstag, writing recently in the New Republic (New York) says:

"Militarism is, in Germany, most intimately connected with the fiscal question. The class which is interested in high import duties is the same which is also interested in the present form of militarism. You cannot uphold the policy of high import duties without perpetuating the worst form of rivalry and strained relations between respective nations which would again make for militarism."

Read that in the light of the present movement to take advantage of the existing antipathy towards Germany in order to intensify that form of commercial warfare (through tariffs, etc.) which is largely responsible for the present horrible and bloody carnage. Read it, and watch who it is that will attempt to fasten the European curse of militarism upon a continent as yet comparatively free from it. Watch, with your eyes wide open.

The devotion of the common people to God's work of tilling the fields and raising their families, in honest industry may save their souls, but it will not save them in this world from the horrible consequences of greed, selfish privilege and tyranny. The millions of innocent peasants of Belgium and Poland have not saved themselves, their families or their property from fire and sword, even though quite innocent and free from all responsibility for the war. The Canadian farmer has doubtless developed in himself the most admirable characteristics by his battle with the adverse forces of nature in the Canadian wilderness. But he has not saved himself from exploitation by money kings, railway magnates and land barons. Nor will he, except by a wider outlook and a wider exercise of his influence. Two thousand years of so-called Christian civilization have not raised the European peasant much in comfort or intelligence. Life is as crude and sordid in Italy to-day as it was in the time of the Romans. (The Chinese river-dweller ekes out an animal existence by scouring the waters for edible plants.) Bloodshed is more terrible and life is cheaper to-day than it ever was in the memory of mankind. And so it is everywhere: poverty, injustice and misery have increased with the increase of knowledge and civilization. Why? Because the innocent necessarily suffer for the guilty, and the welfare of the majority has been subordinated to the aggrandizement of the few. These are some of the things which we must take seriously to heart if Canada is to be saved from destruction. The people must wrest the power from those who have been robbers and oppressors. In Europe, as Mr. McArthur has admitted, the "aristocracy," or the money power has had a "strangle hold" on the people: hence persistent and wide spread poverty with intermittent periods of slaughter such as would be a disgrace to the lower animals. If the history of Canada is to be different from that of Europe the next few years will probably decide. The fortitude and heroism of our pioneers is, as Mr. McArthur says, a tremendous asset; but it will be of no account, so far as future national existence goes, if it does not assert itself in public affairs. The testing time will soon be here.

Brant Co., Ont.

W.C. Good.

a month before and feeding a common-sense ration is the more profitable method.

Dairymen usually want to know what an animal will produce in a certain length of time. True, they want the desired type and conformation of the breed and want the animal looking well, but they base the price which they will pay to a large extent on the records which the animal or its ancestors have made. This is particularly noticeable in the pure-bred stock. At sales last winter there were two herds in particular that, as far as breeding, conformation and type were concerned, appeared about equal, but the one had a number of mature animals which had made considerably larger records than the other herd, consequently they averaged a good many dollars a head more at the sale. A breeder will pay considerably more for a cow that has been tested and made a record of a certain number of pounds of milk and butter-fat, than he will for one that appears to be a good milker but has never been tested. If a dairyman is planning to have a sale in the future it will pay him well to keep a record of what his cows are doing. This applies to grade stock as well as pure-bred. Plan the sale date so that as many of the cows as possible will be well on in calf, or with calves at foot. A cow that has not been bred, or has only been bred a few weeks previous to the sale date, seldom brings a high price. Purchasers will not take the risk, consequently those having a sale would really be money ahead to withhold cows they are not sure are in-calf. This applies to both beef and dairy breeds.

Only recently we called at a place where the man was planning to hold a sale in a few weeks. It was impossible to get anyway near the cattle. They had run on pasture most of the season and had not been accustomed to seeing anyone around. On suggesting that it would pay to have the cattle halter broken before the sale, he stated that he had not intended training them to lead, but when his attention was directed to it he recalled several sales which he had attended, and remembered the slow bids when the stock appeared nervous and unmanageable. No doubt every breeder can recall similar instances, and yet at possibly half the sales the cattle are not used to the halter.

It is advisable to have a good sales-ring. If possible have it under cover so that the sale may be held regardless of the weather. If a good building cannot be procured, a tent can be rented for a small sum and will prove very satisfactory. Have the ring large enough so that the stock can be moved around. Also have it roped off and keep all but those who have business transactions outside the ring. For very little expense elevated seats can be arranged around the ring, whether in a tent or building. When attending a sale men like to be made comfortable, and by having the seats raised all can see. It pays to cater to the comfort of breeders who come with the intention of buying stock.

The number of consignment sales is increasing. This method of selling gives the smaller breeder an opportunity of disposing of his stock. As a rule one has not sufficient stock to make a sale, but by a number of breeders going together, each putting in a certain number of head and selling at a central point, a large sale can be made up that will draw the crowd. A few consignment sales have been a failure for the reason that poor quality stock was offered, but there are associations that have been holding annual sales for several years. The members always consign their best stock and have it in good condition, consequently the public look forward to securing choice stuff at this annual event. There is no reason why consignment sales should not be a success. It must ever be remembered that the buying public to-day have an intelligent idea of pedigrees and a fair idea of the value of an animal. For stock to bring the highest price at an auction sale, it must be in a condition to attract the eye as well as possessing good blood, breed-type and conformation.

During the breeding season it might be well to keep the ram in through the day and let him out with the ewes only at night. This is especially important where one ram is mated with a particularly large flock. Feed him a few oats and some roots, and keep him up in condition if possible. If he is allowed to run with the flock all the time he may injure himself and the lamb crop may be smaller. Try it.

FOUNDED 1866

tered, and after this was repeated fed both morning

of 200 pounds meal; 100 pounds corn meal. One .56 cents. One day, while in the the silage. Clearly the profit versus silage:

.....	\$556.32
.....	46.39
.....	303.04
.....	859.36
.....	961.12
.....	80.00
.....	101.76
.....	8.48
.....	\$556.05
.....	46.39
.....	300.43
.....	856.48
.....	957.37
.....	79.78
.....	100.89
.....	8.40

at the different lots were fed in e. It has been and silage have silage test proved in Nova Scotia very favorable of feeding, the profits accruing rest.

Provinces corn so exceptionally Farmers there average season, d, for, as this city of turnips results as accrue

sale.

cultural papers, the reader will of farm stock. serve, and the ors. At some ls are brought ondition. The session, conse l sold at a t had it been e the increase e in ordinary r the cost of ting the ani- on the market

sale of live should plan them to lead y look at an e. If short- n at a good sale. Three proper care arance of the and coarse to purchase d, etc., that imal a sleek one or two ental, rather ls so fed to Commencing

A Word of Warning to Maritime Farmers.

That farmers will do well to make preparations this fall for an increased acreage of hoed crop in Nova Scotia for 1917 is the advice being given by Prof. M. Cumming, Principal of the Nova Scotia Agricultural College. Fear is expressed that the dryness of the early fall season may militate against next year's yield of hay, and roots or silage crops should be produced in larger quantities than usual to provide a liberal amount of roughage. During the fall seasons of 1914 and 1915 there was a heavy precipitation and the hay crops which resulted in the two following summers were good indeed. This season, up to the

time of writing, the rainfall has been very light, and if these conditions prevail it is to be feared that the hay crop for 1917 will not become well established. Farmers, who can, will do well to make provisions for a larger acreage of hoed crops such as turnips, mangels, etc., and silage crops such as corn or the oats-pea-vetch mixture. Such a move is not made any easier by the fact that, at time of writing, the land is so dry that sod plowing is almost impossible. Fortunately, however, all other kinds of farm work can be brought up to the mark. So there should be more time for plowing when the land becomes moist enough to make plowing possible. Those who produce plenty of these succulent feeds will not be obliged to make such heavy inroads into their mows of hay next fall which, if the dry weather prevails, threaten to be smaller than has been the case this year and last.

Generally throughout the Maritime Provinces the weather at seeding time was favorable. Abundant rains fell up to about the middle of July when haying began. Since then relatively little rain has fallen. Conditions were ideal for storing the hay and grain crops, which were good, but the late fall crops such as roots, etc., will be light and the fall pastures have been poor. On Prince Edward Island the catch of seed was showing up splendidly when seen during the week ending September 30. However, dry weather had prevailed as in Nova Scotia and the lack of moisture may be seen in next season's crop unless there is considerable precipitation during the late fall and winter. Practically the same conditions were observed in New Brunswick, and farmers in the Maritime Provinces can certainly make no mistake by increasing their acreage of hoed crop for 1917.

Thick-Sown and Hill-Planted Corn at Weldwood in 1916.

In 1915 an experiment was carried on at Weldwood largely to ascertain the feeding value of corn sown so thickly that it would scarcely cob at all compared with corn planted in hills. From previous experience we were led to believe that the thick-sown corn, in drills, grew a little heavier yield per acre than the hill-planted corn at Weldwood. We had previously read of an experiment carried on in one of the colleges in the Western States, results of which showed the thick-sown corn to be as good feed as that which produced cobs, provided it had sufficient time to mature. Last year we were careful that our thick-sown corn matured. It had the same number of days as the hill-planted, tried alongside it, both being in the glazed stage when cut on September 28. The analysis of the corn, as taken from the field and a later analysis made of the silage, showed that the thick-sown contained almost equal feeding value with that of the hill-planted, and we did our best to take a fair sample of each, in fact, with the thick-sown sample which was taken from the field, we were careful to get it from a place in the row where the corn was so thick that no cobs or nubbins appeared on the stalks. Weights from equal measurements of corn from the two methods of planting showed the drill-sown to be a much heavier crop per acre than the hill-planted. Last year, the drill-sown was put in in rows three feet apart at the rate of fifty pounds per acre, and the hill-planted according to the check-row system, in hills three feet six inches by three feet two inches. The usual number of stalks, three to four, being the average of the hill-planted.

The year 1915 was an unusual season; so was 1916. Last year was one of the wettest on record during the period of corn growth. It seems only natural that the thick-sown corn should do well in such a year of extreme moisture. In giving results we were careful to mention the peculiarities of the soil and season and also to emphasize maturity in the thick-sown as well as in the hill-planted, because we were afraid that some readers might jump at conclusions and sow their corn, very thick regardless of soil, climate, and of length of season to mature. In short, we were afraid that some would ensue immature corn, which experiments carried on at the Ontario Agriculture College have shown to be bad practice.

We were ready to grant that the season of 1915 perhaps favored the thick-sown corn. It certainly did well at any rate. When the corn was cut, September 28, it had not been frosted, and, while in the glazed stage, it was fresh and green and contained, no doubt, a very high percentage of moisture. (The record of moisture content was lost in the analysis.) This was true of both the hill-planted and the drill-sown corn and was responsible for the heavy weights recorded on each last year. We had another experiment in the same field in the form of a variety test, in which the weights were also very high. The same test with the same varieties was run through this year, and, while the crop to all appearances was as good as that of last year, the weights were not nearly so high.

As we said before, the season of 1916 was also a peculiar season. The corn this year was planted on June 3 and from the last week of June to date of cutting, September 20, it had practically no rain. A few passing showers, for the most part very light, was about all the rain the crop had while growing. Previous to planting, rains were all too frequent and the corn did not go in in the best possible condition. The growing season this year was as dry as that of 1915 was wet, so that those who claimed that the thick-sown corn would not compare favorably with the other in a dry year have had a season to test their belief. This year, the corn got a severe frost three days before it was cut. It was in the glazed stage, quite well matured, and owing to the frosting, to the drier season, and to perhaps a little more advanced maturity, it was much drier when cut.

It might be well to give the readers an outline of the planting, general care of the crop, and the method of cutting, weighing and arriving at the figures which we give here. The corn was planted on a sod field which was pasture in 1915. The land for both the hill-planted and drill-sown was spring plowed; it was rolled after plowing and worked down with disk and drag harrow to a suitable seed-bed. The corn on the particular part of the field in which the test was made was planted on June 3, the drill-sown at fifty pounds per acre, in rows three feet apart, and the hill-planted put in much thicker than last year, in rows three feet apart and forty-two inches apart in the row; but, as will be seen from the table showing the number of stalks to the hill, a thicker seeding was made. Nearly

half of a sixteen-acre field was drill or thick-sown, the remainder being hill-planted, so that the test was carried out on a fairly large scale. We may say here that we had six acres more corn in another field, planted later, and while actual weights were not taken in this last piece a strip of thick-sown, to all appearances, out-yielded the bulk of the field, which was hill-planted.

To get back to the big field. Neither the hill-planted nor the drill-sown corn was hoed, but it was thoroughly cultivated with a two-horse cultivator very frequently throughout the summer. The field was kept clean and the soil mellow. It is not likely that the thick-sown corn would stand poor cultivation as well as would hill-planted, particularly in a year like this has been. Cultivation saved the crop of both the hill-planted and the drill-sown, but we would emphasize thorough cultivation where anyone tries thick sowing. The land, as previously stated, is a rather heavy clay-loam with a hard sub-soil. Apparently it is fairly good corn land. It was manured during the winter at the rate of about twelve good loads per acre.

The variety of corn used to make the test was Bailey, and we may say that this variety is proving a good cropper on the land described. We hold no brief for either method; it is a matter of the best way to get feed enough for a large herd of cattle. The corn growing under both methods got, in so far as possible, the same treatment.

When it came time to measure and weigh we decided to go more thoroughly into it than had been done in 1915. The corn binder had been started and a road was cut between the thick-sown and hill-planted. We decided that six weighings should be made from each, these to be taken at intervals across the forty-rod field. The length of each strip cut from a row for a weighing was 10½ feet. This took in exactly three hills of the hill-planted and made it easier to balance one up against the other. Besides weighing, the number of stalks were counted in each of the six weighings taken from each method, so that we were able to get a comparison of the number of stalks growing on an acre. We went one further and made twenty-four measurements of height and averaged them, in order to get the average height of the corn growing under each method. From the figures obtained we were able to show the average yield of each per acre, as well as other interesting data in regard to the two crops, which are prominently brought out in the accompanying table.

Table Showing Comparison of Hill-Planted and Drill-Sown Corn.

Hill-Planted Corn—(Rows 3 ft. apart—Hills 42 ins. apart in the row).							
No. of measurements	Distance	Average height (13 measurements)	Average No. of stalks (10½ ft.)	Average stalks to a hill	Average stalks per acre	Average weight (10½ ft.)	Average weight per acre
6	10½ ft.	7 ft. 7 ins.	17.16	5.72	23,729	13.87 lbs.	9.58 tons
Drill-Sown Corn—(Rows 3 ft. apart—sown 50 lbs. per acre).							
No. of measurements	Distance	Average height (11 measurements)	Average No. of stalks (10½ ft.)	Average distance between stalks	Average stalks per acre	Average weight (10½ ft.)	Average weight per acre
6	10½ ft.	7 ft. 1 in.	27.16	4.63 ins.	37,558	16.26 lbs.	11.24 tons

The foregoing table shows, at a glance, a comparison of the two crops. The average height of the hill-planted corn from thirteen measurements, in which the short, the tall and the medium were taken in, was 7 feet 7 inches. The average height of the drill-sown corn from eleven measurements, taking in short, tall and medium, was 7 feet 1 inch. In length, then, taking an average of the field, the hill-planted corn beat the drill-sown by about six inches.

It was interesting to compare the average number of stalks on 10½ feet of row. In the hill-planted, the average of six measurements gave 17.16 stalks. The same number of measurements in the drill-sown gave

an average of 27.16 stalks, or exactly ten more stalks in 10½ feet, or nearly one to the foot. Carried to the extent of an acre this would show the average number of stalks on an acre of the hill-planted to be 23,729, and on an acre of the drill-sown, 37,558. These figures show the relative number of stalks per acre. It is interesting, too, to calculate the average number of stalks to a hill, which was 5.72 in the hill-planted corn, a much thicker seeding than the hill-planted was in 1915. To compare with this the thick-sown corn averaged a stalk every 4.63 inches.

The greatest value, of course, attaches to the weight per acre. The average of six weights of 10½-foot strips of the hill-planted corn was 13.87 pounds. Six similar measurements in the drill-sown averaged 16.26 pounds. This, carried to the acre basis, figures out to an average weight per acre of 9.58 tons in the hill-planted corn and 11.24 tons in the thick-sown corn. This is a difference in favor of the thick-sown of exactly 3,320 pounds, or 1.66 tons per acre.

We were particularly anxious to make these weights fair and representative of the field. Two of the editors of this paper, accompanied by a representative of the Ontario Department of Agriculture, made the weights and measurements. That they were very close to being correct for the field we know by the silos. At the number of tons per acre which we estimated we figured that we would have just a few tons more than enough to fill the two silos, one of which is 14 feet by 40 feet, and the other 10 feet by 35 feet. We knew the cubical contents of these, and when the corn was figured out according to the estimates here given, it showed that we would have just a trifle more than the quantity required to fill both. The large silo was partially filled on a Saturday and completed the beginning of the next week. The small silo was started one day and completed the next so that they had some chance to settle. When filled there was just one large load of corn left. This proves another check to show the accuracy of the estimate.

We made note of the comparative percentage of leaf on the corn growing from the two methods, and those who saw it decided that the thick-sown had the largest percentage. However, we did not bring this down to actual figures. Some readers may think the yield per acre as figured out rather light, but it must be remembered that this corn was comparatively dry when weighed, the frost, the dry year, and the stage of maturity counting in this regard. It was one of

the best fields of corn seen in Western Ontario this year. Representatives of the Agricultural College, the Dominion Experimental Farms, and the Dominion Seed Branch, all pronounced the crop a good one for any year, and particularly good for a season such as this has been. Professor E. S. Archibald, of the Central Experimental Farm, in looking it over was not convinced that fifty pounds per acre was the happy medium between the old system of hill-planting and a system of drill sowing. At Ottawa the corn is sown in drills, but only at the rate of about thirty pounds per acre, and Professor Archibald still thought that that rate of seeding might produce a heavier crop than the fifty-pound

seeding. Dr. C. A. Zavitz and Professor A. Leitch of the Ontario Agriculture College, thought, from observation, that the thick-sown would out-yield in weight per acre the hill-planted, which it did. W. J. W. Lennox and E. D. Eddy, of the Dominion Seed Branch both pronounced the field the evenest crop they had seen this year, and both thought that the thick-sown would out-yield the hill-planted. We invited these men to see the field and to give their unbiased judgment on it.

We noticed, this year, that the thick-sown had a tendency to throw out more nubbins and small cobs than was the case in 1915. These, when husked, appeared to be in about the same stage as corn husked from the hill-planted stalks. No doubt the difference in season was responsible for this.

We wish again to emphasize the fact that this thick-sown corn was matured. We would not for one moment advise anyone to sow corn thickly and ensile in an immature condition. We would also emphasize good seed and clean cultivation. We would not care to risk very much thick-sown corn on light, poor land, because there is no doubt but that hill-planting is the best method on poor, and dirty soil. With regard to weeds, however, we have found that drill-sowing permits of cleaning the land almost if not quite as well as hill-planting. The corn is planted so thickly that it does not matter if an occasional stalk is cut out by the cultivator. This permits of setting the cultivator

close to the row. Once the thick-sown corn gets a start, weeds have no chance in the rows and the cultivator, used frequently, easily handles them between the rows. If corn is sown thickly, give as many days as possible to mature and cultivate every five or six days during the growing season.

Underdrainage should be mentioned here. The field upon which this crop was grown was fairly thoroughly under-drained last year. Had it not been for the drains there would have been no crop. A small, shallow hollow near the centre of the field was believed to have been drained; if so, the old drain was not working, and in this small patch, only a few square rods in extent, no corn grew, so that we have pretty good proof that three things: under-drainage, good seed, and cultivation made the crop. We should say here that the crop was grown from specially-selected seed.

We are not sure that fifty pounds per acre is the best thickness for seeding. We believe that it is thick enough and would not advise increasing it. It may be that thirty pounds per acre in rows will give a bigger yield; this should be tried. We are reasonably certain that, by shortening the distance the rows were apart in the hill-planted corn, and by increasing the number of stalks per hill, we got a heavier yield this year. It would also be a good experiment to try out the hill-planted with different numbers of stalks per hill. One thing we do know, that in a fair test com-

prising several acres of a large field, the thick-sown corn at the rate of fifty pounds per acre in rows three feet apart out-yielded the hill-planted, in rows three feet apart and forty-two inches apart in the row, with an average of 5.72 stalks per hill.

The experiment has been tried in two extreme years—wet and dry. The thick-sown proved the heavier crop in both. It was not so much heavier than the hill-planted in the dry year, but it still out-yielded the hill-planted sufficiently to be worth while, provided the analysis shows it to be of equal feeding value. Samples have already been sent to Professor Harcourt, of the Ontario Agricultural College for analysis; results of which will be published when complete. In sowing corn according to the thick-sown method, do not forget these points: Buy good seed; sow as early as possible, in a thoroughly prepared seed-bed; sow on good soil; cultivate frequently and well; leave until well matured before harvesting. These conditions, complied with, should ensure at least a slightly heavier crop than hill-planted corn. If all goes well the experiment will be carried on again next year, and possibly elaborated upon to take in other different rates of seeding. From the sixteen acres of corn in the field in which this experiment was carried out and from six acres later planted, and which we estimated at eight tons per acre, our two silos are full of good feed for this winter. Thick-sown or hill-planted, corn requires cultivation.

Canada's Young Farmers and Future Leaders.

What Young Men's Organizations are Doing.

The young men in different parts of the Province are organizing into what is known as Junior Farmers' Improvement Associations. To be eligible for membership a young man must attend the short courses conducted by the District Representatives. These classes are attracting many of the best and brightest men of the farms, and are giving them a knowledge of the why and wherefore of the work in which they are engaged. Consequently, the members of this new association may well be considered a little above the average in knowledge of their occupation and in ability to manage their business. These young men can be a potent factor in arousing the tillers of the soil to united effort to promote the interests of agriculture. With a total membership of over two thousand, and the number increasing each year, this organization is becoming an influencing factor for better farming in Ontario. Members conduct experiments with various crops and with different systems of cultivation, in order to determine the best for their particular district. Cost of feeding hogs and raising baby beef is kept track of, and some are finding that they can raise better stock at a greater profit than can their fathers. This is as it should be. Every generation should be better than the previous one, and the present age is one of golden opportunities. Some associations hold monthly meetings the year around to discuss matters of interest, and to keep in touch with each other. While the summer meetings are mainly to transact business, literary and social entertainment is worked into the winter meetings. They are proving to be the training schools for platform speakers and debaters. The agricultural interests need men to champion their cause, and, if we are not mistaken, future leaders of Ontario farmers are now receiving their training for leadership in Junior Farmers' Organizations.

There are many lines of work, requiring united effort, which these young men may follow. The mention of what several associations are doing may give ideas to others. Some are aiming at establishing breeding centers in order to aid in improving the quality of live stock in their community. Others are planning to build up pure-bred herds; the members starting with one breed with the object of, in time, making their district noted for a certain breed. One or two associations have done a little buying and selling for the members with satisfactory results. Several have secured representation on the local fair boards, and the new blood is a factor in improving the fair. New classes have been added to prize lists; stock judging competitions have been arranged for on fair day, and money has been set aside for special exhibits put up by junior farmers. These things show that the young men are alive; that they have ideas and are capable of working them out to the benefit of the whole community.

During the winter of 1915 twenty-four young men attended the Short Course held in Aylmer, conducted by the District Representative for Elgin County. At the close of the course a Junior Farmers' Association was formed, and plans laid for carrying on a definite line of work. Competitions were entered, and valuable information gleaned relative to feeding stock, methods of cultivation, and varieties of grain. Considerable seed corn is grown in the district, and the boys decided to hold a Corn Show in January

of 1916. They believed by so doing they would learn considerable about the crop, and also might interest growers in producing and curing high-quality corn. Through the Show the type and quality of corn would be brought to the attention of purchasers of seed corn, and would tend to advertise the district. Grain, seeds, poultry and ladies' work were also included with the corn in the prize list, so that at the fair there was something to interest everyone.

The Association elected its officers and appointed committees to look after the different departments of the fair. Preparation was commenced early in the season; many of the members making a special effort to grow products that would compare favorably in competition with that grown by old hands. They had something to work for during the entire season.

It was necessary to arrange for a building for the show, to collect money for prizes, to prepare a prize list, and to secure judges. Committees were appointed to look after each item, and, in working up the fair, the boys were brought in touch with business men, township councils, etc. Sometimes they encountered difficulties, but, nothing daunted, they worked to make their first big venture a success, and in so doing derived an education and an insight into business they could get in no other way.

The council of the town of Aylmer was approached for assistance, and the town hall was secured in which to hold the fair. Light and heat were provided. Thus, one obstacle was satisfactorily overcome. Securing money for prizes did not prove quite so easy, but representatives of the class met the County Council and Township Councils and explained the object they had in view, and pointed out the benefit it would be to that end of the county. Their efforts were rewarded by \$300 being secured from the Councils. The local Farmers' Institute and many private individuals assisted, consequently, enough money was secured to award liberal prizes for the various classes. Different firms were solicited for advertising, and sufficient was secured to practically pay for printing a twenty-four-page prize list. When the copy was finally prepared, the printing was let by tender.

In order to acquaint growers with the standards of varieties of corn, as selected by the Executive of the Ontario Corn Growers' Association, appointed to standardize the varieties suitable for silage and seed-growing districts of Ontario, the names of varieties selected and Standards decided on were printed in the fore-part of the prize list. The Dent varieties are, Wisconsin No. 7, Bailey, White Cap Yellow Dent, Golden Glow, Flints are, Longfellow, Salzer's North Dakota, and Compton's Early. The standard gave the exhibitors an idea of the size and kind of ears to show. A note was also enclosed giving full directions for preparing the exhibits and shipping them to Aylmer. The prize list contained classes for the different varieties of corn, grain and seeds, and for the various breeds of poultry. It was a two-days' fair, and was a decided success. The judges, supplied by the Department of Agriculture, gave reasons for their placings, and addressed a meeting held in connection with the fair. In this way exhibitors and visitors secured information about the various crops and how to prepare them for showing. It was pointed out where entries were deficient, and many exhibitors will be in a position to show their products to better advantage this year.

The fair proved a good thing for the district. Not only did the young men gain valuable information, relative to managing a fair, but visitors learned what really choice seed corn should be like. Many had been growing seed corn for years and had the impression that it was pretty good corn. However, their eyes were opened when they saw the selection of other growers, and heard the judge comment on the good and bad points of the various entries. The

same was true with the grain, seeds and potatoes shown.

The members of Aylmer Junior Farmers' Association proved that they were capable of doing things, and of doing them well. During the year some have gone West, one or two to Guelph College, and one member is fighting for his country. Those at home have conducted experiments and have endeavored to improve on old methods of farming during the past year. They are contemplating holding a fair again this coming winter. Many of these young men are recognized leaders in their community, and are receiving an education and executive and business training that should make big men of them. Young men all over the Province are demonstrating their ability to hold the reins when their time comes to guide the affairs of the country. Managing the affairs of such things as a local winter fair is the training ground for larger things.

What this Association has done may suggest a definite line of work for other associations to engage in. While considerable attention is given to live stock and judging competitions at fall fairs, grain and seeds receive very little consideration. Even at the large fairs entries are small and too frequently they are placed where they cannot easily be seen. Without grain, and the various legumes and grasses, live stock could not exist. These crops are very important, and every farmer should aim at securing clean seed of the varieties best suited to his soil. Many noxious weeds are introduced to the farm through the seeds sown. It is important that one be able to identify the different weed seeds commonly found in a sample of clover or grass seed. A day or two could be profitably spent this coming winter in becoming familiar with the weed seeds, and in studying the strong and weak points of the varieties of grain. All cannot go to an Agricultural College to study these things, but the information can be secured right in the community. If a meeting is arranged, experts can be secured to discuss the weed and seed grain problem. This is a line of work Junior Farmer Associations might profitably take up this winter. In only a few districts can a Corn Show be held, but in practically every district a good showing of grain and seeds could be made. Prizes need not be large, and by having a number of samples of the different varieties the public are given an opportunity to see the kind and quality of products which are grown in the community. The judge who makes the awards could give reasons for his placings and show wherein various entries were deficient. There may be weed seeds in the grain with which the owner is not familiar. These could be pointed out, and, no doubt, greater care would then be taken in preparing the seed for the following spring. In one community recently visited, wild oats and sow thistle were unknown weeds; the farmers not being familiar with either the plant or the seed, and yet within one-and-a-half or two miles from these farms samples of both weeds could be found. It is advisable to make a study of the noxious weeds in the country, so that if a plant should appear in a crop its character would be known and it could be destroyed before it seeds. If the first weed seen on many farms had been destroyed considerable work would have been saved. There are new weeds making their appearance all the time. Some are annuals and do not give much trouble, but others are perennials and once they become established are difficult to eradicate. One or two days each winter, could profitably be spent in studying the nature of the various weeds and in learning to identify both the plants and the seed. Junior Farmer Associations would be doing good work in arranging for such instruction being given in their communities. This is but a suggestion, and there are numerous other lines of work which the associations might engage in this coming winter.

Provinces—the
ble. Abundant
y when haying
as fallen. Con-
and grain crops,
s such as roots,
ve been poor.
ch of seed was
ring the week
weather had
ck of moisture
ss there is con-
all and winter.
served in New
Provinces can
g their acreage

16.
en more stalks
Carried to the
verage number
be 23,729, and
These figures
er acre. It is
ge number of
-planted corn,
-planted was in
ick-sown corn

to the weight
of 10 1/4-foot
pounds. Six
veraged 16.26
s, figures out
ns in the hill-
ck-sown corn.
-sown of ex-

these weights
of the editors
ntative of the
e the weights
ery close to
the silos. At
estimated we
ns more than
ch is 14 feet
t. We knew
the corn was
here given,
le more than
arge silo was
eted the be-
o was started
ey had some
ust one large
eck to show

centage of leaf
s, and those
d the largest
this down to
k the yield
it must be
atively dry
and the stage
was one of

Average
weight
per acre

9.58 tons

Average
weight
per acre

1.24 tons

ntario this
al College,
Dominion
nd one for
n such as
the Central
convinced
m between
m of drill
but only
and Pro-
of seeding
ity-pound

POULTRY.

Fancy Poultry on the Farm.

EDITOR "THE FARMER'S ADVOCATE":

If you have "no use for chickens," or a discontented son, you had better read this article over twice, for something pleasant and profitable has come into my life and I wish to pass it on. The farm I live on consists of one acre, with access to free range for my birds. I have at present, this second week of September, seventeen hens. They were laying profitably in December, January, February and to this date have kept it up. Half of them are moulting now, and I expect no more eggs for two months. Those selected for breeding will be kept, the balance sold at once. Yesterday I sold the day's eggs, one dozen, for thirty-five cents. The man who farms the sixty acres next to me has some seventy fowl. His daily egg harvest is eight or nine, if he finds them. His is the typical farm flock. I have him started on the right road now, and here I am after you others.

I shall give you a short history of the events leading up to my opening remarks. Four years ago I came from the city to enter a business which, owing to natural facilities, is carried on in the country. After work is cleared up for the day there are a few hours when all outdoors is pleading for attention. There was a small flock of nondescript fowl about, and I found myself watching them with increasing interest. At that time I did not know a Barred Rock from a Leghorn. For the first season I had a great deal of pleasure in setting a few hens and watching anxiously the miracle of incubation. Then the chirping little balls of down that trotted about in the grass completely won my heart, and I resolved to find out all I could about chickens in order that my pets should have every chance in life. As they feathered out I noticed that they lost the delightful look of solid equality that characterized them as chicks. Some grew very long and slim, others dwarfed and dumpy. A few died for no sensible reason at all. That fall I bought ten Barred Rock pullets from a farmer. They looked pretty much alike as to size and feathering. These, with the best of my own, I wintered, but with the best of feed and care I did not get an egg until the natural laying season came around. About mid-winter I picked up a poultry paper in the bookstore. The cover page was adorned with the cut of a cockerel weighing fourteen pounds, a first-prize winner at the Ontario Provincial Winter Fair, Guelph. This opened my eyes very wide indeed. Such birds I had never dreamed of. Now I began to dream of ostriches strutting about in my yards. I wrote at once to the man who owned this bird, and when his descriptive matter arrived I became at once an amateur fancier. The birds happened to be Blue Orpingtons. Had they been any one of a dozen other varieties of Standard Fowl it would not have mattered. The man wanted fifteen dollars for a setting of eggs, and much to the scornful amusement of my neighbor, I ordered some.

Spring came and with it the fancy eggs. I set them carefully, for I had been reading poultry books all winter and knew a little theory, which is a good thing if taken in the right doses. Eight chicks hatched, which I considered good, for the eggs had travelled four hundred miles in early March. On reporting the result I was sent nine eggs free, and from these I hatched six chicks. At the same time I was hatching the eggs from my scrub birds. The difference in the tiny chicks was apparent even to my amateur eyes. The pure-breds had broad heads, large, bright eyes and very sturdy legs, set well apart, and commenced growing with a hop, skip and jump. In three months' time they were twice the size of the mongrel birds, and my delight and wonder knew no bounds. At four months my biggest cockerel weighed seven and one half pounds, and my joy was not dampened by the fact that no one in town would believe it. My neighbor came over one day, had a look, grunted noncommittally and went home. "This fancy stuff is just a fad, you wait and see," was the total of his opinion. Meanwhile, I studied all I could about my own particular breed, bought a Standard of Perfection, and when the Winter Fair came due I bought a ticket for my first poultry show, and took with me a cockerel and three pullets I had picked out as my best.

Compared with the flocks I was used to in my district my birds had loomed like giants, but when I had wandered about the long aisles in the poultry section I realized that many hundreds of other fellows were raising fine birds, and I waited for the judging to begin with a properly growing anxiety, not unmixed with humility. I was competing with seven other cockerels and eleven pullets. Finally the judge came to our class and started work. I never took my eyes off him for an instant. As he handled and compared the birds my excitement grew. As he finished examining the cockerels I saw his pencil make a figure "one" on my tag, and his assistant place a red, first-prize badge on it. In the next twenty minutes I had won first and second prize on pullets, and was experiencing such pleasure as I had never known could exist. I cannot explain it, but I have seen strong men, years old in the fancy, grow red with pure joy at a similar victory. The remaining days of the fair I spent talking with judges and fanciers, and discovered just what proportions of luck and good management had contributed to my success. I was assured that it was extremely rare

to get such good specimens from a single setting of eggs, and I have since discovered that to be true. The birds had been hatched in May, had just the right feed and enough of it to keep them growing naturally, and they arrived at the show at just the right stage and in the pink of condition. I learned more in those few days than I could have by a year's reading, but without the reading I would not have been in a position to assimilate all the information that came my way, nor to ask the questions that brought out the facts I was looking for.

By this time I had a real poultry house to winter my birds, thirty-five feet long, shed roof, nine feet high in front and six at back. The front faced south. Three feet from the floor, and the entire length, were alternate cotton and glass windows. The glass windows were fixed and the cotton frames swung back and hooked on the ceiling. There was a foot of straw on the double-boarded floor. The roosts were set on little cast-iron cups filled with oil, that absolutely prevented mites from getting on the birds at night. A dust box, grit and shell hoppers, a mash trough, a water fountain hung high enough to escape scratched-up litter, a spike to impale mangels and cabbages on, cotton drop curtains over the roosts (these are only lowered on the coldest nights) low, roomy nests completed the furnishings. By the time snow lay knee deep outside I heard daily that sweetest of music, the cackling of pullets in December. I had by this time bought a number of hens from the parent flock of my winners, and all through the winter they yielded a fifty per cent. lay, at an average price of fifty cents a dozen. I have done better than that since and hope to continue. At this same time, on the farm next door, were some ninety hens and pullets not giving a one per cent. yield. My neighbor, not caring to hatch his birds, had gone out in the fall and rounded up what he called a nice flock, paying sixty cents each for them. If his sole idea had been to make a living patchwork quilt he made a howling success of it. He had every size, color and disposition, but not one real business bird in the lot. These were installed in the first real poultry house the farm had ever had. He had made a fair copy of ours. He supplied grit and shell, gave the birds green feed and meat, but until the price of eggs had dropped to thirty cents in early March he was losing money every day, and with that flock he never got it back. Cleaning dropping boards, preventing vermin, was too much bother. Putting in fresh, deep litter, cleaning water pans, and feeding regularly and well was "fussing" with them. Yet he thought he was doing a great deal, and his disappointment at the result was proportional. His case, as I have watched it daily for several years, is the best illustration I have seen of the maxim that if a thing is worth doing at all it is worth doing well, or not at all.

It has been no case of plain sailing with me. I had been warned that my second season would not be as good as the first, for the reason that my enthusiasm, cooling slightly, would allow me to neglect many of the details in feeding and care that had meant so much the previous year. I laughed at this during the first show, but the following spring I was lucky enough to catch myself in the act of saying: "Oh! I guess that will be all right," when I knew that it was not all right, but needed a little trouble at an inconvenient moment to make it so. Just a little slipshoddy work is enough to set you back from "first money." I have not the space here to go into the details of the work. There are many fine books to tell you what the details are, but only experience will make you attend faithfully to those same details.

My flock, for which everything had to be bought, paid a profit of over two dollars a head for the year. This was very fair pay for the spare time work I enjoyed so much. My neighbor, who raised most of the feed himself, ran his birds at a loss. He has a nice flock of standard-bred White Wyandottes now, and the change in results has started the seeds of genuine interest in his breast, without which no human endeavor is worth the whistle. Remember, the best of pure-bred birds would have failed with him had he continued his system. But when once he had bought a few good birds and paid what he considered a very stiff price for them, he just naturally began to do all he could for them. And they naturally did all they could for him, and so both parties were satisfied. During the last three years I have inspected many farm flocks, and the conditions under which they are kept, and I feel that I have something worth while to say on the matter.

Last fall I sold a trio of Indian Runner ducks to a farmer who was born and raised on a farm. In February he wrote me that they had died. I met him in town soon after and found that they had been fed on nothing but whole corn all winter, had no grit, no green stuff, and yet this man could not understand what was the matter with them. Incidentally, he had never known what it was to have fresh eggs on his farm in December. These two cases are extreme, I think, but I do not believe the average is far above that. Poultry has a place on the farm that is as important as any other, for its size, but it is the last to be given a serious thought. The average farm flock is left to shift for itself, and consequently the fittest survive, and hardiness the only quality left, as the conditions are such as to produce nothing more simple than to start right with poultry I would not be writing these lines.

As it is well known that birds of one type and size do best together, it is of prime importance to decide

on a breed. Start by trying out a purely egg breed, like the Leghorns, together with a meat and egg breed such as Rocks, Wyandottes or Orpingtons. There is a splendid assortment of colors in these breeds to choose from, and all varieties have their boosters who are breeding them along standard lines and constantly producing better stock. After you have tried out the two breeds fix on the one that best suits your climate, locality and market. Without wishing to boost any breed, it is my honest opinion that one of the American or English "meat and egg" breeds is best suited to Canada, as a whole. The International Egg Laying Competitions have shown that they lead in winter-egg production.

This brings me to the kernel of my subject. Why do I advise fancy poultry, and not just good standard-bred birds, that might not take prizes at a show? This is why. Fanciers are men who love their birds. They study them constantly, individually. They visit shows every winter and are always comparing notes with their fancier friends. In order to win prizes at the big shows it is necessary to produce birds that are well set up, vigorous and shapely. This can only be done by intelligently selecting the breeders and resolutely casting out the balance from the breeding pens. And you will find that at this time the fancier is not thinking solely of fine feathers. He has the future of his flock at heart. It takes a considerable amount of experience and study to know these best birds. It is necessary to have had an intimate acquaintance with their ancestors for several generations, the more the better. Fine feathers, contrary to general opinion, are not the essentials in the show-room. Condition and type are the first considerations, and these are not produced by birds that are merely pretty to look at. The virtues of a breeder and a good show bird lie considerably more than feather deep. I know that once a man has made up his mind to get pure-bred stock of any kind and gives it a fair trial he would never dream of going back to the old, hit-and-miss, scrub stuff. Aside from the personal satisfaction that he is using his brains and hands and land in producing the best possible results, he finds added satisfaction on the credit side of his bank book. It is a strange fact that, however a man likes to prosper, unless he finds his work interesting he is not going to give it that attention that is a vital necessity. I have lived for many years in the city, and I know that there are more city people envying a life in the country than vice versa. Since I have been attending shows I have met many farm lads who are happily living in the country. They have a hobby that is broadening them by taking them at regular intervals among men they soon make friends with. And it is these very farm boys who have the best chance to shine in the show-room. The start is not expensive, and given the right care there is no place where the finest stock can be raised but on the farm. Fanciers always manage to have their birds raised on free range, putting them in winter quarters in the fall. And, where it is easy to raise three hundred or four hundred birds, the chances for picking out a winner are so much greater.

Can you not see your boy watching his flock during the winter, choosing his best birds to form a select little breeding pen and studying their habits with the greatest interest? And when he takes the best care of his growing chicks, that the other fellow does not get ahead of him next fall, he ensures a splendid profit on the flock on a purely utility basis. He reads the announcement of the fall fairs and then looks over the chickens to see if there is more than one cockerel or pullet that has a chance to win. Can you not imagine his joy at pulling down a coveted prize, or his grim determination to go back and raise a bird that will knock the spots off anything his rival can show next year? You see, it is only necessary to have a little real interest on the farm to make the life there the most delightful in the world. The happy man always has a little jam on the bread and butter of his life. A book called, "Adventures in Contentment," by David Grayson, explains very clearly what I mean. It will help you, as it did me, to look on the farm with the eyes of a man who has drugged in the city and sweated on the land. Surely the ditch diggers of this world are those who had never taken an interest in their work, and it slipped away, leaving them nothing at the end of this life but a memory of aching muscles. No man on earth can understand the sprouting of a grain or the quickening of an egg. There is sufficient marvel in all growing things to make a life-time of delightful study.

And then it is not hard to understand some of Nature's processes sufficiently to hasten and mold her works "closer to the heart's desire." If many men had not had a mighty interesting time experimenting in Dame Nature's workshop we would all be gathering our sustenance with a club even now. Yes, and even now we are as little children reaching for the second step. The vast store of natural energy on this globe is as yet scarcely tapped at all. And yet we often have the spectacle of strong men starving for work in the cities and crops rotting for the lack of hands to gather them. These things are known to all observing men, and, be the reasons what they may, a kindly, democratic government, such as we have in this country, can do no more than show the way. The terrific waste and mismanagement in the production of domestic needs, so glaring in this country and the United States, is unknown in Germany. But who wants to live in Germany? No one likes to be forced to do the right thing. It is better to

THE DAIRY.

Queer Cheese.

EDITOR "THE FARMER'S ADVOCATE":

I was lookin' through ma newspaper the ither evenin', an' bein' what ye might say a wee bit interested in the cheese market I turned tae the page where they tell ye the ups an' doons o' business an' what ye are likely tae get for what ye hae to sell, or tae pay for what ye buy. An' by the looks o' it a chap had better be sellin' than buyin' ony time o' the day. I mind twenty-five or mair years back the prices we would be gettin' for grain an' pork an' beef an' such like things we had with which tae pay the taxes an' store-bills an' maybe doctor's bills as weel. It was hard scratchin', say what ye like about the increased cost o' livin' at the present time. Mony's the bushel o' aits we sold at twenty-two cents,

o' the first cheese-makers we had hereabouts. He used tae call aroond in the evenin's an' talk about ane thing an' anither, but he'd aye feenish up by tellin' us what fine cheese he wis makin'. Ma auld auntie that's deid an' gone the noo, pur body, used tae gie him a dig once in a while when she'd think he wis gaein' a bit too far. He didna' like this ower weel, an' one nicht he telt her that he wis gaein' tae get her photograph, ane o' those days, tae hang up in the curing-room tae scare the wee mice awa'.

"Weel," says ma auntie, "gin ye mak' all yer cheese as hard as that last one ye gied us a sample o', ye dinna need tae bother. Ye'll be deid safe frae the mice." That settled him for the rest o' the season.

But I didna' feenish tellin' ye about some o' the queer cheese I hae seen turned oot o' factories in ma day. I'm minded o' one young chap that couldna' get his cheese tae stick together aifter he took them oot o' the hoops. He knew he wis in for it gin he tried tae sell them, sae he buried the hale lot back o' the factory, an' though the farmers were complainin' abbot the amount o' milk it took tae mak' a pound o' cheese they didna' find oot the trick till the next year, when the cheesemaker wis safely oot o' the country.

Anither lad that we had in the neeborhood aboot that time, an' wha wis supposed tae be makin' cheese, wis great for rinnin' aroond at nicht, gettin' acquainted wi' the girls an' tryin' tae develop the social side o' the community as much as possible. Mony's the mornin' he'd get tae the factory tae find ten or a dozen farmers waitin' tae get their milk weighed in, but he never got in a hurry at that time o' day. But gin it happened that he wanted tae get awa' tae a picnic or somethin' o' the kind in the afternoon, he wis the boy that could rush it through. I've seen him gae to the whey-tank the second time in one morning tae get sour whey tae pit in the milk tae hurry it along. A guid deal passed for cheese in those days that oor buyers wad call by some ither name at the present time. The standard is gettin' higher, an' I'm thinkin' no honest mon will be objectin'. Wi' the price what it is we should dae what we can tae keep up the quality, an' we can tak' oor money wi' a clear conscience. I remember a friend o' mine in toon, once, tryin' tae mak' me believe I wis no' daein' richt tae be takin' twelve cents a pound for cheese, as we were daein' at the time. I couldna' see it that way, an' I dinna' see it that way yet, although ma friend's case is better than it was. Gin the consumer isna' gettin' as guid value for his money when he buys cheese as when he buys somethin' else he's liable tae notice it, an' I'm thinkin' we're safe in leavin' the matter in his hands. At the same time I hae na' use for the farmer wha mak's it part o' his religion tae keep on complainin' aboot the sma' profits in the business, an' wha is a' the time tellin' ye how muckle it costs tae feed coos the noo, an' what the prices o' bran an' shorts were ten or fifteen year back, when maybe he didn't feed a bag o' bran tae his coos in a month o' Sundays. We dinna' get sympathy noo-a-days, na matter how muckle we kick. Aboot a' we get for oorselves is a sort o' contempt that I canna' say we dinna' deserve. Na mon who isn't an auld wumman will be complainin' onyway, na maitter how things may be gaein' against him, an' I'm thinkin' just noo especially, wi' cheese at twenty cents and prospects o' a rise in the near future for a kinds o' farm produce, we ought tae cut oot the grumblin'. The chances are we'll no' starve tae death, but gin we dae it's as weel tae remind oorselves that death by starvation is no' muckle harder than the average way o' gettin' aff the airth. There's a bricht side tae everything, even the cheese business.

SANDY FRASER.

Preparing to Produce Winter Milk at a Profit.

With cheese selling at twenty-one cents and butter climbing to the forty-cent mark, the dairy cow can truly be called the mortgage lifter. She has always been a means of turning roughage and coarse grains grown on the farm into ready cash, the net returns depending on the amount of milk and butter-fat produced, together with the price of the manufactured article. The average yearly production of milk per cow is barely sufficient to pay for feed consumed, but the possibilities of production are great. By a process of weeding out the poor producer and giving the selected cows proper feed and attention, high-producing herds have been built up. However, the most carefully selected and richly bred herd cannot produce unless given the necessary raw materials. Some dairymen do not get the best out of their herds for the reason that an insufficient quantity of the right kind of feed is fed. A factory run to its capacity is generally a paying proposition, provided the right kind of machinery is installed. So with the dairy cow, the breeder must select the one that will give the greatest returns for feed consumed, and then feed her to capacity on milk-producing feeds. In the issue of "The Farmer's Advocate," September 24, a table was published setting forth the yield of milk and butter-fat, together with the cost of feed for a certain herd for the past year. The figures are worth studying as they demonstrate the value of keeping accounts of what the cows are fed, as well as of the production. These cows were not stinted in the feed line, and most of them responded nobly.

It is generally conceded that winter dairying, taking everything into consideration, is more profitable than summer dairying. Labor is cheaper than during the summer, price of milk and butter higher. With silage, a succulent ration is supplied, and it is known that stable-feeding gives larger returns per acre of fodder grown

know that the change has come from within when once the light has been seen.

You may think I have wandered from my subject, but it is not so. I am not trying to settle the ills of humanity by a few hours' banging on a typewriter. But I do know something about this chicken business, and after all, every little bit helps.

Leeds Co., Ont.

W. A. STAEBLER.

The Fifth International Egg-Laying Contest.

The final report of the Fifth International Egg-laying Contest, held under the supervision of the British Columbia Provincial Department of Agriculture, at the Exhibition grounds, Victoria, B. C., gives the total number of eggs laid during the contest as 36,382, which is the combined production of forty pens of six birds each.

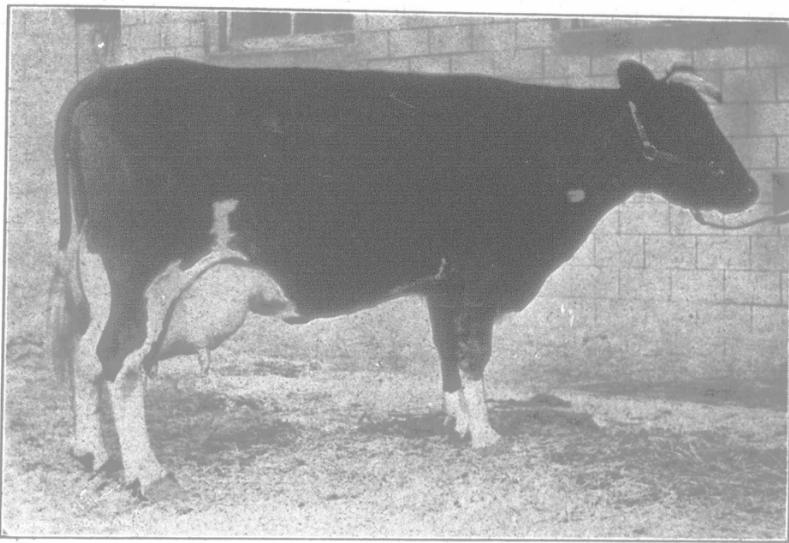
For the month ending September 21, 1916, the total number of eggs was 3,719 from the number of birds mentioned. The various breeds were represented and all gave a fairly good account of themselves. The winner of the first prize in the light-weight varieties was A. R. Lowe, Lakehill, B. C., with a pen of White Leghorns. The six birds laid a total of 1,103 eggs in the eleven months, which is about 184 eggs per bird. During the month of September they laid 130 eggs. J. A. Hanson, Corvallis, Ore., was 47 eggs behind the winner, with his pen of White Leghorns, and Miss Eva Hart, Sydney, B. C., won third place with a pen of White Leghorns that laid 1,054 eggs. There were twenty entries in this class,

and all but one were the White Leghorn breed.

In the class for heavy-weight varieties there were also twenty entries, made up of White Wyandottes, Barred Rocks, Reds, White Orpingtons, Buff Wyandottes, Buff Orpingtons, and White Cornish. While the first-prize pen in this class laid more eggs than the winning pen in the former class, the lighter breeds exceeded in the total. Dean Bros., Keatings, B. C., won the first prize for a pen of White Wyandottes, the six birds laying 1,126 eggs in the eleven months. Second prize was won by C. G. Hamilton, Pt. Washington, Pender Is., B. C., with his White Wyandottes, which laid 1,071 eggs. Third place went to E. D. Reid, of B. C., with a pen of 'Dottes that laid 1,048 eggs, which also won the silver medal for the highest winter-egg production in the class.

This contest was conducted under the directorship of J. R. Terry, Chief Instructor in Poultry-raising for the Province of British Columbia. The different breeds were housed and fed alike and given every opportunity to produce to the limit of their capacity. The birds were carefully selected by the different breeders and no doubt the best were entered in the competition. While individual birds have exceeded the average egg production of the highest pen, the birds in the competition have proven to be considerably above the average run of fowl.

This is a good time to get rid of the old hens and the cockerels. Feed is too dear this fall to waste on non-layers. The cockerels should be fattened and the hens sold as soon as they stop laying. Fill their places with the best of the early-hatched pullets. Select strong-constituted birds of good size and type. If pullets are late-hatched feed mash to hasten maturity. Clean up the poultry houses before putting in the winter layers. Eggs are going to be high this winter, so be sure to get them.

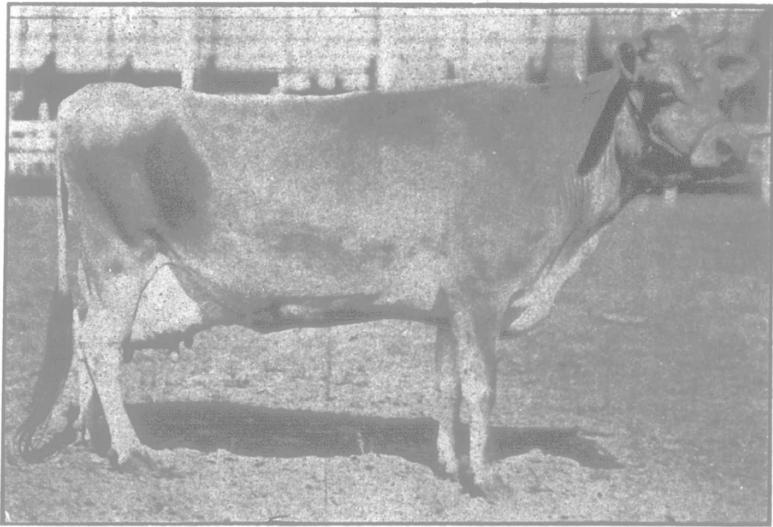


Lakeview Rattler 11364

7-day record—milk 724.0 lbs, butter 37.54 lbs; 30-day record—milk 2816.1 lbs, butter 142.77 lbs; 30-day record, 8 months after calving—milk 1409.7 lbs, butter 61.20 lbs; year's record—milk 19155.0 lbs, butter 831.25 lbs; 1 day's milk—record 106.6 lbs.

and wi' dressed hogs at four an' a half an' beef quarters at three dollars a hundred weight, I'm no' wonderin' that we never thought about a time when farmers wad be payin' a thousand dollars for a new-fangled kind o' a buggy in which they could rin races wi' the cars.

But as I wis sayin', I wis lookin' for the latest price o' cheese in ma paper an' when I cam' tae the reports o' some o' the Western Boards this is what I read: "Twenty and one half cents offered, but the farmers refused to sell." "Weel" says I tae masel', "I suppose they kin their ain business best, but I mind



Meadow Grass 2nd of Kirkfield.

Grand champion Jersey female at Toronto, owned by R. J. Fleming, Toronto.

the time they'd hae taken it." An' na doot mony o' these men remember as weel as masel' when they were paid six cents a pound for cheese that brocht us aboot forty-five cents a hundred for oor milk. There's been some change as ye might say, sure eneuch, an' I suppose that ye wouldna' find mony farmers that wad want tae go back tae the "guid auld days" even though there might be some compensations for the hardships we had tae pit up wi'. For one thing we used tae hae some queer cheesemakers in those days. An' as ye might expect they very aften made queer cheese. I hae seen cheese sae saft that it wouldna' stand upright on the shelves, but wad lean over till it fell aff on tae the floor. An' I've seen ither that were as much too far in the opposite direction. This reminds me o' ane

than does pasture. However, grass seems to be the natural feed for animals, and allowing the cow to pick her feed is much easier than harvesting and storing it for stable feeding. Fresh air and sunshine obtained in the open are conducive to health, but if the greatest returns are to be obtained, the pasture must be supplemented during mid-summer and fall. This applies especially to the cow in milk and one which will milk well on into the winter. If the milk flow decreases, due to shortage of feed or unfavorable weather conditions, in the fall, it is difficult to bring it up to normal again. In fact, most dairymen claim that it is impossible to do so. Even dry cows due to freshen during late fall and early winter will give a better account of themselves during the lactation period if supplied with sufficient feed to flesh them before dropping their calves. These facts have been proven time and again, yet supplementary feeding is not generally practiced. Dairymen who allow their cows to drop below normal in milk flow or get out of condition, due to shortage of pasture and lack of care, are losing hard cash. The loss will be heavier than ever this year owing to high price of both feed and milk. A certain amount of the feed consumed goes to sustain the system; that over the maintenance ration goes into production. From the appearance of some herds they are not receiving even a maintenance ration, let alone enough feed to produce milk at a profit. Many feeders evidently fail to realize the relation of feed consumed to production. If feed is scarce this fall and it is not thought advisable to purchase mill feeds, get rid of the cows that are boarders and feed well those which are kept. A small herd of carefully selected, well-fed cows is more profitable than a large herd kept on a maintenance ration. Besides, the labor is reduced, which is an item that must be considered.

Even if winter dairying is the most profitable line, it is impossible to have all the cows freshen in the fall. The best-laid plans are upset by cows failing to breed, and various other causes over which man has little control. Consequently, while the aim in some dairies is to have the cows freshen in the fall, there are some freshening at different times of the year. This tends to give a uniform supply of milk to place on the market the year around, and so prevent a glut in one season and a shortage another. Six weeks' or two months' rest should be given a cow in order that she may gain in flesh before dropping her calf. Dairymen aiming at winter dairying generally breed their cows to freshen any time from October to the New Year. Work is not so rushed in November and December as during seeding and harvest, consequently, there is time to give the cows and calves the attention necessary to have them make the best returns for feed consumed. Cows freshening in the fall usually milk well all winter and continue to give a good flow in the spring, so long as grass is abundant. August and September are generally considered to be the most difficult months to make milk. Flies are bad and pastures are parched. However, by this time the cows to freshen in the fall are dry or nearly so, consequently all the feed goes to build up the animal body and prepare the cow for her winter's work.

Whether a cow is in milk or dry she requires special attention during the fall. If pastures are short they should be supplemented. Green corn, silage, or clover hay are satisfactory roughages, and oats or bran might also be profitably fed. Possibly a few pounds of oil-cake meal or cotton-seed meal would aid in balancing the ration, and under certain circumstances be the most economical feeds to use. The concentrates to feed depend on the nature of the roughage. This year in particular all pasture is short and on many farms the grain supply is below normal, while roots and corn are not on a par with other years. Consequently, dairymen have difficult problems in the feed line to face this fall. In view of the high price of dairy products every effort should be made to handle the herd so as to get the greatest net returns under prevailing conditions. This cannot be done by curtailing the feed or feeding a one-sided ration to good cows.

Cows are sensitive animals, and the milk flow is influenced by changes in temperature. After the first of October it is usually advisable to stable them at night. The ground is more or less damp and cold, and if cows are left out extra feed is required to keep up the body heat. If the feed is not forthcoming then the milk yield suffers. A cow should be in the stable on chilly, drizzly days this time of year, but so long as it is fair weather they are better out even if the pastures are short, but they require feeding in the stable. Not only do the cold and damp lower the vitality of the animal, but tend to cause udder trouble. Teats are more liable to become sore during the fall than at any other time of the year. Garget may be brought on by the udder coming in contact with the cold ground. This trouble not only diminishes the milk flow for the present, but frequently causes loss of a quarter of the udder. The average dairyman might profitably take lessons from those who are making high records with their herds, regarding care and feeding the year round. If special attention aids in making big records, it will assist in improving the milk yield of the average cow.

The change from pasture to stable is probably the most difficult thing to get a cow accustomed to. Climatic conditions of this country are such that animals must be sheltered about seven months of the year. Fresh, succulent grass is Nature's feed for stock, and successful dairymen aim at imitating summer feeding in the winter. Silage comes nearer taking the place of grass than any other feed grown on the farm. Roots are valuable feed to include in the ration, and, of course, there must be a certain amount of dry feed. The system of an animal on pasture all summer, becomes accustomed to digesting green feed, and it is a miracle that the loss

is not heavier than it is when they are placed on dry fodder. So often the change is made suddenly in place of gradually getting the animal accustomed to digesting dry feed. It is possible to change from field to stable conditions without in any way interfering with the health of the animal or decreasing the milk yield. Through September and October the cows become accustomed to a certain amount of dry feed in a well-regulated dairy. A certain amount of concentrates is also fed daily, and, as the grass decreases the silage and roots are fed in increasing quantities, consequently by the time the weather prevents stock going to the fields they have become accustomed to winter conditions and winter feed.

Corn, either as silage or stover, goes a long way in solving the winter-feeding problem. If handled properly corn stover is readily eaten by stock the early part of the winter, but silage is a palatable feed for all seasons of the year. A cow requires all the roughage she will consume, but the amount of concentrates to be fed depends on the yield of milk. One pound of grain to every four pounds of milk is a rule followed by some.

Milk averages about 87.5 per cent. water; 3.6 per cent. fat; 2.5 per cent. casein; .7 per cent. albumen; 5 per cent. sugar, and 7 per cent. ash. These substances must be fed before the cow can produce them in the form of milk. If they are not in the feed, a cow will draw them from her system for a certain length of time. Feed is also necessary to repair waste tissue, supply energy and heat. It is necessary that the ration consist of feeds that will supply protein. Where there is a supply of alfalfa or clover hay and a silo full of corn a dairyman can keep his cows looking fairly well, and at the same time producing a profitable quantity of milk, without feeding too heavily on expensive concentrates. Oats are the most nearly balanced ration in themselves of any of the grains. They are particularly good for milk cows and young stock. Bran is also highly recommended as a protein feed. Oil cake, cotton seed and brewers' grain are also rich in protein, and are used in large quantities by some dairymen. Owing to scarcity of grains many tons of these feeds are being purchased this fall to assist in keeping the cows up to normal in production this coming winter. For best results a variety of feeds is necessary.

The dry cow due to freshen within a few weeks requires attention as well as the cow in milk. Probably the concentrates need not be fed in as large a quantity, but she must be fed well when dry if the greatest returns are to be made during the lactation period.

The boarder cow should never be kept. However, we have reason to believe that many are still to be found in the country, and in many herds they will be the means of reducing the ration that the profitable cow should receive this winter. Never before was the necessity of weeding-out so apparent as it is this year. Individual records of production and feed cost should be kept, and attention centred on the cows making a profit.

THE APIARY.

Preparing for Winter in the Apiary.

Bees do not become torpid in winter like other insects, but they generate heat and consume their stores in so doing. In cold weather the bees form a compact spherical cluster, the interior of which may be as warm as eighty or ninety degrees Fahrenheit. Successful wintering depends principally upon the number of bees in the cluster, the youth of the bees, sufficient and wholesome stores, and protection from cold. When good protection is provided the bees do not need to produce so much heat, consequently less stores are consumed and there is less drain upon the vitality of the bees.

Preparation of bees for winter, therefore, begins by seeing that each colony has a good fertile queen and enough bees to crowd the spaces between seven to ten combs, the more the better, and that these consist principally of young bees that have done but little field work. Weak colonies must be united. To get plenty of bees reared in August and September in regions where but little honey is gathered during these months, the queen should be one that has been reared during the summer. Since such a queen will also usually build up her colony more rapidly and to greater strength in the spring, and will be less inclined to swarm than an old queen, the advantages of requeening colonies that have old queens are great, and it will often pay to buy queens for this purpose if they have not been reared.

Each colony should have thirty to forty-five pounds of wholesale sealed stores if it is to be wintered out-of-doors, the amount depending on the intensity of the cold, and thirty to thirty-five pounds if it is to be wintered in the cellar. The weight of an ordinary 10-frame Langstroth hive made of white pine with walls seven-eighths of an inch thick, with five-eighths inch thick bottom board, combs, bees and pollen, but without cover, is, if dry, usually between thirty and thirty-five pounds, so that in weighing hives for the winter the weight of stores may be liberally estimated by deducting thirty-five pounds from the weight. Any deficiency in weight is made good by feeding as rapidly as possible during the third or fourth week in September (the first week in October in southern Ontario,) with sugar-syrup.

To avoid dysentery it is good practice to give each colony at least ten pounds of syrup. This is stored next to the cluster which occupies the empty parts of the comb from which the last brood emerged, and it

is therefore consumed first, so that the accumulation of the faeces is delayed. At the Central Experimental Farm, Ottawa, where a considerable amount of honey is gathered from wild flowers in August, it has been found that colonies whose stores have been thus supplemented with about ten pounds of syrup, winter better than those whose stores consist of honey only, and this has been found to be the case in many places in Ontario and elsewhere. If honey-dew honey or other stores that quickly produce dysentery are suspected to be present in quantity, the outer combs should be removed and replaced with combs of clover honey saved from the summer, the honey should be extracted from the inner combs and the colony should be fed with sugar syrup.

In many places in British Columbia, southern Ontario and the Annapolis Valley, N. S., the bees may be wintered successfully out-of-doors, provided adequate protection is given, but in regions where the winter is very cold they must be wintered in the cellar. In places where there is a choice between the two methods, out-door wintering is sometimes preferred by absentee beekeepers for out-apiries because the bees need no attention from the time they are prepared and packed for winter at the end of September until spring has opened. Nevertheless, where the bees are unable to get a good cleansing flight for several weeks their vitality is better conserved in cellars where the optimum conditions of temperature, ventilation and humidity (which as yet are but imperfectly known) are approached than under the severe and fluctuating conditions found outside.

Outdoor Wintering.

On the Pacific coast where the winter is mild and damp, a weather-proof wooden case that slips down over the outside of the hive and projects about three inches above it, with a two-inch covering consisting of sacks or a chaff cushion on top of the frames and a ventilated waterproof roof makes a sufficient and satisfactory extra covering. It is advantageous to have a dead-air space between the case and the hive, and this may be filled with cork granules or other packing that will not attract or hold moisture. The entrance to the hive should be reduced to six or eight inches long by three-eighths of an inch deep.

In colder and drier regions the hive without its roof is placed in an outer case large enough to take two to four inches of good packing such as planer shavings or closely packed dried leaves around the sides (in severe climates the bottom also) of the hive and six to twelve inches on top. The material on top may be placed in bags or a cushion for easy removal. It is an advantage to make such a case large enough to take four hives in two pairs, back to back, because the colonies keep one another warm. The cases made to take four hives have proved very satisfactory in many apiaries in southern Ontario, and with three inches of planer shavings at the sides and underneath and ten inches on top, they have met with fair success at the Central Experimental Farm, Ottawa, in the winters of 1912-13 and 1913-14.

The roof of the wintering case should be covered with waterproof roofing. Above the packing material an air space should be left which should be ventilated by holes in the gables. To prevent the mouths of the hives getting choked with dead bees there should be a space of at least an inch between the floor and the bottom bars of the frames. A suitable size for the outside entrance where the winters are severe is one and one-quarter inches high by eight inches wide, the width being reduced to three-eighths of an inch during the winter by means of a piece of wood revolving on a screw and resting on a projecting nail or block of wood. To prevent the small entrance getting partly closed with ice there should be no projecting ledge under it. To be buried under a moderate depth of loose snow does bees no harm in mid-winter, but snow may advantageously be cleared away from the hives in March.

Bees wintered out-of-doors must be sheltered from wind. Protection from wind is especially important in the colder regions. In such regions if the apiary is not surrounded by evergreens or other satisfactory shelter a close board fence about eight feet high should be erected around the apiary. It is necessary to emphasize the importance of wind protection in the winter, because it is often given insufficient attention.

Bees wintered out-of-doors start breeding earlier than those wintered in the cellar, and they benefit by the better protection provided by the wintering case in the spring.

Cellar Wintering.

The bee cellar should be well ventilated but not drafty, and the temperature should be kept steady at about two to five degrees below that at which the bees would begin to show signs of restlessness. The best temperature in the early part of the winter will usually be around forty-eight degrees F., but as the faeces accumulate a somewhat lower one (forty-two to forty-five degrees F.) with more fresh air will be needed. The air in the bee cellar must not be too dry, but it must not be damp enough for moisture to condense on the floors of the hives, and the cellar should be well drained. The bees must be kept in darkness and should be left undisturbed.

The cellar of the residence is usually satisfactory for wintering bees, or it can be made so, the furnace helping to supply the required temperature and ventilation. A portion of the cellar should be boarded off for the bees. The principal faults are insufficient insulation to keep the temperature within the stated limits, insufficient ventilation and insufficient or ex-

cessive humidity. The combination of a too low temperature with excessive humidity is particularly injurious.

A bee cellar to contain many colonies should be furnished with a chimney to draw off the foul air, the draft being regulated by dampers. Good insulation may be secured by having the cellar wholly underground, or in the side of a hill, and the fresh air may be brought in through a six-inch or eight-inch earthenware drain pipe laid under the ground.

The bees should be brought into the cellar as soon as possible after the last good flight that they are likely to get. This is usually some time in November. It is advantageous to contract the entrance and give light protection for two or three weeks previously. During transportation to the cellar the entrances to the hives should be temporarily closed with, for instance, soft paper or burlap. Inside the cellar the size of the entrances should be large enough to allow sufficient ventilation and to facilitate the ejection of dead bees. The hives may be raised behind slightly to allow the dead bees to roll out. It is a good practice to replace the cover of the hive with three or four empty sacks. The dead bees should be swept out of the cellar two or three times during the winter, if they accumulate and become offensive. It is not advisable to winter bees in trenches dug in the ground. Should a colony through accident have been put away for winter light in stores, thin cakes of candy should be placed over the frames to avoid starvation, but to have to feed bees in winter is a sign of bad management.

Feeding the Bees.

Syrup made from the best grade of white granulated sugar is a safe substitute for honey in spring and summer and a desirable supplementary food for winter. For autumn feeding use two parts of sugar to one of water, in the interior of Canada, and two and a half parts sugar to one of water at the coast. To get the sugar to dissolve completely, the water must be hot, and if the syrup is made over the fire, the sugar must be added to the water in small quantities at a time and stirred constantly until dissolved, to prevent it from settling to the bottom of the vessel and burning. Burnt sugar is very unwholesome for bees and would cause their death during winter. To prevent the syrup from granulating, a teaspoonful of tartaric acid may be added to every twenty pounds of sugar.

Candy for feeding in an emergency during winter is made by dissolving over a slow fire six pounds of sugar in one and one-eighth pints of hot water and boiling it at 238 degrees Fahrenheit over a hot fire, with one-quarter teaspoonful of cream of tartar, for a few minutes without stirring. Boil longer if too soft. When the candy becomes almost cool enough for the finger to bear it, it should be stirred until it begins to whiten, and then poured quickly into moulds to form cakes about one inch thick. Syrup made as previously described should be given inside of the hive and covered up so that bees from the other hives could not get access to it. To prevent undue excitement at robbing,

it is best to feed in the evening. (From Bulletin No. 26, Dominion of Canada, Department of Agriculture.)

HORTICULTURE.

The Fifth Fruit Crop Report.

The fifth fruit crop report issued by the Dominion Fruit Commissioner shows little improvement in the quality or yield over what was stated to be the case in the last report. In some sections there will be very little No. 1 quality. The British Columbia crop will be slightly less than last year with a smaller percentage of No. 1's. In Ontario the yield is poor and the quality worse still. Apples are coloring well and attaining size, but the scab is very prevalent. The most favorable Ontario report comes from the Georgian Bay District. The total crop there will be between 60 and 70 per cent. of normal, but there will only be about 20 per cent. No. 1's. The latest indications are that the crop in the Annapolis Valley will not exceed 500,000 barrels. The quality and color are very much better than last year. Crop prospects in the United States are very good particularly in the Northwestern States. The volume of the crop, says the report, will be between 16 and 18 thousand cars.

The Inside and the Outside of a Big Co-operative Company.

The most severe critics of the United Fruit Companies of Nova Scotia, Ltd., admit that it has been a good thing for the fruit business in the Annapolis Valley. This should prevent any incorrect inferences on the part of readers who, on account of prejudice or through our inability to properly set forth the nature or operations of the organization, desire or happen to arrive at conclusions opposed to co-operation. The Company referred to has often been cited as one big success in the co-operative method of handling farm produce and farm supplies. At a distance we see only the outside; we are told of its successes, but not its failures; we are led to believe that, in spite of all the influence brought to bear by interests that would be injured by its success, the Company stands supreme and undisturbed. This is peculiar to all co-operative organizations. Away from home they are not without honor, and farmers after hearing of their achievements often link themselves up with such an organization, thinking, that from the first, so long as they are all good, the movement will go steadily on and everything will be fine. Co-operative associations do not usually work in this way, and, knowing this to be a fact, the writer became imbued with a desire to obtain a glance at the inside of the cup. We were able to view the operations of The United Fruit Company from many angles. The Manager, individual members and critics were interviewed, and from the different threads we are able to weave a fabric that represents to some extent the Company as it is. To be brief, the organization is still doing a large business and a remarkable amount of good, but it has its troubles. Furthermore, the people of the Annapolis Valley are apparently no more liberally endowed with the true spirit required for such a movement than they are everywhere else in Canada, and Canadians at large are perhaps the most niggardly endowed of any people in the world. The Canadian's independent life and the prosperity which comes to him who seeks it with hand and brain working in unison are the biggest obstacles to co-operation in this country.

To obtain a clear idea as to the work of the large Co-operative Company that since 1911 has been handling an ever increasing quantity of the output of apples, one should first understand the conditions prior to its inception. Commission firms in Great Britain had representatives in the Valley who solicited consignments. They in turn had sub-agents at the shipping points, who went from grower to grower seeking patronage for the houses they represented. There were many charges against this produce included in the account of sales, and while the majority of the commission houses in England and Scotland were probably honest, very few of the shippers actually thought so. There was a charge for this and a charge for that. In fact, the returns were so extensively itemized as regards the expenses, that many of the growers who had no way of ascertaining the truth were somewhat dubious about the integrity of the consignees. Again, there was the speculator who was active when the demand was keen, and dormant when the market was dull. Thus, during a good season there were several channels through which the fruit could be marketed, but when the price went flat and there was little demand, the growers were obliged to look out for themselves, which usually meant that the greater part of the fruit was consigned. With no guiding factor in the handling of six or seven-hundred-thousand barrels, one can easily understand how there would sometimes be congestion at the shipping points, and even in the Old Country markets themselves, when such a number of individuals, practically uninformed as to conditions at home and abroad, tried to market their season's crop.

One cannot say, however, that the people of the Annapolis Valley lacked confidence in anybody with whom they came in close contact. Not many years ago a representative of a very honest man, still residing in Ontario, purchased apples throughout the Valley. Fruit was drawn to the warehouses and put in charge of the buyer, who at once stamped the shipping mark of the gentleman he represented on the barrel. Not

requiring funds at that particular season, the growers failed to demand payment as they handed over load after load of their product. Just as the season was drawing to a close the buyer left without saying "Good-bye," the apples were safely stored with another gentleman's shipping mark plainly stamped with good ink on the end of the barrel, and a large number failed to receive even one cent for their season's crop. It would have been a strange jury, or an unjust judge, who would not have allowed the owners of those apples to recover what still remained in the warehouses, but there was no organization and the individuals said: "Oh, its only sending good money after bad," and they let it drop there. These are reminiscences, but they depict pretty well indeed conditions in the Annapolis Valley as they existed ten years ago.

Co-operation Tried.

In the year 1907 a few growers in the vicinity of Berwick united themselves into a small co-operative company. By 1909 five more associations were organized, and the following year saw the inception of as many more. These co-operative associations must have been an improvement over the old haphazard method of marketing, or the movement would not have had such a rapid growth. The number increased still further and 1911 was the birth year of the Central Company, which was consolidated in 1912 and incorporated under the name of "The United Fruit Companies of Nova Scotia, Limited." The majority of the small associations throughout the country became subsidiary companies and contributed representatives to its board of management. We shall not attempt here to explain the type of organization or the history of its growth. We are more interested in what it has done and in what it is doing.

Last year when the apple crop of the Annapolis Valley amounted to approximately 625,000 barrels, about fifty per cent. was handled by the Central. They had their European representative, and furthermore endeavored to develop new markets in other parts of the world. Supplies, meaning fertilizers, spraying materials, barrels, nails, etc., were handled to the extent of \$100,000. In 1913-14 the total expenses of operating the Central amounted to \$28,700. The following year the amount was reduced by \$4,500, and the present manager, A. E. MacMahon, expressed the opinion that the Company will be operated this year for about \$20,000. The average cost of packing at the warehouses of the subsidiary companies was about 12½ cents per barrel last year, and it cost in the neighborhood of five cents per barrel to pass the apples through the Central. The remaining charges levied by the local company depend upon their capital expenditures in warehouses, equipment, etc., or in any operations they carry on in connection with the business. The fruit is all packed by gangs employed by the local companies at their shipping points. The culls are disposed of according to an agreement between the subsidiary companies and the growers. Altogether fifty-two warehouses are controlled by the organization. These have an average capacity of 8,000 barrels, but including the different varieties 20,000 barrels will easily pass through one building in a season. Last year 52,000 barrels were passed through two warehouses. These plants are frost-proof on the first floor and in the basement, which renders storing a safe proposition and makes it possible to pack and ship the winter varieties during the months of December, January, February, and even as late as March.

Following are a few features which the Manager expressed as characterizing the efforts of the Central organization:

1. Raising the standard of grading and packing and creating a demand for the output.
2. Establishing markets for the sale of potatoes direct, and chartering steamers and schooners for transportation at a figure less than the prevailing freight rate. Three steamers and two schooners had been chartered by the last week of September this year, and negotiations

for more were then under way. Raising the standard of the potato pack is considered important, and work along this line is being conducted all the time.

3. Purchasing supplies including flour and feed, which business exceeds \$100,000. So far the Company has been very fortunate in securing low prices for the benefit of the members. Supplies are distributed at prevailing retail prices and the members receive their rebates periodically.

These three brief references to the work of the United Fruit Companies of Nova Scotia, Ltd., should suffice to introduce the reader to the organization and convey a fair idea of what it means to the grower of the Annapolis Valley. Its field extends as far East as Falmouth and as far West as Annapolis Royal, a distance of about 75 miles. In addition there is a subsidiary company in Queen's County and one in Lunenburg.

As to the advantages of the organization, with reference to prices, the Manager said that in Liverpool, Eng., the co-operative brand was favored with a preference amounting to 2 to 4 shillings per barrel. In the local markets the Company's output was desired and commanded a better price than the average of the individual grower and shipper. The Fruit Branch at Ottawa also made some investigations and commended the co-operative enterprise for the work it was doing and the prices it was returning to the grower.

Rumblings Heard on the Outside.

While none of the views set forth in the preceding paragraphs were contradicted or questioned by critics or dissatisfied members of the organization, some did make statements that we shall reproduce here in part. Up to the present we have revealed only the bright side of the picture, but let it be plainly understood that there are dissatisfied members, and, more than that, dissatisfied local companies. Just as the good accomplished by the central finds its way down through the local association to the individual grower, so do the little dissatisfactions which exist in the separate communities coalesce into a large complaint to the local company, which, in turn, through its connections with the Central registers its grievances.

One practice which is causing trouble is the pooling system. As an example, the members of a local company will deliver all their Gravensteins to the warehouse to be graded and packed. That association has its manager and its packing gang, upon whom depends the standard adopted. This system extends all along the line and the complaint has been registered that the quality is not the same throughout the Valley and some packs are superior to others. In parts of King's County the growers feel that their fruit should not be pooled with that from Annapolis, and vice versa, for the Central Company adjusts the price for Gravensteins after the variety has been disposed of, handing to the local company so much per barrel and paying no attention to the character of the output of the different associations. These apples must of course conform to the requirements of the Fruit Marks Act, but the feeling exists that a barrel of No. 1's selected from an unclean crop is not so good as a barrel of the same grade selected from good-quality stuff. The Central has its own paid inspectors and instructors going from warehouse to warehouse endeavoring to standardize the pack, but this, some of the growers claim, has not been accomplished. The packing of the growers' fruit at their own local shipping point and in turn pooling each variety from the subsidiary companies has caused no small amount of trouble. There is little incentive to keep on improving the quality when some company in Hants or King's or Annapolis puts out more inferior stuff and gets just as much per barrel for it.

The United Fruit Company might discriminate between the brands of the local associations, but if the pooling system is not right the evil will still exist

in the subsidiary organizations, where, with our present knowledge of handling fruit on a large scale, the problem cannot be solved. If pooling is wrong from the viewpoint of the subsidiary companies, it is also wrong from the viewpoint of the individual growers who must combine their crops at the headquarters of their own little concern. There is just as much difference in the quality of the crops of the growers themselves as there would be in the packs of the several local companies. A new shipping company has grown up which recognizes each local association, that sells through it, as a unit unto itself. While the evils of the pooling system are partially overcome in this way, they are not obliterated. The growers in the small centres still pool their fruit.

The success of such an enterprise as the United Fruit Company depends very considerably upon the manager and his staff. In the initial stages a gentleman was employed as manager, who had grown up with the apple business and was acquainted with every phase of the work, both growing and marketing. The United Fruit Company made a move in the beginning that co-operative associations too seldom do; they engaged a man who had made a success of his own business and was still young and aggressive enough to make a success of a business for someone else. Regarding his services and the returns he brought to the growers there was little complaint, but a feeling developed that he was not devoting all his time to the company and in the natural course of events another took command. The present Manager has been connected with the Central Company since its inception. He has been a successful business man and public servant but he has no easy master to serve. The public demand a "strict accountability" and any move to exploit new markets or develop old ones must bring results, for the growers always disregard the motive and consider the deed.

It is with regard to expenditures that the people are most exacting. They feel that more salaried men than are necessary are employed to conduct the business.

Another complaint made is that the settlements are too much belated. Sometimes the final statements are not issued till June, and, while the growers can obtain advances of money, they prefer early settlements so they will, to use their own expression, "know where they're at."

These are a few items which are causing trouble for the United Fruit Companies of Nova Scotia, Ltd.

Cause and Effect.

There was need of a strong co-operative company in the Annapolis Valley and it was brought into being. While all the growers have not thrown in their lot with the enterprise, there are very few who have not been benefited by its existence. In fact, those who have remained independent have perhaps profited more than the members themselves, for the Company not only had to meet all legitimate competition but they were obliged to face the obstacles and avoid the pitfalls laid by the interests which were growing rich out of their dealings with the Valley growers. This opposition could not but influence the prices returned by the Central and subsidiary companies. Furthermore they sent representatives abroad to exploit new markets and develop those to which the Valley had been catering for years. This of course was charged up to the members, while it was of almost equal value to those who still remained outside. The independent growers were paid good prices for their apples at the shipping points, and members of the Company did not fail to hear about it. When an exceptionally good account of sales is received by a non-member it is heralded about, but there is never any mention made regarding the average returns and how they compare with the receipts of the co-operative man.

Such a body of men, who represent upwards of fifty per cent. of the growers, have some weight when they enter a protest or prefer a claim. The Company have been instrumental in bringing about reforms which have been good not only for their members but for the growers and shippers at large.

Instances could be cited where the Central body having command of a large quantity of fruit, has relieved congestion by diverting their shipments. While this works to the advantage of the member, the independent grower also profits by the relieved condition of affairs.

The prices received by those who have not joined themselves with this Company are competitive prices, which would not have accrued were there no organized body conducting business there.

Regarding salaries, members should take into consideration the value of men who can conduct the business and bring them results. Any private enterprise would not hesitate to pay double the amount paid by the Company, if the business was prospering. The cost of handling each barrel of apples and the net returns for the same are the deciding factors in the matter.

While there may be disgruntled members and dissatisfied subsidiary companies that is not the fault of the system which has done so much for the Annapolis Valley growers. If there is anything wrong it is the duty of the members to make it right and still continue the business which means so much to them. He is a very narrow-minded grower who "knocks" the United Fruit Company, whether he be a member or not. Very few, if they actually spoke their mind, would like to see it go out of existence, and readers should not think for one minute that there is any danger of it doing so. The present Manager said only a short time ago that never in the history of the organization had it enjoyed such loyal and staunch support.

Automobiles, Farm Machinery and Farm Motors.

Preparing for Winter.

In another month or two a large percentage of cars that have been used exclusively for pleasure, will be stored away in buildings of some kind, sort or description. A small percentage find lodgement in city garages where they are always kept well heated and in excellent condition. A larger proportion, however, are put away in barns or other buildings on the property of the owners. If you intend to do any work upon your motor during the winter months, do not forget that there is a new disease called petromortis. This is caused by the injurious gases filling the air in any garage not properly ventilated. See to it that your storage facilities include windows or pipes that will provide definite quantities of fresh air at will.

Here is another cool weather suggestion. Of course you realize that freezing troubles must be forestalled. If you are going to use your car on the warmer days of winter and do not wish to be constantly draining the radiator you should remember that a small radiator requires two quarts of wood alcohol, or two and one-half quarts denatured alcohol, the medium-size radiator demands one gallon wood alcohol or five quarts denatured, and the large size five and a half quarts wood alcohol or seven quarts denatured. This mixture will keep radiators from freezing at zero. If a cold snap comes and there is danger of the mercury dropping to twenty degrees below, your radiator should have 3, 6, 9, quarts of wood alcohol or denatured alcohol for the small, medium and large sizes respectively. To prevent freezing at thirty-five and forty degrees below zero, the quantities must be increased to one gallon, two gallons, and eleven quarts. It would also be well to remember that wood alcohol is more effective than the denatured product under ordinary circumstances, but that at lower temperatures there is very little difference. In using an anti-freeze, first drain the entire cooling system and wash it out thoroughly with clean water. When you have added the proper amount of alcohol, fill the radiator to the usual level with clean water, then be sure to run the motor a few minutes in order that the solution may be properly mixed. The alcohol has a tendency to evaporate more or less rapidly, even in the coldest weather, and more must be added from time to time to keep the solution up to the strength desired. Perhaps a pint every fortnight will be sufficient, especially if when running the motor you do not allow the mixture to steam. Some people have secured very good results from adding three or four ounces of glycerine to the solution, and there can certainly be no harm in following such a course.

Most of the good motors are equipped with vacuum tank systems for drawing fuel to the carburetor, and after a season's running this very excellent device may require a certain amount of attention. There are dangers to be avoided,—the collection of sediment in the strainer at the top of the tank,—perhaps too, the cover has become slightly loose, admitting air, and the third cause for minor trouble may be the looseness of the connections on the suction pipe at the manifold end or where it joins the vacuum tank itself. Just to satisfy yourself that the vacuum system is in good running order, it might be well to give it an overhauling at your earliest convenience. If everything is found in satisfactory

condition, you have the joy of knowing that the season's work has been satisfactory and that your car, so far as its fuel transmission is concerned, is ready for another season's work.

The Gas Engine—the House-Wife's Helper.

Few practical farmers would listen to a salesman who offered them, at any price, a hand-power feed grinder. The same men will go to town, purchase a washing machine so large that it would almost stall a one-half horse-power engine to run it. Do they think where the power to run this machine is to come from? (True it is that some men run them, but not always). No, they take it for granted that it is so far ahead of the old method that the wife or hired girl should be satisfied to turn the crank, or work it back and forth in whatever the prescribed method may be.

The pumping of water for the stock in the barns has always been considered one of the most important uses to which a gas engine could be put. What about some labor-saving device that would pump water to the house? Then the vegetables could be easily washed by turning a faucet and letting the water do the work, the butter could be easily washed, the Blue Monday would be a thing of the past.

Electric light is another convenience which this source of power makes possible. These are some of the more common labor-saving devices, but let us look at some others that are possible.

Let any man watch a woman preparing a meal and he will see the energy she expends is mostly in doing countless little things which tire her more by their monotony than by actual work. A dish washing machine will relieve the house-wife of the most disagreeable of all tasks. Why should the country woman not have a vacuum cleaner? Without an engine a small shaft driven by hand could give power to a food chopper, knife cleaner, coffee grinder, etc., and do many other tasks in the kitchen.

The housewife will insist that the engine must be clean and easy to start. She does not want one that will spatter oil all over. Many reliable engines are on the market and do excellent work when used intelligently. Labor is scarce and often hard to get along with; herein lies a possible solution.

Many of our readers will say these ideas are just notions and sound very nice but are not practical. In the older-settled districts in this new country many are contemplating building large modern houses, while many have done so already, and this question should be given every consideration. It will pay the outlay many times if so much of the drudgery that rightly drives girls off the farm will be eliminated. Most men will gladly help to do their part if there is a demand for something like this, so be sure and let them know your wishes. Then we will be able (1) to do things we had not the time to do in the past; (2) to do work better than is possible by hand; (3) to find more time for the development of a higher tone of culture.

FARM BULLETIN.

Are We Patriotic Enough?

EDITOR "THE FARMER'S ADVOCATE":

One might scarcely think it necessary to ask "are we patriotic enough," in view of the fact that since the war began more than three hundred and fifty thousand men have answered the call of King and country, while something over eight million dollars have been raised for war purposes. Yet in spite of this notable record we are convinced that there is a lack of true patriotism among many Canadian citizens. It is well to remember that a very large percentage of those who have enlisted in this country are from the British Isles, and have only been in Canada for a few years or months. For two years now their names have been appearing in the Canadian casualty lists with the next of kin invariably found in Ireland, Scotland or England. Why, may we ask, have so many Britishers in Canada enlisted for overseas service? Is it not largely due to the fact that England has been attacked by the foe, and that they have loyally responded to the call to defend their native shores? It is only because the British navy intervened that our own shores were not invaded, while the supremacy of Britain and her Allies on land and sea is the only guarantee that we shall be left unmolested. Because of this it is just as much the duty of Canadians to enlist, even if the battle-ground be Europe, as for those of the Old Land who were here for so brief a time.

The writer was present at a meeting where presentations were made to the boys (nearly all English) who had enlisted for overseas service. No cheers greeted the names as they were read by the chairman, and no enthusiasm was shown or approval manifested by the audience as the chairman championed the cause of Britain and her Allies. In this stupendous struggle for the liberties of the human race every Canadian should be interested in helping to bring victory to the Allies, yet there are lots of people in Canada, both young and old, whose attitude is one of selfishness and indifference when it should be one of sacrifice and service. We are proud of the many who have answered the call and have given to a great cause the last full measure of devotion, yet we think, before this struggle ends there will be a demand for greater sacrifice than has yet been rendered. Kipling's lines hold good after two years of war:

"No easy hope or lies
Will lead us to the goal,
But iron sacrifice
Of body, mind and soul.

"For all we seek and are,
For all we love or hate,
Arise and face the war!
The Hun is at the gate."

There have been those who, like Count Tolstoi, held that patriotism was a curse and the cause of strife between nations, but the patriotism that he and others saw and condemned must have been of a jingo variety and not of the noble sort that Webster defines as that passion which aims to serve one's country.

OCTO

either
its r
in
thin
peac
with
We v
Buffa
all na

As
our h
somet
patrio
is, "M
the li
our ru
popula
with
in Ca
come
there
Canad
her de
citizen
a know
to diff
deeply
zone."

If
also c
land i
patrio
relatio
withou
are hea
or no i
children
for sac
held up
and acc
at that
possible
If pare
is the s
careful
citizens

We,
politics
of the
form o
flag wa
of pain
claims
vices or
to see
of this
blind p
political
Our
higher
their c
yet in
to them
land."

Middl
Which
a day
subject
A perfec
entirely
question
found th
it would

To

Recep
Stock Y
Oct. 9,
130 cal
389 hors
steady;
fifteen
calves st
watered;

The to
the City
the past

Cars...
Cattle...
Calves...
Hogs...
Sheep...
Horses...

The to
for the co

either in defending it from invasion or protecting its rights and maintaining its laws and institutions in vigor and purity. The truest patriots have, I think, been the greatest friends of international peace and goodwill among men. As for example witness the names of Bryan and Stead and McKinley. We will not soon forget McKinley's last speech at Buffalo, in which he prayed that God would bless all nations with prosperity and happiness.

As Canadians we need to be more patriotic in our love for the land of our birth. Is there not something suggestive in the fact that our most popular patriotic song is "God Save the King," while America's is, "My Country, 'Tis of Thee." Our cousins across the line sing about their country while we sing about our ruler. Why should not "O Canada" be just as popular with us as "My Country, 'Tis of Thee" with our American friends, yet it is seldom heard in Canadian assemblies? Love of country should come first in the breast of every patriot, and surely there is no land more worthy of our love than this Canada of ours. If we cannot go out and fight in her defence "somewhere in France" we can be worthy citizens here at home, and by a study of our history, a knowledge of our resources, and visits, if possible, to different parts of the Dominion, learn to more deeply love and appreciate this "land of the northern zone."

If it be true, as Webster states, that patriotism also consists in maintaining the institutions of one's land in vigor and purity, there is need for greater patriotism on the part of many of our people in their relation toward the Christian church, an institution without which we cannot survive as a nation. There are heads of families all over this land who take little or no interest in the church, with the result that their children are growing up without respect or reverence for sacred things. The one idea of a successful life held up before those children is that of money-making and accumulating property, so it is not to be wondered at that teachers and preachers find it well nigh impossible to instill spiritual truths into their minds. If parents would only realize that the home influence is the strongest and most lasting they might be more careful to develop those qualities that make for good citizenship both in themselves and in their children.

We need to be more patriotic in the matter of politics, putting principle before party, and the welfare of the state before selfish aims and ambitions. That form of loyalty and patriotism which consists in flag waving and cheering for a party candidate and of painting the other fellow as black as possible, which claims all the virtues for one side and finds all the vices on the other, is of a type that we would like to see eliminated from our midst. When the farmers of this country become independent and cease being blind partisans there will be hope for purity in our political life, and not before.

Our great need in Canada is for patriots of the higher type who shall seek in every way to further their country's best interests, for there are many yet in our midst "with souls so dead, who never to themselves have said, this is my own, my native land."

Middlesex Co., Ont.

M. L. SWART.

Crow Justice.

BY PETER MCARTHUR.

Which is more enjoyable, a day in the spring or a day in the fall? Wouldn't that make a good subject for debate in the literary societies next winter. A perfect spring day and a perfect autumn day are entirely different and yet wholly delightful. If the question were debated thoroughly it would be found that "much may be said on both sides." And it would be a good thing for us to make an occasional

study of the delights of our climate. We would probably find much more to be thankful for than to grumble about, and life in the country would be enriched if we would only look about us and enjoy ourselves at home as much as we do when we travel. At the present writing we are having a spell of the finest autumn weather imaginable, though the wheat and the pasture would be better for a few days of heavy rain. The days are warm and still, flooded with golden sunshine and drowsy with a sense of ripeness and maturity. The wandering breezes carry the odors of ripening apples instead of the perfume of spring flowers, and I am not sure but it rouses us to a keener delight. Wherever the eye turns there is something to delight us. The orchards are glowing with ruddy apples, even though most of them are touched with scab, and the woods look to have been browned to a turn in the summer oven. As the days are now shortening it is possible for even a leisurely man to see a whole day from the first streak of dawn to the last flush of sunset. Chores must be done before the children go to school, so that moderately early rising is necessary in the country. The rooster alarm clocks begin to sound about five o'clock in the morning and when one is sleeping in a tent he has only to open one eye to see

"This wet, grey-visaged world emerge
Out of the silence and the mists of sleep."

After one is up and about, every hour of the day has a special charm of its own that is worthy of a poem. Even though it is wise to get the fall work done in time we should at least devote an occasional few minutes to enjoying this wonderful world when it is at its best.

To-day the crows are holding a convention in the wood-lot and I wish that I could attend as a delegate. It often seems to me that much could be learned about the best way to conduct human affairs if we would study more carefully the methods of the lower creation. Animals, birds, etc., are governed in their actions by instincts that are fundamentally correct. Since man developed brains he has tried to fess along without instincts and the results have been deplorable. By not using our instincts we have practically destroyed them. According to the scientists, instincts have been developed by millions of years of experience, and careful observation of them shows that they are the highest wisdom for the creatures possessing them. Yet we have deliberately stifled our instincts and adopted the dogmas of the Ontario Department of Education. Personally, I find myself so devoid of instincts or of anything that suggests the accumulated wisdom of millions of years that when I want to get in line with instinctive wisdom I have to study the Red Cow or the pet pig or some of the farm animals. And that study has convinced me that the domestic animals are lacking in many of the finer instincts. Long association with human beings has caused them to degenerate. That makes it all the more desirable to study the instincts of the wild and unspoiled creatures.

The very first attempt to study the instincts of crows in convention assembled brings us in touch with what is perhaps the strongest instinct they have. Some wise crow back in the paleozoic or other remote age must have worked out the "Safety First" idea that is now so popular with manufacturers and transportation companies, since laws were passed making them responsible in case of accidents to their employees. The crows certainly believe in "Safety First" and no matter how important the caucus they are holding or how much they are interested in the question before the meeting, they never fail to have sentinels

posted or to keep a careful watch for enemies. A warning "Caw" from the sentinel will cause the meeting to adjourn *sine die* without any of the stately formalities used to wind up our parliaments. I have also noticed that when they call a meeting everything is conducted with democratic simplicity. There is no Black Rod, or mace bearer or liveried flunkies of any kind. A crow simply yells that there is something the matter and crows begin to gather from all parts of the county. And right here is a point worth considering. There is always a full attendance at all crow meetings. When they decide to hold a mass meeting everybody attends and the matter is discussed freely. They do not do things like human beings who will call a meeting of the ratepayers to consider the condition of the school well and no one will turn up but a couple of the trustees and the ratepayer who laid the complaint. The crows all attend, and judging by the racket they make they all speak their minds freely.

I have noticed that the important crow meetings are always held over the case of such public enemies as owls or hawks. They prefer charges in the same noisy way that they are preferred in our parliament, but on the few times that I got near enough to observe their methods I noticed that they have one trick that we would consider unparliamentary, though much might be said in its favor. After a crow has worked himself up into a rage while telling about the grafting of the prisoner at the bar he invariably jumps into the air and takes a swat at the accused with his wings. As those whom we accuse usually have the best lawyer that money can buy they invariably get off without suffering any material damage. But the owl or hawk that is tried by the crows gets his punishment while the trial proceeds. The crow shows the courage of his convictions by trying to knock the block off the person accused. I may be wrong, but I am inclined to think that fewer scoundrels would go unpunished if we modelled our parliamentary and judicial procedure on that of the crows. We have been trying to apply brains to trials of this kind with the result that rascality goes unwhipped in most cases. If the crows were not so shy and so given to the safety first idea I think I could develop a much better legal code than we have, from observing the workings of their instinctive justice.

Two Big Fairs the Same Week.

The first week of December will see two of the biggest live-stock shows of the year on the American Continent. The Chicago International, after a lapse of two years will open its gates again on December second and will continue until December ninth. The Ontario Provincial Winter Fair, Guelph, will open December first and hold forth until December eighth. Breeders who intend to exhibit stock should bear in mind that entries for the International close November first and for the Ontario Provincial, November fifteenth. It is rather unfortunate that these two big fairs should fall on the same dates. Heretofore the Guelph Show followed the Chicago event, but there is enough good stock in Canada to make the Ontario Provincial a "hummer" this year and to spare a strong contingent for the final reckoning in the American live-stock show circuit. The International promises to be stronger than ever this year. It will be an honor to win there and keep Canada to the fore in the eyes of United States and South American breeders. The Guelph fair has a bright outlook, and to exhibit and win there means added prestige, and a big exhibit will serve to strengthen Canada's live-stock industry at home. Remember the dates upon which entries close. Be on hand at the fairs.

Toronto, Montreal, Buffalo, and Other Leading Markets.

Toronto.

Receipts of live stock at the Union Stock Yards, West Toronto, Monday, Oct. 9, were 184 cars, 3,884 cattle, 130 calves, 379 hogs, 1,876 sheep, 389 horses. Good cattle of all kinds steady; common cattle slow. Lambs fifteen cents higher; sheep strong; calves steady. Hogs \$11.90, fed and watered; \$12.15, weighed off cars.

The total receipts of live stock at the City and Union Stock Yards for the past week were:

	City	Union	Total
Cars.....	79	617	696
Cattle.....	841	7,496	8,337
Calves.....	54	713	767
Hogs.....	642	10,132	10,774
Sheep.....	1,912	6,713	8,625
Horses.....	145	2,024	2,169

The total receipts at the two markets for the corresponding week of 1915 were:

	City	Union	Total
Cars.....	46	866	912
Cattle.....	245	7,338	7,583
Calves.....	30	729	759
Hogs.....	473	9,132	9,605
Sheep.....	1,806	8,703	10,509
Horses.....	33	6,736	6,769

The combined receipts at the two markets show an increase of 754 cattle, 17 calves and 1,169 hogs, but a decrease of 46 cars, 1,884 sheep and 4,640 horses.

The live-stock market opened on Monday with nearly four thousand head of cattle, good to choice heavy steers, choice butcher steers and heifers, and choice cows were firm and in demand. One load of choice heavy steers sold at \$8.60, while several loads sold at \$8.40 to \$8.50. The great bulk, however, were common to medium; the trade was slow and from 20c. to 30c. lower. Prices on all classes of cows held fairly steady. Good butcher cows were wanted. Canners and cutters were also in demand at steady prices. Choice milk cows and choice forward springers were in demand, but the common kinds were hard to sell. Choice, well-finished bulls held firm. Bologne bulls about 10c.

to 15c. lower. The trade on stockers was very slow, and they sold at 25c. to 40c. lower than the previous week. Good feeders of right color and weighing 950 to 1,050 lbs. sold at \$6 to \$6.75, and were in demand. Heavy, short-keep feeders were in demand, and sold at \$7. The receipts of sheep and lambs were fairly large, and the market was steady to strong, choice lambs selling at \$10.25 to \$10.40. Several extra choice lots sold at \$10.50 to \$10.60, while cull lambs sold at from 8c. to 8½c. per lb. Light handy sheep were firm and in demand, while heavy bucks and thin lambs were hard to sell. There was a fairly light run of veal calves and prices remained steady; real choice veal calves selling at from 11c. to 12c. per lb.; heavy calves were slow and hard to sell. Hogs—The hog market held fairly steady with the close of last week. Wednesday and Thursday there were about 5,000 for sale and the market weakened. Packers paid \$11.40 for fed and watered to regular shippers, but were giving 40c. less to all others.

Butcher Cattle.—Choice heavy steers, \$8.25 to \$8.50; good heavy steers, \$8 to \$8.25. Choice, \$7.40 to \$7.65; good,

\$7 to \$7.25; medium, \$6.50 to \$6.75; common, \$5.50 to \$6. Cows.—Choice, \$6.25 to \$6.50; good, \$5.80 to \$6.10; medium, \$5.50 to \$5.75; common, \$4.75 to \$5.25. Canners and cutters, \$3.50 to \$4.75. Bulls.—Best heavy, \$6.75 to \$7; good, \$5.75 to \$6.50; common, \$5 to \$5.50. Stockers and feeders, \$5 to \$6.65. Milkers and springers, \$55 to \$115. Spring lambs.—Choice, \$10 to \$10.50; common, 7c. to 8c. per lb. Light, handy sheep, 6½c. to 8c. per lb.; heavy fat sheep, 4c. to 5½c. per lb. Veal calves, 6c. to 12c. per lb. Hogs, \$11 to \$11.40, fed and watered; \$11.25 to \$11.65, weighed off cars. Less \$2.50 to \$3.50 off sows, \$5 off stags, \$3 off light hogs, 50c. off heavy hogs, one-half of one per cent. government condemnation loss. Light hogs are those that weigh 140 lbs. and under at the yards here. Heavy hogs are those that weigh 240 lbs. and over at the yards here.

Breadstuffs.

Wheat.—Ontario, No. 1 commercial, \$1.44 to \$1.47; No. 2 commercial, \$1.39 to \$1.42; No. 3 commercial, \$1.31 to \$1.34; No. 2 winter, per car lot, \$1.50

THE ROYAL BANK OF CANADA

Capital Authorized - - \$ 25,000,000
 Capital Paid Up - - - 11,785,000
 Reserve Funds - - - 13,236,000
 Total Assets - - - 214,000,000

HEAD OFFICE: MONTREAL

Branches throughout every Province
 of the Dominion of Canada

Accounts of Farmers
 Invited

Sale Notes Collected

Savings Department at all
 Branches

to \$1.52; old crop, \$1.35. Manitoba (track, bay ports)—No. 1 northern, \$1.78½; No. 2 northern, \$1.75½; No. 3 northern, \$1.70½.

Oats.—Ontario, No. 2 white, 54c. to 56c.; No. 3 white, 53c. to 55c. Manitoba (track, bay ports)—No. 2 C. W., 60½c.; No. 3, 60c.; extra No. 1 feed, 60c.; No. 1 feed, 59c.

Barley.—Malting barley, 90c. to 92c., nominal; feed barley, 85c. to 87c., nominal. Peas.—According to freights outside; No. 2, \$2.15 to \$2.25, nominal.

Buckwheat.—Nominal, 85c. Corn.—American (track, Toronto), No. 3 yellow, 98c.

Rye.—No. 2, new, \$1.18 to \$1.20; No. 1 commercial, nominal.

Flour.—Manitoba first patents, in jute bags, \$9.30; second patents, in jute bags, \$8.80; strong bakers', in jute bags, \$8.60. Ontario, new, winter, according to sample, in bags, \$7.25, track, Toronto; new, according to sample, \$6.50, bulk, seaboard.

Hay and Millfeed.

Hay.—New, No. 1, per ton, \$10 to \$12; No. 2, per ton, \$9 to \$9.50. Straw.—Car lots, per ton, \$7 to \$8, track, Toronto.

Bran.—Per ton, \$29.

Shorts.—Per ton, \$31.

Middlings.—Per ton, \$32.

Good Feed Flour.—Per bag, \$2.35.

Country Produce.

Butter.—Butter again advanced one cent per pound wholesale during the past week. Creamery, fresh-made pound squares, 39c. to 40c. per lb.; creamery, solids, 37c. to 38c. per lb.; dairy, 31c. to 32c. per lb.; separator dairy, 35c. to 36c. per lb.

Eggs.—Eggs remained stationary, selling at 43c. per dozen in cartons; fresh eggs in case lots bringing 36c. per dozen, and selects in case lots 39c. per dozen.

Cheese.—June, 24c. to 25c. per lb.; new, 22c. per lb.; twins, 22½c. per lb. Honey remained stationary in price with an active demand. Sixty-lb. tins selling at 12c. per lb.; 5-lb. tins at 12½c. per lb.; one-lb. sections, \$2.40 to \$3 per dozen.

Poultry.—Poultry remained about stationary with the exception of turkeys which advanced. Spring chickens, per lb., 15c.; spring ducks, per lb., 12c.; geese, per lb., 12c.; turkeys, young, per lb., 25c.; fowl, 4 lbs. and over, per lb., 14c.; fowl, under 4 lbs., per lb., 12c.; squabs per dozen, dressed, \$3.50 to \$4. Beans.—Hand-picked, \$5 per bushel; prime, \$4.50 per bushel.

Hides and Skins.

City hides, flat 20c.; country hides, cured, 18c.; country hides, part cured, 17c.; country hides, green, 16c.; calf skins, per lb., 25c.; kip skins, per lb., 22c.; sheep skins, city, \$2.50 to \$3.50; sheep skins, country, \$1.50 to \$3; lamb skins and pelts, \$1 to \$1.50; horse hair, per lb., 38c.; horse hides, No. 1, \$5 to \$6; No. 2, \$4.50 to \$5.50; wool, washed, 42c. to 46c. per lb.; wool, rejections, 35c. to 38c. per lb.; wool, unwashed, 32c. to 35c. per lb.; tallow, No. 1, 6½c. to 7½c.; solids, 6c. to 7c.

Wholesale Fruits and Vegetables.

Receipts declined considerably on the wholesale fruit market, peaches especially. The bulk of those which were shipped in were poor quality, the few choice

ones advancing in price; 6-qt. flats sold at 25c. to 40c.; 6-qt. lenos at 35c. to 50c.; 11-qt. flats at 30c. to 65c., and 11-qt. lenos at 40c. to \$1; an odd one bringing \$1.25.

Pears also were poor quality, selling at 30c. to 50c. and 60c. per 11-qt. basket.

Plums were scarce; the 11 qts. selling at 50c. to 75c. and 85c. to \$1 per 11-qt. basket.

Ripe tomatoes were quite scarce, and sold at 40c. to 50c. per 11-qt. flats, and 50c. to 60c. per 11-qt. lenos.

Green tomatoes were almost unsalable at 15c. to 20c. per 11-qt. basket.

Beans.—There were a few beans shipped in; the green selling at 35c. per 11-qt. basket, and wax at 50c. to 75c. per 11 qts.

Beets were scarce at \$1.35 per bag, and 40c. per 11-qt. basket.

Cabbage remained high priced at \$2.25 per bbl.

Carrots sold at 35c. to 40c. per 11-qt. basket, and \$1.35 per bag.

Celery.—Home-grown was very poor quality, selling at 15c. to 25c. and 30c. per dozen; Brighton, 40c. and 65c. to 75c. per dozen; British Columbia, \$2 to \$2.25 per case.

Corn varied greatly in price and sold at 10c. to 20c. per dozen.

Onions were very firm at \$2.75 per 75-lb. bag; \$3.75 per 100-lb. bag, and 50c. to 60c. per 11-qt. basket. The Spanish selling at \$4.50 per case.

Parsnips were only shipped in small quantities, and brought 40c. to 50c. per 11-qt. basket.

Potatoes declined; the New Brunswick Delawares selling at \$1.65 per bag; British Columbia's, \$1.60 per bag; Prince Edward's, \$1.50 per bag.

Montreal.

The local cattle market was steady during the past week. Demand has only been light, and at present prices which are now being charged it is only to be supposed that trade will be much lighter than it was when the market was lower. No particular change was noted during the past week, and sales of good steers were made at 7½c. to 7¾c., with medium quality ranging from 6c. to 7c., and common selling all the way down to 5½c. Butcher cows were still changing hands at 4½c. to 6¼c. per lb., while bulls brought ¾c. above these figures. The market for lambs was slightly easier, prices being fully ¼c. lower. Ontario lambs changed hands at 9¼c. to 9½c. per lb., and Quebecs at 8¾c. to 8¼c. per lb. Sheep were in fair demand, and the price was steady at 6½c. to 7c. per lb. There was a good demand for calves and as offerings were none too large the market was steady at 7c. to 10c. per lb. The feature of the market was the further easiness in the price of live hogs. These were changing hands at 11¼c. to 11½c. per lb., and the demand was good.

Horses.—The market continued dull, and offerings were as light as demand. Prices continued unchanged as follows: heavy draft horses, weighing 1,500 to 1,700 lbs., \$200 to \$250 each; light draft horses, weighing 1,400 to 1,500 lbs., \$150 to \$200 each; small horses were \$100 to \$125 each; culls, \$50 to \$75 each; fine saddle and carriage horses were \$200 to \$250 each.

Dressed Hogs.—The continued decline in the price of live hogs affected the market for dressed hogs, and sales took place at 16¼c. per lb., this being fully ¼c. lower than the recent price.

Potatoes.—Offerings were becoming more liberal, and, as a consequence, the price, though still high, showed an easier tone. Green Mountains in car lots were quoted at \$1.35 to \$1.40 per 90 lbs., while Quebec potatoes were \$1.25 to \$1.30, ex-track. In a jobbing way prices were about 20c. per bag more.

Maple Syrup and Honey.—Demand for honey has been moderately active and prices were unchanged, being 15c. per lb. for white clover comb; 12½c. to 13c. for white extracted, and for brown clover comb, while brown extracted brought 2c. less. Buckwheat honey was 9c. to 10c. There was no change in the market for maple syrup, and prices were 90c. to 95c. per 8-lb. tin; \$1.05 to \$1.10 per 10-lb. tin; and \$1.25 to \$1.50 per 13-lb. tin, according to quality. Maple sugar was 13c. per lb.

Eggs.—It seemed almost impossible to obtain reliable fresh stock at any price, although quotations were 45c. per dozen for this quality. It is understood that

export is still going on to the other side. No. 1 selected eggs were quoted at 38c.; No. 1 candled, 34c., and No. 2 candled, 30c. per dozen.

Butter.—The market for butter was unusually strong, and prices advanced during the week. Finest creamery was quoted at 38c. to 38½c. per lb., while fine quality was about ¼c. under these figures. Consumption is naturally restricted by the high price. Under-grades were quoted at 36½c. to 37c., while dairy ranged from 27½c. to 31c. to cover all qualities.

Cheese.—This product sold at the highest price in history. The record price of 21 13-16c. has been paid at Peterborough, and at the Montreal auction Eastern cheese sold at 21 11-16c. Quotations here for Western colored were 21½c. to 21¾c. for fine, and 21¾c. to 21½c. for finest Eastern. White sold at a discount of ¼c.

Grain.—Little change took place in the market for oats during the week. No. 2 Canadian Western oats sold at 62½c. to 63c.; No. 3, 61¾c. to 62¼c.; extra No. 1 feed, 61¾c. to 62¼c.; No. 1 feed, 61¼c. to 61¾c.; No. 2 feed, 61c. to 61¼c., ex-store.

Flour.—Prices advanced during the week, and were then at a new high record in the history of the trade. Manitoba first patents were \$9.40 per barrel; seconds were \$8.90, and strong bakers', \$8.70, in bags. Ontario winter wheat flour also advanced, and 90 per cent. patents were selling at \$8 to \$8.30 per barrel, in wood, and \$3.80 to \$3.95 per bag.

Millfeed.—No change took place in this market during the week. Bran was \$27 per ton, in bags; shorts, \$29; middlings, \$31; mixed mouille, \$34, and pure grain mouille, \$36 per ton.

Hay.—The market was unchanged at \$13 per ton, carloads, ex-track, for No. 2 baled hay; \$11.50 for No. 3, and \$10.50 for clover mixed.

Hides.—Lamb skins were up to \$1.55 each; calf skins were 30c. per lb. for No. 2, and 32c. for No. 1; beef hides were 21c., 22c. and 23c. per lb. for No's. 3, 2 and 1. Horse hides were \$1.50 each for No. 3; \$2.50 for No. 2, and \$3.50 for No. 1. Tallow was 8c. per lb. for refined, and 2½c. for rough.

Buffalo.

Cattle.—Cattle offerings at Buffalo the past week were again pretty liberal and ran very much to the one kind of plain, half fat, cheapish kind of steers. Supply of shipping steers figured fifteen to twenty loads on Monday, and with the exception of two or three loads, were in the main, on the medium order. One load* of strong-weight, Ohio steers sold at \$10.25, and best Canadians ranged from \$8.40 to \$8.75, with best handy weight steers selling up to \$8.75; light, common kinds running on down to \$6.50 to \$7. On heifers, a few fancy kinds sold up to \$7.50 to \$8, but \$7.65 to \$7.85, with some steers in, generally took the best handy butchering heifers. Little heifer stuff sold down to \$5.50 to \$6. On cows a few best heavy ones sold up to \$7, but there were not many to bring the price. On feeders \$7.15 was paid for the best load, being Canadians. Bulls sold at about steady prices, and choice milchers and springers brought \$5 per head more. Market ruled generally steady on shipping steers, but on a medium and common kind of steers trade looked from 15 to 25 cents lower. Best of the fat stuff sold at about steady prices. Demand is stronger for the well-finished grades than the medium and commoner kinds. Receipts for the week totaled 5,275 head, as against 5,800 for the previous week, and 8,500 head for the corresponding week last year. Quotations:

Shipping Steers.—Choice to prime natives, \$9.50 to \$10.50; fair to good, \$8.75 to \$9.25; plain, \$8.25 to \$8.60; best Canadian, \$8.50 to \$9.35; fair to good, \$8 to \$8.50; common and plain, \$7.50 to \$8.

Butchering Steers.—Choice heavy, \$8.50 to \$9; fair to good, \$8 to \$8.50; best handy, \$8.50 to \$9; fair to good, \$7.25 to \$8.25; yearlings, prime, \$9.50 to \$10.25; fair to good, \$8.50 to \$9.

Cows and Heifers.—Best handy butcher heifers, \$7.50 to \$7.75; common to good, \$6.50 to \$7.25; best heavy fat cows, \$6.75 to \$7; good butchering cows, \$6 to \$6.50; medium to fair, \$5 to \$5.50; cutters, \$4 to \$4.25; canners, \$3.50 to \$3.75.

Bulls.—Best heavy, \$6.75 to \$7; good butchering, \$6.25 to \$6.50.

Stockers and Feeders.—Best feeders, \$7 to \$7.25; common to good, \$6.25 to \$6.75; best stockers, \$6.75 to \$7; common to good, \$5.50 to \$6.25.

Milchers and Springers.—Good to best, in small lots, \$80 to \$100; in carloads, \$70 to \$75; medium to fair, in small lots, \$60 to \$65; in carloads, \$55 to \$60; common, \$40 to \$50.

Hogs.—Market showed the worst effect of the season the past week, a drop of \$1.75 per cwt., being noted in seven days. On Monday top was \$10.50, few scattering sales were made from \$10.30 to \$10.40, bulk sold at \$10.25, with pigs \$9.25; Tuesday heavies sold from \$10.25 to \$10.40, most of the York weights went at \$10, and pigs generally \$9.75; Wednesday nothing brought above \$9.65, with other sales ranging on down to \$9.50, and pigs, \$9.25; Thursday prices were up ten to fifteen cents, and Friday the market ruled steady to a dime higher, heavies selling at \$9.90 and \$10, Yorkers mostly \$9.75 and pigs \$9.25, roughs \$8.75 to \$9.15 and stags \$8 down. Receipts the past week were 34,500 head, as compared with 26,256 head for the week previous, and 30,100 head for the same week a year ago.

Sheep and Lambs.—Trade was good the past week. Monday and Tuesday top lambs sold mostly at \$10.60; Wednesday top was \$10.75; Thursday bulk went at \$10.75, with a few \$10.85, and Friday the general market for tops was \$10.65. Feeder buyers paid up to \$9.25 and \$9.50 for re-sorted cull lambs, and those that had to go for kill went mostly from \$9 down. Sheep were scarce, ewes, which comprised the bulk of the receipts in this division selling from \$7.25 to \$7.50. Top for yearlings was \$9, and best wether sheep were quotable around \$8. For the past week the run totaled 14,800 head, being against 17,604 head for the week before, and 18,700 head for the same week a year ago.

Calves.—Market showed improvement as the week advanced. Monday, Tuesday and Wednesday tops sold mostly at \$13; Thursday a few made \$13.50, and Friday best native veals brought up to \$14 and \$14.25. Cull calves the fore part of the week sold from \$11.50 down, and on Friday's market they brought up to \$12. Around 200 head of Canadians were here Friday, and the top veals out of those sold at \$13.50, with the culls \$12 down. Some heavy rough Canadians moved around \$7, and grassers sold down around \$5.25 and \$5.50. Receipts the past week were 2,050 head, as against 2,224 head for the week before, and 1,800 head for the same week a year ago.

Chicago.

Cattle.—Beeves, \$6.60 to \$11.35; western steers, \$6.15 to \$9.40; stockers and feeders, \$4.75 to \$7.75; cows and heifers, \$3.50 to \$9.40; calves, \$8 to \$12.50.

Hogs.—25c. higher; light, \$8.10 to \$10; mixed, \$9 to \$10.05; heavy, \$8.90 to \$10.05; rough, \$8.90 to \$9.15; pigs, \$6.75 to \$9.25.

Sheep.—Lambs, \$7 to \$10.30.

Cheese Markets.

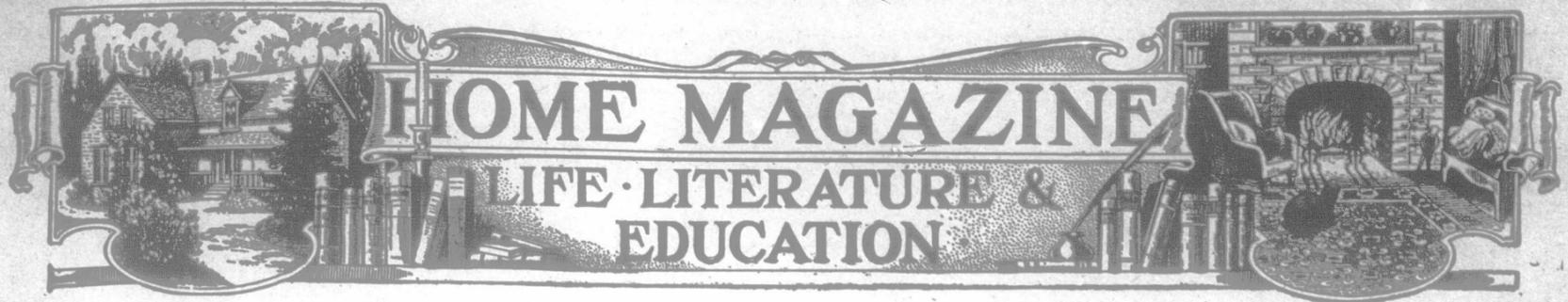
Mont Joli, Que., 21 9-16c.; Napanee, 22c.; Alexandria, white, 22c.; colored, 22½c.; Picton, 21¾c. and 22c.; Victoriaville, Que., 20¾c.; Perth, 22¼c.; Iroquois, 22c.; Cornwall, 22c.; Montreal, finest westerns, 21¾c.; finest easterns, 21¼c.; New York, specials, 20¾c. to 21c.; average fancy, 20½c. to 20¾c.

Sale Dates.

Elgin County Pure-Bred Stock, St. Thomas, Ont., Oct. 17.
 R. O. Morrow, Holstein dispersion sale, Hilton, Ont., Oct. 18.
 O. A. C. Pure-Bred Stock, Guelph, Ont., Oct. 26.
 Nov. 8—Western Ontario Consignment Sale Co., Fraser House Stables, London, Ont., Shorthorns.

Coming Events.

Oct. 12 to 21—National Dairy Show, Springfield, Mass., U. S. A.
 Dec. 1 to 8—Ontario Provincial Winter Fair, Guelph, Ont.
 Dec. 2 to 9—International Fat Stock Show, Chicago, Ill.
 Dec. 8 to 9—Toronto Fat Stock Show, Union Stock Yards, Toronto.



October Woods.

BY IDA WHIPPLE BENHAM.

The frost has opened the chestnut burrs,
 And the nuts fall lazily, two and three;
 The squirrel chatters, the partridge
 whirrs,
 And the red-capped woodpecker bores
 his tree.
 Oh, lightly and lightly the birch leaves
 float!
 Like golden butterflies loosed in
 spring;
 And bright as the sails of a fairy boat
 The walnut leaves take wing.

Now come, now come, far down the lane
 The asters beckon, the robins call!
 The shrunken brook grows broader again,
 And leaps in a laughing waterfall.
 Over the stile, and over the bridge,
 Adown the path where the meek
 cows stray
 By glen and hollow and windy ridge
 Let us follow the woodland way.

See! how the marvellous cloth of gold—
 A Tyrian tapestry woven fine—
 Wide as we wander is still unrolled,
 Rustling under your feet and mine!
 The breadth of the woodland is joy to
 breathe—
 The mingled odors of leaf and flower,
 And clustering fruit where the wild
 vines wreath
 The oak tree's mossy tower.

Softly into the vistaed wood
 Through painted windows the sun-
 beams smile;
 The hushed winds walk in pensive mood
 Down many a solemn Gothic aisle.
 The golden clouds hang low in air,
 Wrapped in their folds the late sun
 rests;
 And the tall trees stand as if in prayer
 With their beards upon their breasts.
 —Our Dumb Animals.

Letters From Boys at the Front.

[The first of these letters was sent to his mother by Lieut. Hamilton Bingle, who went overseas with the Princess Pats in August, 1914, and is still fighting in the trenches, now with a regiment from Middlesex, England.

The second is from a young private, George T. Noice, who also went to the front in 1914, was severely wounded twice in France, took part in the famous landing at Suvla Bay, and is now in Egypt, still "On Active Service" doing office work for the army, although incapacitated, by reason of his injuries, from doing further duty on the field.

Our readers will be pleased to read what these brave boys have to say.—Ed.]

Farming in France.

My Dear Mother:—

I had one letter from you this week, and I've no doubt there is more for me somewhere, as the mail has been held up for us a little. This is Saturday night, mother, and the best Saturday night I've had since I came out this time.—Fancy a nice rest for a few days behind the line where there are no shells and things, and where the sound of the guns is faint.—It's like being in some kind of a sixth heaven or something like that. It won't be for long, for long before this reaches you I expect I will be back and into it again—but while this rest is on we will certainly make the best of it.

The country looks absolutely beautiful. Tell dad that the crops are perfect. The wheat is a bumper crop. I was in one wheat field to-day and found some heads which measure seven inches. That is almost a record, isn't it? I've seen some big heads at home, but these seem to be the very limit—well filled

out too, and the straw very clear and bright but awfully tough. The farmers (or at least the women and very old men) are doing the harvesting. They have Deering and McCormick binders here. I notice a great many of these binders. It makes me think that the French Government may have taken a hand and provided binders to facilitate getting the crops in. You should see these big teams of Percheron horses get along with a binder. They walk up fast and seem to pull it with apparent ease. None of the field furrows are as deep as we have at home, so going across the end there is hardly any dip to the machine—no weeds nor grass in the bottom of the sheaves. I watched a man cutting to-day, and I suggested to him to tighten up the tension on his trip to get a bigger sheaf and showed him how to do it, as he did not seem familiar with the machine, and he was quite tickled. He thanked me quite profusely, but as it was in his own language our conversation was rather limited. I also got him to use a longer neckyoke, for the fiddling little, short things the I. H. C. send out are no good for these big teams they have over here. The old man explained to me that his team ran away the first time he hitched them on to the binder and they saw the reel going around behind them.

This country has England beaten forty ways for farming on a big scale. They have big fields here, like we do at home, and decent rounds. England is too much like a big park, and all chopped up with hedges running in every direction, to really make a business of farming. The trouble here is that the people simply grow stuff to eat and not to sell, which makes the biggest difference in their methods. The crops are not put in the barns, simply stacked up in a series of small stacks, which are called "ricks." The straw is done the same after threshing. The barns, of course, being all brick, are not big enough to put much inside.

They have a remarkable way of

have a garden. Fancy, cabbages and spuds growing out in front of the house! They also have their clotheslines up over the garden too, and on wash day all the family linen hung up for all the passers-by to look at. Nothing seems to be done with any idea of beauty at all. To see anything nice one has to get out into the fields and away from the buildings. These people need to have some Americans come over here and build a few country farm places for them and show them how to live. As for a telephone, they would no more have one in the house than keep an aeroplane to go for the cows. I might tell you that they milk the cows three times a day here. Why they do, I don't know. Perhaps they think they get more milk. They make butter in a barrel churn, and have cream separators (Sharpless), and in most other things are quite rational. Windmills (the big, four-blade kind) are stuck up all over the country, and very little use is made of electricity. The main roads are all cobblestone, and traffic goes at a walk,—no such thing as a light rig, like a buggy or victoria,—just big carts or gigs, with a Percheron horse in it,—the thing with an axle in it, like our farm wagons at home. Every farm has two or three wolfish looking dogs, which are always kept chained up, and the smell from their kennels is in keeping with the various other odors about the place.

Railways are fairly frequent, but no electric inter-urban trains.—The people seem to stay at home, and what they do for any form of amusement I don't know,—go into the villages, and drink beer or *cafe cognac* at the Estaminets, seems to be the principal relaxation. The country is absolutely full of churches, and I suppose there is quite a hit doing in the religion line. If they built a few bowling greens and tennis courts, and baseball grounds, I should think life would be much more pleasant. Perhaps it is much better here in peace time though. The men all seem lazy, and the women work like drudgery,

The weather lately has been beautiful, and the evenings are fine and cool—quite enjoyable after the turn in the trenches we have had, even if it isn't for long. You had some hot weather at home, according to the letters I've had, which I suppose is to make up for the wet, late spring. All the officers in my company, except the Major, are boys who were either at college in England or professors of some part, and they take very little interest in anything they see in the country. One of them didn't know, the other day, whether a hen laid one egg a day or three or four, and another one didn't know what the hames were on a horse's harness. So, of course, they take very little interest in the agricultural side of the war. The cows and cattle in general are not up to much, just plain red cows, without any particular breeding; and outside of family use, I don't think dairying is much of a business. No such thing as Jersey and Holstein cattle like we have at home.—Just the plain, red variety without any fancy touches.—They are rather small, too, and poor looking for beef. I think a packing house would go broke in a week. There are very few fruit trees of any kind, and I think the people put in most of their fruit-time on hops, which go to the breweries. These people drink a terrific amount of beer, (poor stuff, too, like 2½%). They even give it to a twenty-months-old baby, but it doesn't seem to hurt the kids any.

Now I am going to finish this and go to bed, (real bed with sheets). I haven't told you anything about the war, because I'm having a respite from the war and I will give you one. I will write again in a day or so. Give my love to dad and the boys, and with lots for your dear old self, I am,

Your loving son,
HAMILTON.

A Moonlight Trip to the Pyramids.

Cairo, August 31st.

Like most people who have ever been to Cairo I had made the journey to the pyramids in the day-time, but having been told that to get the best effect they should be seen by moonlight, I and three of my chums decided that on the first opportunity we would "do the Pyramids" by moonlight.

Choosing the first full moon we started out, and having only a limited time at our disposal chose the electric car as the quickest means of accomplishing the journey out.

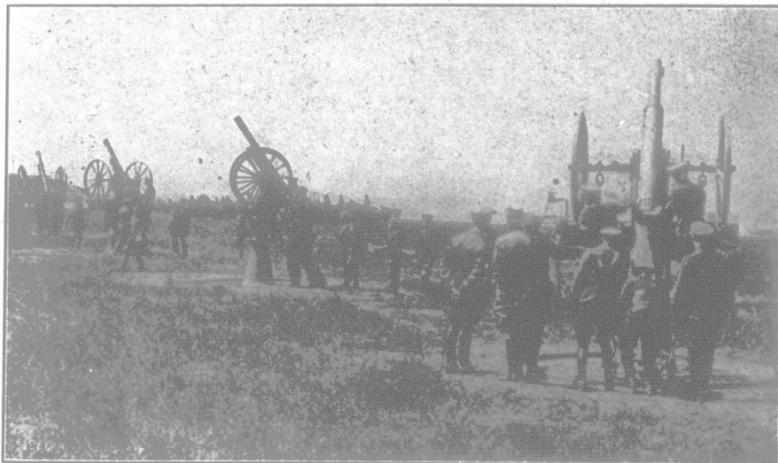
It was a beautiful night, and although we had already been over the ground in the daylight, the soft moonlight gave the surrounding country such an added effect as to alter it almost beyond recognition.

After a ride of about an hour over a road lined with avenues of lebbek trees, we came to the foot of the path leading to the largest and most famous of the three Pyramids of Giza—The Pyramid of Cheops.

Standing at the foot of this immense erection, one is almost overpowered by the tremendous size of the whole structure, and of the separate pieces used in the construction. One of the first things that strikes one is to wonder how, without the aid of machinery, these huge pieces of stone were ever put in their places.

It will give you some idea of the greatness of this Pyramid if I tell you that the height is about 451 feet, and each side is 755 feet at the base, the whole occupying an area of 535,824 square feet.

Having got rid of the inevitable crowd of Arab guides and donkey boys all clamoring for hire, we decided to



A Battery of Aircraft Guns Mounted on Pivots.

Photo taken on the Belgian front. International Film Service.

building what they call their "farms" here—house, barn, pig and sheep pens, and stables, all adjoin in a big square, with a brick paved walk all around, on the inside. Inside the walk, and in the centre of everything, is the manure heap. Fancy—this inner square is filled with manure and straw from the stables as well as rubbish from the house, and there are usually about 8 to 10 pigs running about loose over it! I don't see how the people stand it, but you won't find a farm house in the whole country different. In front of the house, where they could have a nice lawn and some flower-beds and trees, they

and they haven't any shape, (perhaps I should call it figure) but you can't expect a woman to get out and hoe spuds and pitch hay and then look much, can you? Most of the women have a pair of arms like a blacksmith's, and a back like a butcher, and from what I've seen, they all wear red flannel petticoats. (Perhaps I'm getting too explicit, but while I am at it I ought, perhaps, to be definite). I can't tell you much about the children, except that they are awful noisy, and there seem to be millions of them, as though this country expected another invasion in about twenty years.

make the ascent of the outside of the Pyramid, a task which proved more formidable than we had anticipated.

However, after about half an hour's hard climbing (which, I must say, included two "breathers") we duly arrived at the top and took a look at the surrounding country.

Down below us, looking like a huge rabbit warren, we could see the Harvard and other excavations, and away in the distance Cairo with its scintillating lights, and the Delta of the Nile with its countless rivulets and channels glittering in the moonlight. One is almost involuntarily reminded of the fanciful Oriental comparison of the Delta to a "fan fastened with a diamond stud." But time was getting short and we had other things to see, so we started on the downward journey.

This was, if anything, a more arduous task than the climb up, but in due course we arrived at the foot once more. Keeping to the road and turning away to the left we came to that greatest of all the Egyptian mysteries, the Sphinx. What once must have been a most beautiful piece of work now presents only a broken and disfigured surface, and I cannot do better than quote you Kingslake's splendid description of this famous monument.

"And near the Pyramids, more wondrous and more awful than all else in the land of Egypt, there sits the lonely Sphinx. Comely the creature is, but the comeliness is not of this world; the once worshipped beast is a deformity and a monster to this generation; and yet you can see that those lips, so thick and heavy, were fashioned according to some ancient mould of beauty—some mould of beauty now forgotten—forgotten because that Greece drew forth Cytherea from the flashing foam of the Aegean, and in her image created new forms of beauty and made it a law among men that the short and proudly-wreathed lips should stand for the sign and the main condition of loveliness through all generations to come. Yet there still lives on the race of those who were beautiful in the fashion of the elder world; and Christian girls of Coptic blood will look on you with sad and serious gaze, and kiss your charitable hand with the big, pouting lips of the very Sphinx."

This is one of the best descriptions I have seen or read of this, the greatest of all the old-world marvels.

Having visited in turn Campbell's Tomb, in which were found the four sarcophagi, and the Temple of the Sphinx, famous for its huge blocks of alabaster, we found that our time was at an end, and made our way back to the cars and Cairo well satisfied with our "Moonlight Trip to the Pyramids."

G. T. N.

Hope's Quiet Hour

A Call For Volunteers.

I heard the voice of the Lord, saying, Whom shall I send, and who will go for us? Then said I, Here am I; send me.—Isa. 7:8.

From utmost east to utmost west, where'er man's foot hath trod, By the mouth of many messengers goes forth the voice of God; "Give ear to Me, ye continents—ye isles, give ear to Me, That the earth may be filled with the glory of GOD as the waters cover the sea."

What can we do to work GOD'S work, to prosper and increase The brotherhood of all mankind—the reign of the Prince of Peace?

A. C. AINGER.

The summer heat is over and the call for volunteers is sent out by the churches in city, town and country. So many have answered their country's call for volunteers that the need of Sunday School teachers and other church workers is greater than usual.

Did you think it was a call you might comfortably ignore? Look at our text. The Great Commander of the Army of God is still saying: "Whom shall I send, and who will go for us?" There is no conscription in His great

army. He is the Lord of hosts—hosts of volunteers, who stand ready to be sent on His errands.

The prophet Isaiah had seen a vision of the Glory of the Lord, which filled him with fear and caused him to say: "Woe is me! . . . because I am a man of unclean lips." Then he was given an outward token of forgiveness; he was assured that his iniquity was taken away, and that the Holy Spirit had touched his lips with divine fire. Was he to sit down and rest satisfied with his own restoration to God's favor? No, his ears were now opened to the great call for volunteers: "Whom shall I send, and who will go for us?" and his response was swift and enthusiastic: "Here am I; send me."

to meet it. Of course it is a great mistake to be over-confident, or to think we are quite capable of accomplishing any task however difficult. To go forward trusting in one's own strength is to invite disastrous failure; but to be ready when God calls us to attempt anything he plainly wants us to do—trusting in His power, not in our own—is our only business in this world.

When Moses was told to deliver his people from the power of a cruel tyrant he made all the excuses he could think of. He declared that he was not eloquent and they would not listen to him, and—with apparent humility—asked God to send a more capable messenger. He had tried many years before, to help Israel and had utterly failed. What

If we are subconsciously thinking "I don't want to do such a hard and tiresome task," let us say that honestly to God and see what He thinks of the excuse. A business man once kept on his desk the motto: "Do the hard things first." I have no doubt that he made a success of his business.

Perhaps, like Moses, you have already tried and failed. The children behaved badly and apparently paid no attention to your teaching. Well, what of it! If you judge by any results you can see you are sure to come to a wrong conclusion. Our part is not to count up results, but to tell out God's message faithfully and prayerfully. We are to sow and water the seed—God can be trusted to give the increase. But we are lacking in common sense if we look for the harvest as soon as the seed has been covered out of sight.

When a dying sinner prayed: "Take my influence and bury it with me," he was indeed asking a hard thing. Influence—helpful or harmful—is not easily buried. Even of your children forget your words they will be helped forward—or backward—by the secret yet mighty influence of your character.

You can't tell what you are capable of until you try. God asks for volunteers, but He does not require His soldiers to supply their own equipment. Our power for good will come if we, every day, say heartily: "Here am I; send me!" and then look to Him continually for wisdom and strength. Talking about religion—trying to force our views on other people—may only make them hate the subject. We all need to pray for what has been called "the divine gift of common sense," lest we do harm to God's cause. We must speak the truth in love, not in conceit; and a failure may help to take the conceit out of us. Until we learn to distrust ourselves and trust in God we are like raw recruits, not ready for hard warfare. A man kept constantly before his eyes a wine-glass with its foot broken off. Around the top he pasted a label with this inscription: "Hold Thou me up, and I shall be safe." He said that it was a reminder of his own inability to stand alone, and of the necessity of God's continual upholding.

In the last chapter of the Bible is written the command: "Let him that heareth say, Come." If you have heard the voice of God—that still small voice which is so full of compelling authority—it is not only your privilege but your solemn duty to carry His message to others. The great command to make disciples of all nations is still sounding in our ears. If we are ignoring that command, or if we fancy it only applies to missionaries, and that all God expects of us ordinary people is a little money—perhaps a very little—given annually to the cause of missions, we are making a very great mistake. We are not responsible for the result of our sowing, but we shall have to give account if we withhold our seed-grain.

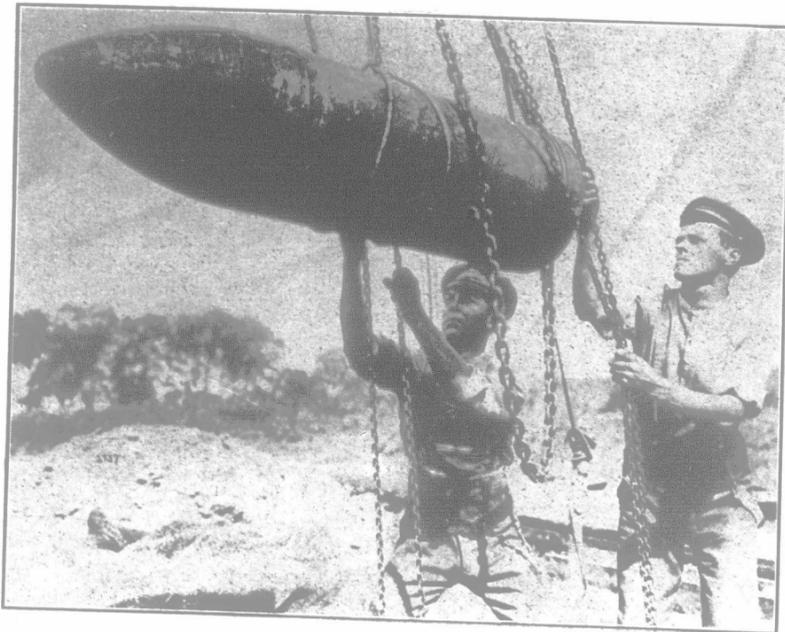
"In the morning sow thy seed, and in the evening withhold not thine hand; for thou knowest not whether shall prosper, either this or that, or whether they both shall be alike good."

Perhaps, like the fishermen of Galilee, you may say that you have toiled for a long time and have taken nothing. Then the Master's command may be: "Launch out into the deep and let down your nets." That doesn't always mean that you are called into a heathen country. It certainly means that your love for Christ is to be so enthusiastic that you can't help letting the people around you know whose you are and whom you serve. There was a man who once said: "I would rise up from the dead to preach." The joy of Christ's service made him eager to share his gladness with those who were discouraged.

Character is marvellously contagious. A director of one of the modern organized play grounds declared that he wanted for supervisors: "Men that are so manly and women that are so womanly that their manliness and womanliness will rub off on the boys and girls and help them to become of the same sort." God wants manly men and womanly women to be His fellow-workers in life's school. He calls us to be pupil-teachers. We must not expect to finish our education before we try to impart to others something of what we have already learned from the Head Master.



Salonika is the Most Cosmopolitan Battle Front in Europe. Chinese soldiers eating a quick lunch in the presence of British and French brothers in arms before Salonika.



British Shells.

This shows something of the intricate tackle necessary to lift one of the big shells used in the British offensive in the West. International Film Service.

Last Sunday I said to a neighbor of ours: "I suppose you will soon have a great deal to do in the way of church work." He answered cheerfully: "I am hoping there will be a great deal to do."

That was the spirit of Isaiah when he eagerly pleaded to be sent out on a difficult task, even to rouse his hard-hearted people to a sense of their dangerous wickedness. "Here am I; send me!" The volunteer was at once accepted, for the Lord said "Go!"

I am afraid most of us are more inclined to shirk responsibility than to go forward with out-stretched hands

was the use of trying again. Yet when he tried to evade God's call, we are told: "The anger of the Lord was kindled against Moses." Which of us dare face that result of trying to shirk our responsibilities?

Teachers are needed in Sunday School. You know this and yet you may be uneasily manufacturing excuses as Moses did. You say, "I am not good enough," or "I have no gift for teaching," or "no one has asked me, why should I offer?" Yet God Himself may at this moment—be saying insistently to you: "Who will go?" Whatever we answer to that call, let it be a true answer.

Phillips Brooks once said: "Take that task of yours, which you have been hesitating before, and shirking, and walking around, and on this very day lift it up and do it."

We are called to be volunteers, not leaders. Our prayers should not be that God may do our will, but that we may do His.

"Follow on, follow on, till the night is gone, Till the long hard quest has its end in rest, And the Vision of Christ is won." DORA FARNCOMB.

The Windrow

Seventy-four firms in Toronto are now making munitions.

Over three thousand graduates and undergraduates of Toronto University are now on active service.

When the new span for the Quebec bridge is built rolled steel will be used instead of cast steel. This, it is thought, will lessen the danger of accident.

Dr. Evelyn Windsor, of Calgary, is going on active service. She is the first Canadian woman to go to the front as a doctor. Her work will be at the dressing stations.

The loss in materials of the span of the Quebec bridge which fell recently when being lifted into place, is estimated at \$600,000, the total cost of the bridge, when finished, having been placed at \$17,000,000. If completed, this structure would cut 200 miles from the railway distance between Halifax and the West.

A new type of ship, whose hull is entirely built of concrete except for the ribs, which are steel, arrived recently at Christiania, Norway, from the shipyards of Christianiafjord. It is the first stone vessel ever floated, and its builders claim that it is much safer than vessels built of wood or steel.

The New York Central Railroad has announced that its engineers have perfected a process for eliminating the hidden flaws in steel rails. The discovery was made by Dr. P. H. Dudley, consulting engineer of the road, who has been at work for 40 years in a study of the cause and prevention of rail-breaks. He is 72 years of age, and for 33 years he and his wife lived in a specially equipped car in which he could carry out his investigations.

An odd state of affairs exists in the vicinity of Salonika, where men from twelve nations have been brought to fight over neutral territory, which belongs to none of them and to which none lays claim. The nations are: Allies—French, British, Serbs, Russians, Albanians. The Central Powers—Germans, Bulgars, Austrians, Hungarians, Turks.

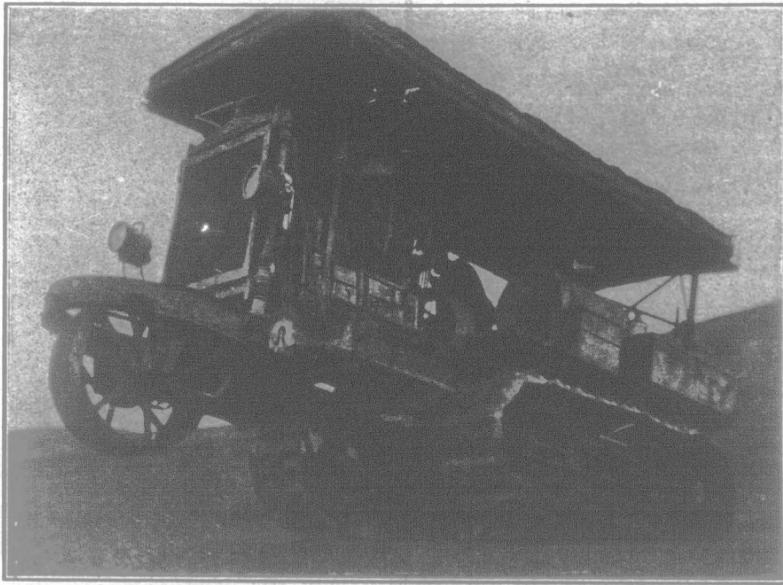
"The war has done wonders in removing anti-feminist prejudice in England. It has been discovered that women are useful as well as ornamental, and that the nation needs them. Premier Asquith, formerly a pronounced opponent of equal suffrage, has declared that the women must have recognition in the new electoral bill. The trade unions, once so ungenerous toward the weaker sex, have at last allowed them to enter the workshops."—The Independent.

According to an official Yellow Book, recently issued in France, the manner in which the German authorities deported the inhabitants of the cities in the captured areas of the north—25,000 from Lille, Roubaix and Tourcoing alone—was heartless in the extreme. Families were ruthlessly torn apart, all capable of working, between the ages of 15 and 55, being taken to work in fields and factories for the Germans. The French people are greatly incensed over the details of the book.

Jack London, the noted writer, is a most enthusiastic farmer. In a valley in California, the original of his "Valley of the Moon," he has a ranch of 1,300 acres, of which he is very proud. He raises the biggest and best crops of hay in his county; his live stock is the best bred, sleekest and fattest; he has a 75-acre vineyard, and a 12-acre prune orchard that yields an annual average of near 12 tons; also he built the first concrete silo in California, 43 feet high and 11 feet in diameter. Seven years ago Mr. London started with 126 acres, but, as he says, he has been "buying beauty ever since."

whom she repulsed after a bloody encounter.

A young girl recently killed herself in an English village. The coroner's jury, however, brought in the verdict: "Killed by idle gossip." The girl had been guilty of nothing actually wrong, but "the gossip disseminated by the women of the village blackened her name until she could bear the suspicious looks and spoken taunts no longer, and so she ended her life." The event caused an antigossip crusade, an account of which appears in Pearson's Weekly (London):



Giant Tractor Used by British Army.

Like a kangaroo, the forward part of the truck rises high in air when it is about to go up a steep grade. International Film Service.

Her Highness the Begum of Bhopal, India, perhaps the richest woman in the world, has given great assistance to the Allies, ever since the beginning of the war. She offered to train recruits for the Government, and the Bhopal Imperial Service Lancers were placed on garrison duty at Meerut. She also sent ten tents for hospital use to France, contributed \$28,000 for the Prince of Wales' Relief Fund, \$3,000 for comforts for Indian troops, and \$1,000 for relief of Belgian sufferers. She set out herself on active service, but was invalidated at Aden. Bhopal is the only State in India where the ruler is a woman, and the present Begum is the only living woman ruler who has been in action with her own troops. During a pilgrimage to Mecca she and her body guard were attacked by Arabs,

"A society has been formed and rules drawn up. The entrance fee has been fixed at a nominal sum, because the society desired to embrace all classes, both rich and poor. Our richer women are just as adept at robbing others of their character as are the women of the working classes who chat with each other from their respective doorsteps.

"The organizers are quite hopeful of minimizing the number of gossips, because they are convinced that the worst offenders talk scandal more from a matter of habit than through any really malicious desire to injure another.

"Members must take a vow to avoid either starting or spreading any unkind remarks about any one else, nor will they listen to a person who

tries to tell them. To repeat what they have heard, even if known to be true, is equally as bad as to set the ball rolling. For the first ten breaches of this law a fine is imposed, graduating from a shilling up to the maximum fine of ten shillings. After ten slips the women are to be blackballed as incurables.

"If we pick up mud and throw it at a fashionably dressed lady and spoil her clothes she can get redress through the law; no well-brought-up woman, however, ever dreams of throwing mud at her friends.

"If, on the other hand, we imagine that she is too flighty in her behavior, and, in order to strengthen our belief, we repeat all her trivial, little, indiscreet actions, we are flinging mud at her character, and she can get no redress unless it should happen to interfere with the earning of her livelihood, or can be proved a malicious act.

"Idle gossip does more harm than anything else in the world, and if the organizers of the antigossip crusade have only the perseverance and courage to make it universal they will do inestimable good for the general happiness of the community.

"Charity, like all else, should begin at home, and those who cannot join the crusade should begin in their own family circle and resolve not even to think ill of their friends, acquaintances, or those of whom they have little knowledge. When ugly tales are told them these should be immediately forgotten.

"Before making a statement about any one, do not forget to let it pass the three golden gates: 'Is it true?' 'Is it needful?' and 'Is it kind?'

"These form the motto of the antigossip crusade."—Literary Digest.

Common Decency.

(The 'Public Ledger,' Philadelphia.)

Trust in common decency and general fidelity is not misplaced, and if a man thinks there is something radically wrong with the race he had better look within and see what part of his own being needs tinkering.

Most people are doing their best and are trying to live and let live according to the light vouchsafed them. The deliberate evildoers are in the minority, or life would be insupportable. The leaders of the people are chosen from those whose faith in the people is high and fine and strong. The crowd cannot care for a man who does not believe in its essential goodness and honesty.

Does this mean that the only good thing is the popular thing, and that the right way is the way the crowd takes? Not exactly. It means that if you have something better than the rest have you may not hug it to yourself and



Serbiens Arriving in Salonika, Ready to Fight Again.

run off with it, like a selfish animal that has discovered something good to eat. The sum of your own happiness is divisible. You are yourself a product and a survival out of a mob of ancestors; and the question now is, what will you dispense to this contemporary throng?

The strong and admirable natures have never made the mistake of looking down upon their fellows. They have not despised nor condescended. They have confessed themselves not weary and disgusted with the evil that lives on earth among men, but touched and quickened by the perennial virtue that does not die with the virtuous. The poets and the philosophers that have shaken our dispositions are they who have read deeply into the true nature of a man and have seen as in a book the authentic legend of his career and character. "To love is to understand."

The deeper one looks the better opinion one entertains of those who are poor and still brave, are tempted and still firm, are pestered and badgered with mishap and still can laugh. Do not look in the stately pleasure parks of those who can pay any price for anything if you would find the bubbling spring of happiness, but seek for it in the dooryard of some humble rural homestead where contentment dwells because love abides.

The crowd is not truly seen when it is seen in a mass: it is made of people built like you and me. To our finite understanding it is a moving miracle of numbers: it is hard for us to conceive that these thousands upon thousands have nearly all some sheltered place where they rest at night, a table somewhere spread, a circle of friends with whom they clasp hands frequently or walk, linking arm in arm.

Traverse our streets on summer evenings, and on piazza after piazza, or on one flight of white steps after another it is the same—a group of people with their own family jokes, their own intimacies or sorrow, house after house, all through the city. They have come out to take the cool of the evening air, and in the exchange of pleasantries with the neighbors or acquaintances who pass there is the blessing of a friendliness which must in time spread over the world, with other gracious dispensations to make it impossible to go to war.

The Ingle Nook.

[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.]

Dull Day Work For Children.

The other day I was in a house where the children, two little girls, were very busily and happily engaged in making furniture for their doll's house, quite the most cunning little chairs and tables, an umbrella rack, and so forth. "They've been at them for over two hours," said their mother, "I'm always so glad when they find something to keep them quiet and in good humor on rainy days."

I began to examine the various articles, and the children were only too delighted to explain all about them:

"They're just made of tooth-picks and beeswax—see!—with paste-board for the seats of the chairs and tops of the tables. We found out how to make them in a magazine. You could use shoemaker's wax, if you liked, or plasticene or stiff dough, or putty, or the salt paste like what you make salt beads with. We used our water-colors to paint the pasteboard."—they were very breathlessly anxious to tell everything all at once, and the words tumbled out almost on top of one another.

"Splendid!" I exclaimed, "and not long ago I saw some lovely little arm-chairs made with big goose-feathers and pins. The pieces of feathers had been cut three-cornered to make the bottom and back, with the feathery portion to the centre and the hard quill forming the four outside edges; then the legs were made of bare quills."

They thought they would have to try some.

"And did you ever see raffia things?"—they asked, "Sterling G—just makes them lovely! Little baskets, and purses, and picture-frames, and jardinières for flower-pots, and"—evidently there was no end to Sterling G—'s accomplishments.

Afterwards I thought how very much better it is to give children (except, of course, the babies) things that will exercise their inventiveness, than "just toys" to be looked at, played with for a little, then broken up or discarded as uninteresting. Children love to make things, and have a greater affection for any sort of thing that they make themselves than for the finest brought in, all complete, from the toy-shop. The proudest little lad I have seen this fall was one who had made "a wagon that would run" from a piece of shingle, two empty spools cut in two, and some bits of cedar. Besides, a child cannot make even the crudest article for himself without gaining more deftness of hand, and—mark this—securing a certain degree of mental development as well. This, you know, is the real principle involved in the Manual Training department in the schools. Manual Training does not mean simply "making things;" it means also a definite training in brain-power, for it has been discovered that no work of the hand can be done, carefully and well, without a corresponding development in the mental area.

There are so very many ways, too, in which children can be encouraged, to this work-play. Buy some doll's patterns for the little girls, give them a pair of blunt-topped scissors, needle, thread and "patches," and just a little of your time for instruction, and see how happy they will be. And

scheme is now afoot to encourage in Canada the manufacture of toys, hitherto confined, to a great extent, to Europe. It is thought that this and other manufactures will help to give work to soldiers who may return too much disabled to do heavy work. All this is very good, but it is hoped that the inventiveness of the workers will be largely devoted to the making of toys that really interest and occupy the attention of children, leading them to exercise their own inventiveness and imagination. Dolls, of course, are always loved by little girls, and supply abundant opportunities for dress-making. All the things useful in "playing house" also come in the category,—puzzle pictures, materials for building houses and bridges—anything and everything that will inspire the wish to construct.

After all, the human mind never gets over the wish to create, to express itself. How dear to us is the garden we make with our own hands, the house we plan or even help to build, the pretty rag rugs and cushions we design, the plan of any kind that we conceive and foster and bring to completion. The consciousness of this need in ourselves should lead us to appreciate the children's viewpoint. After all we are "but children of a larger growth."

Do you know fall crocuses? They are just the loveliest things. When "out to tea" last night (October 3rd) I saw a perfectly beautiful bouquet of white clematis blossoms (*paniculata*) and some of the mauve crocuses. The vase in which they were placed was mauve too, and chanced to be very much the shape of a crocus, bulging out towards the top and then recurving at the edge. You can imagine how beautiful the effect was. The fall



Troops from Annam, in Indo-China, who are helping the French in Greece. International Film Service.

as soon as they are old enough teach them to bake and cook easy things, seeing to it that hands are scrupulously clean and a dust cap on before the experiment begins; the lessons will be invaluable, to you as well as to the child, later on.

Then there are scrap-books to be made; pictures to be framed in various ways for the play-house; empty eggshells to be decorated with water colors and strung on strings or used as small flower-pots in which to start seeds and "see how they grow;" pictures to be drawn and painted with water-colors; little paste-board baskets for the play house, covered with glue on "buds" from the woods;—can't you think of a hundred things?

Try some of them on the first rainy day or cold Saturday—and don't mind the "muss." Have the children tidy everything away and sweep up just as soon as they are through, and so give them another lesson.

Dr. Montessori, that wonderful educationist, says that children's play is all work anyhow—they are always serious over it—and so her system, a development of kindergarten methods, is to make play of work, and the children are led on naturally and happily—just as you may lead them!

A far-reaching and commendable

crocuses, by the way, are somewhat larger than those that come out in spring, and have longer stems.

What an endless variety of holders one needs to have to make cut flowers look their best,—low flat ones for pansies, tall slender ones for lilies, rose-bowls for roses, stout strong-looking vessels for flowering branches, wide jars for hydrangea—and so it goes. A very good rule is to suit the shape of the vessel to the natural growth of the flowers, that is, low, spreading flowers need low broad dishes, tall slender ones need tall slender vases, and so on. For morning-glory, for instance, nothing can be prettier than a tall slender vase that spreads out into a convolvulus-shaped top—so like the shape of the flower itself.

Never choose an ornately decorated holder for flowers; perfectly plain ones are so much more effective. Plain clear or green glass, opaque blue or black glass, plain green or brown earthenware jugs, even old yellow "crook" jars that suit them, are all fine for the flowers of good shape. A few trials will educate one to know "which suits which."

Just a last word—If you haven't planted any bulbs for winter blooming tuck a few into the soil as soon as possible. Bring them up in six weeks or more (freesias, paper-white narcissus and

Chinese lilies, of course do not need this long rooting-time) and so brighten the late winter months with bloom.—And don't forget some pots of parsley for the kitchen window.

JUNIA.

Waste of Meat in the Home.

A bulletin on the above subject has been issued recently by the Home Economics Department of Cornell University. The conclusions were based on experiment and inquiry and may be found very suggestive to many people who have hitherto given very little thought to the subject.

It is pointed out that, unless fuel has to be considered, it pays to buy the tough cuts, which only require long and slow cooking, after being first seared on the outside to make them retain the juices. After choice is made there are still several ways in which waste may occur. (1) In not making use of all the trimmings or bringing them from the market. (2) In failing to make use of fats that could be used for frying, shortening or soap-making. (3) In throwing away bones that could be used for soup. (4) In not using the left-overs. (5) In failing to use bones and scraps for chicken feed.

Canning Meat.

It is very handy to have canned meat on hand, and, if care is taken, the canning may be done quite successfully at home.

Method 1.—Cut the meat in pieces that will go into the jars easily, using wide-mouth glass jars with clamp tops. Sterilize the jars and pack the meat in solidly to within 1/4 inch from the top. Sprinkle over the top 1/2 teaspoon salt for each pint of meat. Onion, pepper or other seasonings may be added if liked. Put on the jar a new rubber ring of best quality; place the cover on top but do not fasten down tight. Put the jars on a rack in the boiler in which there is warm water that reaches to one inch from tops of jars. Bring to a boil and cook from 4 to 5 hours. When done fasten the clamp down. Keep in a cool dark place. No water is used in the jars. Simply fill to overflowing from another jar.

Method 2.—Brown the meat in hot fat, then steam or simmer it until it will tear apart easily. Pack into jars, fill the spaces with hot soup stock nicely seasoned. Cook 3 hours as above.

Canned Chicken.

Chicken may be canned by either of the above methods.

Chicken Soup or Stock Canned.—Cover all bones and trimmings of the chickens with cold water, salted, and simmer slowly until the bones may be removed clean. Add onion and pepper, or any seasoning liked. Strain the stock, reheat to boiling, pour into hot sterilized jars, and cook as above in a boiler for one hour on each of 2 successive days.

Canned Chicken for Serving.—Take 1 pint chicken stock, or 1 cup stock and 1 cup thin cream; 1/4 cup flour; 1 pint canned chicken; salt and pepper; onion juice, celery salt, or celery leaves. Reserve 1/4 cup stock. Add the seasoning to the remaining stock and heat to boiling point. Blend the 1/4 cup stock with the flour and with it thicken the hot stock. Boil for 5 minutes. Add the canned chicken and leave until hot but do not boil or it will be tough. Serve on toast, or on hot buttered biscuits, or with curried rice.

Creamed Canned Chicken.—Take 1 pint chicken stock, 2 cups white sauce, dash of celery salt. Warm the chicken in the sauce, season, and serve on buttered toast or hot biscuits, with a border of hot rice, or with mashed potatoes over the top, brushed with milk and browned in the oven. Mushrooms may always be added to creamed chicken, also chopped cooked celery or oysters.

White Sauce for Chicken.—Take 1 cup chicken sauce, 1 cup thin cream, 1/2 cup flour, 1/4 cup butter, pepper and salt. Put the butter in a saucepan; when it bubbles add the flour mixed with the seasoning and stir until blended. Add the stock and cream and stir until cooked—about 2 minutes. If the

do not need this so brighten the with bloom.—And of parsley for the

JUNIA.

at in the above subject ly by the Home of Cornell usions were based nquiry and may e to many people ven very little

at, unless fuel pays to buy the require long being first search hem retain the s made there hich waste t making use bringing them In failing hat could be ening or soap- throwing away used for soup. left-overs. (5) nes and scraps

at. re canned meat is taken, the te successfully

eat in pieces s easily, using ith clamp s and pack ithin 1/4 inch over the or each pint or other ber if liked. ber ring of cover on

in the boiler water that tops of jars. from 4 to en the clamp dark place. jars. Simply another jar. eat in hot until Pack into t soup stock hours as

n. by either Canned.—ings of the salted, and es may be onion and ked. Strain pour into k as above each of 2

ing.—Take cup stock cup flour; and pepper; lery leaves. the season- and heat e 1/4 cup n it thickened. Add leave until l be tough. ed biscuits,

en.—Take white sauce, he chicken serve on its, with h mashed ed with n. Mush- o cream ed celery

—Take 1 in cream, epper and saucepan; ixed with blended. stir until If the

chicken stock is omitted and milk used instead, this sauce may be used for fish or for salt codfish soaked and cooked slowly. To sauce for fresh fish a dash of nutmeg may be added if liked, while for codfish hard-boiled egg should be added. Fish dishes may be garnished with a few sprigs of parsley, or a little chopped parsley or paprika may be sprinkled over the top.

Chicken Salad.—Cut the meat into small pieces and mix with an equal quantity of cold-boiled rice. Chopped celery or nuts may be added. Mix with salad dressing and serve on lettuce decorated with slices of pickle or olives.

Fall Cookery

Celery Relish.—One quart celery, 1 quart cabbage, 1 quart green cucumbers, 1 quart onions, 1 quart green tomatoes, 3 large green peppers, all chopped fine; 1 cup salt, 1/2 lb. mustard, 1 lb. brown sugar, 1/2 gal. vinegar, 1 cup flour, 5 cents worth curry powder. Mix dry ingredients to a paste in 1 pint of the vinegar, and when the rest is cooked stir this in and stir for 20 minutes.

Mixed Pickles.—One gal. cucumbers, cut small; 1 gal. green tomatoes, quartered; 1/2 gal. onions, steamed; 2 heads cauliflower, steamed; 1/2 doz. green peppers. Scald in strong brine and let stand a day or two, then make the following dressing: 1 gal. cider vinegar, 12 tablespoons mustard, 2 cups sugar, 2 tablespoons turmeric, 1 large cup flour, wet with a little cold vinegar. Have the gallon of vinegar boiling, then add the other and boil 5 minutes. Put on the thoroughly drained pickles.

Cucumber Pickle.—Chop 3 cucumbers fine and add a piece of a red pepper also chopped fine. Add 1 tablespoon salt, 1/2 teaspoon celery seed, 3 tablespoons vinegar. Mix all well. This must be used soon, but will keep several days.

Peach Custard.—Line the bottom of a pudding dish with pared and halved peaches, cavities up. Fill these with soft sugar. Make a rich boiled cornstarch custard and pour over. Cover the top with a meringue and brown in the oven. Serve hot. To make the custard: Take 2 tablespoons cornstarch to one quart of milk. Mix the cornstarch with a small quantity of the milk and flavor it. Beat up 2 eggs. Heat remainder of milk to near boiling, then add the mixed cornstarch, the eggs, 4 tablespoons sugar, a little butter and a pinch of salt. Boil 2 minutes, stirring briskly.

Baked Pears.—Fill a baking dish with whole pears. Wipe them but do not remove stems. Pour around them 1 large cup boiling water, add 2 tablespoons sugar and bake slowly, basting frequently. Serve cold, with sugar and cream.

Grape Juice.—Pick the grapes from the stems and put them into a clean saucepan with a pint of water to each two quarts of grapes; cover and heat slowly to the boiling point. When the mass is boiling hot, throughout, turn it into a heavy bag to drain; when cool press out the juice remaining. Turn all the juice together, or keep that expressed by pressure by itself as a second quality of juice. Heat the juice to the boiling point, skim and store in fruit jars as in canning fruit. Sugar may be added to the juice if desired, but it is preferable to omit it.

Baked Stuffed Cucumbers.—Wipe and peel large cucumbers, cut in 2-inch pieces crosswise and remove seeds. Mix 4 tablespoons bread crumbs, 2 tablespoons finely chopped cooked ham, and 2 tablespoons grated cheese. Moisten with tomato sauce and season with salt and cayenne. Put the cucumber cups in a shallow pan, fill with the mixture, pour 1 cup chicken stock or broth of any kind around, and bake 1/2 hour. Remove cover, sprinkle with buttered crumbs and bake until crumbs are brown. The tomato sauce is made by cooking tomato and onion together, and thickening the mixture with butter and flour cooked together. Season nicely. The butter and flour may be browned before the tomato is added.

Spiced Grapes.—Five lbs. grapes, 3 lbs. sugar, 1/2 teaspoon cloves, 2 teaspoons cinnamon and allspice, vinegar. Press the pulp from the grapes and boil the skins in a little water until tender. Cook the pulp and put

through a sieve. Add to the skins and put in the sugar, spice, and sufficient vinegar to taste. Boil all together and seal.

Cranberry Catsup.—Five lbs. cranberries, 1 pint vinegar, 2 1/2 lbs. brown sugar, 3 tablespoons cinnamon, 1/2 tablespoon cloves (ground), 1/2 tablespoon salt, 1/2 teaspoon paprika. Cook the cranberries and vinegar about 5 minutes. Press through a sieve, add other ingredients and let simmer until thick.

Griddle Cakes Without Eggs.—With the advent of cold weather griddle cakes are always liked. Take 1 yeast cake, 1 cup lukewarm water, 4 tablespoons light brown sugar, 4 tablespoons melted lard, 1 teaspoon salt, 2 1/2 cups flour 1 1/4 cups milk. Scald and cool the milk. Dissolve the yeast and sugar in the lukewarm water, add the lard, flour, salt and milk. Beat well, then cover and set aside in a warm place to rise for about an hour. When light stir well and bake on a hot, greased griddle.

The Scrap Bag.

Vegetable Brush.

Keep a small brush on hand for cleaning celery and other vegetables. It saves both hands and time.

Cleaning Kettles.

Washing soda is very good for cleaning pots and kettles. Fill the utensils with hot water and add a tablespoonful of soda, then let boil for a while. The same water may be used for cleaning the sink or coarse shed tables.

Darning Hint.

By darning diagonally across the weaves, instead of with it, the stitches are not nearly so likely to pull away from the edges of the darned spot.

A Handy Work Basket.

A large shallow basket, lined with chintz or cretonne, with pockets all around, is a most useful step-saver. In the pockets put spools of various kinds, thimble, needle-case, tape-measure, hooks and eyes, underwear buttons etc. The open center of the basket will hold any sewing that may be on hand.

Renewing Black Silk.

Old black ribbon or soft silk may be renewed nicely as follows: Soak in a bowlful of warm water to which is added a dessertspoon of ammonia to every pint of water, and 1 tablespoonful of good black ink. After the materials have been soaked they should be placed on a clean piece of old sheeting spread on a table, and slowly smoothed with a piece of sponge in one direction. They should then be left, covered with the cloth, over night, then pressed on the wrong side with an iron that is not too hot.

Renewing Gloves.

Old black kid gloves that have become shabby at the finger-tips will look fresh again if sponged with ink and allowed to dry well before they are worn again. If hard, rub with a very little olive oil.

Floor Mixture.

Mix together boiled oil, vinegar and turpentine in equal parts and apply to hardwood or stained floors with a soft cloth. It prevents the dust from scattering and leaves the floor clean.

Scorched Vegetables.

Should vegetables chance to become scorched when cooking, set the dish at once in another containing a little cold water, and the scorching will scarcely be noticed.

Stained Table Linen.

Be sure to soak table linen that has been stained with fruit juice in cold soft water before allowing it in hot water, as this only sets the stains. A cupful of Javelle water added to the boilerful of water when boiling the clothes will usually remove obstinate stains.

Ripening Green Tomatoes.

When ripening large green tomatoes taken from the vines just before frost wrap each in paper and put them in a dark closet. Look at them every 5 or 6 days, using the ripe ones.

Blackened Kettles.

To remove the black from the outside of kettles soak them for a few hours in a solution of lye, then scrape and wash well.

Huckleberries for Winter.

The old way of putting huckleberries in molasses is excellent. Drain off the molasses before using and wash the berries. Blueberries do not keep in this way as well as the common huckleberries because the skin is more tender.

An Old Hot Water Bag.

Do not discard an old hot-water bag that has begun to leak. Keep a crock of clean sand in the house, and when needed heat it in the oven and fill the bag with it. The heat will be well retained.

A Great Winter Economy.

Few people know the value of old coal, or cinders. With any heater, sifting coal ashes more than repays for the time and trouble taken. If the ashes are dampened the problem of dust is solved. When the cinders are picked over and freed from melted clinkers, they should be well soaked with water.

Two or three inches of thoroughly wet cinders on top of a bed of new coal makes the hottest and most lasting fire that any coal will produce. One reason is that the fine coal keeps the heat in the heater. Another reason is that the water and coal gas join to make a new and more powerful gas still. To show what an economy cinders may become, I cite the fact that, whereas I used to burn twelve and thirteen tons of coal, I now require only about half that amount.

The sifted ashes I never throw away. I use them on walks, on grass, on the lawn, and even spade them into the garden. Mixed with soil, they serve several purposes; they sweeten it, tend to retain moisture, and do away with many bugs and worms. Among the vegetables, squashes are especially fond of coal ashes; among the flowers—asters. —Sel.

To keep Grapes.

Select choice bunches. Seal the ends of stems with sealing wax and pack in cotton batting. Keep in a cool place.

Dried Peaches.

Peaches, pared and cut in halves may be cooked in syrup then dried in the sun. When dry, pack in a jar with sugar about them. To use, soak over night and stew in the same water.

What to Serve With "What"?

An old hand-written cook book has the following.—

Always have lobster sauce with salmon, And put mint sauce your roasted lamb on. Veal cutlets dip in egg and bread crumb; Fry till you see a brownish-red come. Grate Gruyere cheese on macaroni, Make the top crisp but not too bony. In dressing salad mind this law: With two hard yolks use one that's raw. Roast veal with rich stock gravy serve, And pickled mushrooms, too, observe. Roast pork, sans apple sauce, past doubt, Is "Hamlet" with the "Prince" left out. Your mutton chops with paper cover, And make them amber brown all over. Broil lightly your beefsteak—to fry it Argues contempt of Christian diet. To roast spring chickens is to spoil them, Just split them down the back and broil them.

It gives true epicures the vapors To see boiled mutton without capers. Boiled turkey gourmands know, of course, Is exquisite with celery sauce. The cook deserves a hearty cuffing Who serves roast fowls with tasteless stuffing.

When Apples Are In.

Baked Apples.—Wash, core and quarter firm, tart apples. Put them into a baking dish, cover with cold water, adding 1 1/2 cups sugar to 6 apples. Bake 3 or 4 hours until they are a dark amber color.

Another.—Take good, tart apples, Greenings are best. Scoop out the cores and place in a baking pan. Fill the holes with sugar, adding a clove or two if liked. Pour some cold water around and bake until light and fluffy. Serve with cream. When baking apples always use an earthen or granite baking dish, as tin or iron blackens them.

Fried Apples.—Pare and slice and fry in hot fat. Serve with pork, or by themselves with sugar sprinkled over.

Crab Apple Jelly.—Cover with water and boil until tender, then strain. Boil the juice 20 minutes. Add the same amount of heated sugar; pint for pint, and cook 5 minutes. Pour into tumblers and when cold cover with melted paraffine.

Sweet Apple Pickle.—Take 7 lbs. pared and cored apples to 3 lbs. sugar, 1 pint vinegar and 1 oz. sliced ginger-root in a bag. Make the syrup first, then add the apples and simmer 3 or 4 hours. To keep apples white put them in cold water to which a little lemon juice has been added and leave 15 minutes.

Stuffed Apples.—Pare 6 apples and cut out the cores. Fill the cavities with mincemeat and bake, basting frequently. When done remove carefully to slices of hot buttered toast, pour the juice over and serve.

Apple Cheese.—Take 4 lbs. pared, cored and quartered apples, 2 lbs. sugar, grated rind of 1 lemon and juice of 2, and a teaspoonful essence of ginger. Add 1 cup water and stew gently to a thick pulp. Let cook an hour or more after beginning to boil. Put in small jars.

Apples with Meringue.—Stew apples in a rich syrup. When cold cover with a meringue of beaten egg-whites, sprinkle with nutmeats, and brown in the oven. Serve in the same dish.

Apple Pie.—Line the pie-plate with rich crust, fill with pared apples cut in eighths, sweeten well and dredge with flour and cinnamon. Pour over all 1/2 cup rich, sweet cream or boiled custard, put on top crust and bake. To make "deep apple pie" leave out the under crust. More fruit can be used in this way. If preferred the cream may be left out and a generous lump of butter used instead.

Apples and Rice.—Peel 8 apples, halve them and take out cores. Put in a pan with 3 oz. butter, sprinkle with sugar, add the grated rind of half a lemon and bake until tender. In the meantime boil 6 oz. rice with 1 1/2 pints milk, sugar to taste, and 1/2 teaspoon grated nutmeg. When done arrange in a mound on a platter, place the apples around and serve hot.

What to Do with Pears.

Pear Marmalade.—Wash the pears and remove stems and blossom end. Cut the pears in bits and put in a kettle with a very little water. Set in another vessel holding water and cook to a pulp, then rub through a colander. To every pound of pulp allow 1/4 lb. sugar. Cook until smooth and thick enough to drop from a spoon in clots. Put in small glasses and when cold cover with paraffine.

To Can Pears.—Take 10 lbs. pears, pared, halved and cored, 5 lbs. sugar, 1 lemon sliced thin, and 1 teaspoon ground nutmeg, 1 teaspoon cinnamon and a small piece of ginger-root, all tied in a bag. Cook until the pears turn pink, then can.

Pears with Cream.—Ripe pears are delicious when cut up and served with cream and sugar. Heap whipped cream on top of the dish.

Baked Pears.—Select ripe pears, cut them in halves and arrange in a granite baking dish. Mix 1/2 cup sugar with a cup of boiling water and stir until dissolved. Cover and bake slowly, basting frequently with the syrup. Serve with cream.

Preserved Pears.—Select firm, ripe pears. Pare them and cut in halves, dropping them into cold water. Put parings and cores on to boil with 1 quart water, cook 15 minutes, strain and add to the juice enough water to furnish 1 quart to every 1 lbs. sugar.

Allow $\frac{3}{4}$ lb. sugar to every pound of fruit. Boil and skim the syrup clear, adding a little lemon juice and a small piece of ginger-root to each quart. Put the pears in the syrup and simmer until tender; lift the pieces out carefully and put in jars. Boil the syrup down until rich and thick, pour it over the fruit and seal. If the pears are a hard variety they must be cooked tender in clear, boiling water before they are put into the syrup.

Pear Pudding.—Take 1 quart pared and quartered pears. To a cup of sugar add a cup of water. Let this boil, then add the pears and stew gently until tender. Soak about half a small loaf of stale bread in tepid water until soft, then press dry and crumble fine. Melt $\frac{1}{2}$ cup butter, add the crumbs and stir until almost dried out. Beat the yolks of 3 eggs and $\frac{1}{2}$ cup sugar until light, then add $\frac{1}{2}$ teaspoon cinnamon, the bread, and the stiffly beaten whites of the eggs. Butter a granite baking dish. Put in half the pears, then the bread mixture, then the rest of the pears. Cover and bake slowly $1\frac{1}{2}$ hours. Serve hot with sauce or cream.

Starchy Foods.

Potatoes and all kinds of cereals contain starch, a substance that cannot build tissue, but is very valuable, for all that, as a producer of energy and heat. As may be judged, starchy (or carbohydrate) foods alone do not make up a perfect dietary; proteid foods—meat, cheese, milk, eggs, beans, lentils etc.—must be added to rebuild the tissues that are always wearing out, while, for greater fuel value, it is necessary to add fat or oil in some form.

The most important cereals are wheat, Indian corn, oats, rice, rye and barley, and these may be cooked in very appetizing ways.

Boiled Rice.—When properly cooked rice should not be a dark-colored, gluey mass; it should be white, and every grain should be separate. Measure 1 cupful of rice to 2 quarts of water. First wash the rice well and drain it thoroughly. Have the 2 quarts of water boiling very rapidly. Drop the rice in, little by little, so as not to stop the boiling, and boil rapidly, uncovered about 20 minutes, or until the grains are soft. When nearly done add a teaspoonful of salt. Next turn into a fine colander or strainer to drain, and wash by pouring on plenty of cold water. Drain well and reheat. Rice cooked this way may be served with meat and gravy, instead of potatoes, or may be served as a pudding with cream and sugar.

Potatoes contain too small a quantity of tissue-building foodstuffs to be depended upon alone. They must not be made the principal item of diet, but must have added to them meat or some of its equivalents, with a little fat in some form. For instance, a potato dish prepared with cheese and cream or butter may be very nutritious. To make it, boil and mash the potatoes and beat until light with a little cream, butter, salt and pepper. Add a little grated cheese, put more cheese over the top, and bake in a dish in which the potatoes may be served. . . . If the cheese is not liked, the beaten whites of two or three eggs may be carefully folded in instead.

Another way is to cut boiled potatoes into small cubes, put in layers alternately with pieces of hard-boiled eggs, pour a cream sauce over, and bake. Potato salads are also quite nutritious if mixed with hard-boiled egg and a dash of onion. Or the egg and onion may be omitted and chopped nuts used instead. All potato salads need plenty of good salad dressing and should be served on lettuce leaves. In making the dressing, melted butter or salad oil should be incorporated to supply the necessary fat. . . . Scalloped potatoes also are quite nutritious. Pare and slice the potatoes, parboil in a little water, then drain, cover with milk, add dots of butter, and bake. Many in making scalloped potatoes do not add salt until serving for fear of curdling the milk.

Breakfast cereals should always be cooked in a double boiler, which may be improvised by setting a smaller saucepan in a larger one containing water. Most books on cookery recommend cooking oatmeal 6 hours, or soaking it for several hours then steaming in double boiler

for three. Coarse flaky cereals should be stirred as little as possible, fine ones may be beaten. As a rule all cereals may be cooked twice as long as directed on the package. If too moist when nearly done should be cooked uncovered for a while. Cereals are all valuable foodstuffs, oatmeal and cornmeal being particularly valuable in winter on account of the fat they contain. Cornmeal is also said to be rich in "vitamines," so valuable in preventing anaemia. For summer many people who find oatmeal and cornmeal too heating prefer barley, wheat preparation and rice. All cereals should be served with milk and cream to supply extra fat and protein.

The Beaver Circle

After School.

2 p.m.

"Let me see," said lazy Lynn. "Oceans of time to do them in—Seven examples. And some will be just as easy as pie for me. Compound numbers are simple enough, once you get the hang of the stuff. I think I'll drop around to the gym, and try the tank. I'd like a swim."

4 p.m.

"Twenty-fifth? You're sure of the date? My library book is two days late. I promised mother it shouldn't stay out for another single day. Want to walk to the library, Jack? I've got a book that must go back. And then for home. I mustn't forget I haven't done those examples yet."

5 p.m.

His mother calls him. "That you, Lynn? Your cousin's here, my boy; come in. She's come to dinner, and brings good news—an invitation you can't refuse. She wants to know if you can go tonight to the moving-picture show. There's a tiger-hunt in Hindustan, I've told her that I'm sure you can."

6 p.m.-10 p.m.

Those examples! Poor little sinner! And yet a boy must have his dinner. Next, the "movies." Then to bed. "I'll get up early and do 'em," he said. But let these stars * * * denote the night; and then suppose it's broad daylight—Let X be Lynn, and Y the bed—and X was still in Y, 'tis said!

Some things we learn outside of school. Among them is this splendid rule: Having lessons to do each day, Procrastination is not the way.—The Australian.

Little Bits of Fun.

Doctor—"Stick out your tongue farther."
Boy—"Can't. It's fastened t' my back."

Little Alan for the first time saw a man with a wooden leg. "Oh, mummie!" he cried. "Look at that funny man with his walking-stick inside his trousers!"

"Walter Jones," said the teacher sternly, "you are not attending to the lesson. Did you hear Jessie Smith's description of the American product, hominy?"

"Yes'm," replied the small boy glibly.

"All right, then. Give me a sentence in which you bring in the word correctly."

With the courage of despair Walter replied, "Hominy marbles have you?"

Some More "Holiday" Letters.

Dear Puck and Beavers,—Two weeks before our holidays began I was operated on for appendicitis, thus I spent the first week of our holidays in the hospital. The next few weeks were spent in recuperating. I was unable to walk far at first, and could only walk as far as the lane for the mail. The rest of the day I would sit on the lawn or lie in the hammock under the trees. Later on as I grew stronger I went for a visit to my auntie's and stayed three weeks. I enjoyed myself very much while there and went to two lawn parties. On August the eleventh, my little brother's birthday, I went to a picnic at the river. We went early and came home at four o'clock in the afternoon. We took our lunches with us. After lunch we went out bathing and in the boats. I went two or three times for a boatripe. I was quite tired that night, but pleased with my trip to the river. The next week I returned home and employed myself by helping mother and reading to pass the time. The last week of our holidays was very wet, so I did not enjoy myself very much. School reopened on Tuesday, September fifth. Owing to my operation I was unable to try the Entrance High School examinations, so will still be in the senior fourth class when I go back to school. I think I had quite a nice time on my holidays, considering my illness. Hoping to see this in print I will close. I remain a staunch friend to the Circle.

WILHELMINA PETRIE.

P.S.—I wish some of the Beavers of about 12 years of age would write to me. My address is Bainsville, Ont., R. R. No. 1.

Dear Puck and Beavers,—On Thursday, the twenty-ninth of June, school closed. We were taking all our books home, and our school-bags were full. On the way home we were talking of our plans to spend the holidays. We were also talking of how glad we were that school was closing. My plans were for to stay at home for the first few weeks with mother. Then I would go visiting sometimes. In August I would go on my holidays, but did not get them at all. Through the holidays I had certain work to do of which I am now going to tell you. I had to go raspberry picking sometimes, but I would never get very many at a time. It was always my job to bring up the cows. Besides that I had the chickens to care for. I had to help my sister keep house when mother was away. Besides work we had some sports and pleasures. One pleasure was visiting, which I did very little of. I went to see a few of the school children, and was at my auntie's and grandma's several times. Another sport was playing with my cousins. The games we played were, run a mill, hide-and-seek and such like.

My particular pleasure was at the garden party. I will tell you all about it. It was at Sparrows, about two miles and a half from our place, but my sister and I walked every step of the way. When I got there I had my tea, then I walked around the yard with the other children. About eight o'clock the programme began. The first thing was the Chairman's address, and then came our song. It was "Laddies in Khaki." There were Highland dancing, songs, recitations and dialogues. The most interesting thing of all was the Highland dancing. There were also booths, and I spent fifteen cents in them. I spent five on candy, five on ice-cream and five on peanuts.

After the month of August was nearly over we were thinking of getting ready for school. I and my sister went down town the Saturday before school opened and got our books. We all felt very glad to get back to school among the other pupils.

(NAME NOT SIGNED.)
Paisley, Ont.

Dear Puck and Beavers,—As I saw that the composition was "How I Spent My Holidays" I thought I'd try my luck. So here it is.

The afternoon, after examinations were over, Mary and I went picking strawberries. We each had a mug to pick

in. We went down our lane and over the big hill to the patch. When we got there we were pretty hot, so we sat down to rest. In a few minutes we got up and started to hunt berries. But we could not find many and we were so hot. So we started for home. When we got there mother told us we could eat the berries; and so we did. On the first of July there was the Sunday School picnic. Our whole family went and enjoyed themselves. The best thing of all was the races, but hardly any girls would run. When our race came there were only five running, (counting myself). When they said "go" away we went, and I came first. I got a red ribbon with first prize on it. Then tea was served, and some games played, then we went home. On the fifth of August we went down to the lake. I was in for a little while, then I came out and got dressed. Tea then was served and we went home. The next thing coming off was a party at my Uncle Henry's. We went and had a good time. The next was a birthday party at Mrs. A. D. Campbell's. I went and had a good time. A week from that was a party at Mrs. R. Connell's; I went and enjoyed myself. I also helped mother by washing dishes, sweeping the kitchen, and keeping my bed-room clean and tidy. I have 20 ducks to look after, which takes quite a lot of my time. I also do other little things. I will close.
(Age, 10 years.) JEAN GILCHRIST,
Shanty Bay, Ont.

The Prayer of a Little Child.

BY JEANNETTE LOUISE MCLENNAN.

It was evening. By a snow white bed Kneelt a tiny little figure In the attitude of prayer. And the guardian angel watching Heard these words the baby said:

"Please God, there is something That I want so much to say; But you'll be sure to hear me So I thought I'd try to pray. And perhaps you'll understand Though I'm only very small; For Muvver says you love us Little children best of all.

"Daddy is a soldier man And he's awful big and strong, But I wish he wouldn't go away And stay away so long. Daddy doesn't like to fight But his duty made him go; Please God, tell me what is Duty That could make him leave us so?"

I wonder what it's all about And why they want to fight; But You, Dear God are sure to know And you can make it right. Maybe when I'm bigger grown —and older— then I'll know; But I can't ask my Muvver now, It sets her crying so.

"Muvver says a guardian angel Watches over me at night; Please God, could you send my angel Where my Daddy's gone to fight? And let her guard my Daddy He's so far—so far—away, For I've got Muvver for my angel Watching me both night and day."

The golden head drooped lower The little form relaxed; The tired little heart had rest. The mind so sorely taxed With problems all too weighty And questions much too deep; Till nature taking pity Brought rest in kindly sleep.

Then the guardian angel gently With infinite love and grace; Bent low above the sleeper And smoothed the lines from his face, Then soaring high on wings of love Through space eternal, heavens bright She sought the throne of her Father Amidst the realms of light.

From this earth of gloom and torture With its wailings loud and wild; She carried to Him—her Master This Prayer from the heart of a child. "Lakecroft," Beaverton, Ont.

Water Under Pressure For Farm and Country Homes

Here is a system that will supply all the hard and soft water required for household purposes—water in the basement for washing, water in the kitchen and water in the bathroom. It will also supply water for the stock, barn, dairy and garden.



WATER SYSTEMS

"The Standard of Canada"

They are suited to either gasoline engine, hand or electric power. We can furnish you with a water system that is suited to your particular needs. Don't worry about the depth of your well, for there is an AYLMEYER SYSTEM suited to it, whether it is shallow or deep.

The 1500 Electric Water System in Detail (Water direct from the well for drinking)

This system can be attached to the ordinary house wiring. It consumes less current than a domestic iron. It works noiselessly and automatically. The AYLMEYER ELECTRIC SYSTEM fills the pressure storage tanks, and is so constructed that it pumps cold water for drinking purposes direct from the well to the tap. The Aylmer 1500 Electric is the only system made in Canada with this fresh water feature. This AYLMEYER SYSTEM gives you a cold drink direct from the well—others give you tepid water from a storage tank. Which do you want?

We have an illustrated booklet on each of these three systems. Write for a copy, or go to your dealers.

The Aylmer Pump & Scale Co., Ltd.
Aylmer, Ontario



Homeseekers' Fares FROM TORONTO

To Winnipeg and Return.....	\$35.00
To Regina and Return	38.75
To Saskatoon and Return.....	39.75
To Edmonton and Calgary and Return....	43.00

EVERY MONDAY TO OCTOBER 30TH

Proportionate Fares from and to other Points

ELECTRIC LIGHTED TOURIST CARS

For our Booklet, "Homeseekers' and Settlers' Guide," tickets and information, apply to nearest Canadian Northern Agent, or write to

R. L. Fairbairn, General Passenger Agent, 68 King Street E., Toronto, Ont.

WE ARE BUYERS OF ALL KINDS OF

Clover and Grass Seeds, Seed Grain, etc.

Of Fancy qualities in Alsike or Red Clover, Timothy, etc. We invite correspondence, and pay highest prices for Fancy Grades. Sample Bags sent free upon request.

Wm. Rennie Co., Limited

Toronto

THE VETERINARIAN

A valuable book which tells you about the treatment of diseases of your live stock given FREE with a trial ton order of

LINSEED OIL CAKE

"Maple Leaf" Brand
Write to-day for lowest prices.

The Canada Linseed Oil Mills, Limited
Toronto and Montreal

WANTED CRATE-FED CHICKENS

also poultry of all kinds. Write for our weekly price list.

WALLER'S

702 SPADINA AVE. TORONTO

speech, that these few examples, alas, are not confined to the uneducated classes. "Say Mary," "You don't say," "Those kind of things" for "Things of that kind," "Lady friend" or "Gentleman friend," "It's me" or "He went with Alice and I," "Yes, Miss," or "No, Miss," "Ain't or hain't," "You was" for "you were." Do not say a person's "home" when you mean his "house." We say to-day "man and woman" instead of "lady and gentleman," as "Mrs. Brown is a charming woman."

We Americans have the habit of strong exaggeration in our use of extravagant expressions not only improper, but untrue as well.

How often we hear "Oh! I had a perfectly elegant time." "The supper was gorgeous." "Isn't she too awfully sweet for any use?" Look up awfully in the dictionary. "I am completely worn out." "Aren't you all in?" One could easily fill a fair-sized volume with examples of our daily abuse of the King's English.

One learns much in almost any society by being willing to talk about subjects of interest to others, and by listening courteously, that is, with attention to what others have to say.

One of the most discourteous acts a person can commit is to allow the attention to wander when one is being personally addressed.

It is said, that one of the chief charms of Robert Louis Stevenson, who was a brilliant talker, was his sympathetic power of inspiring others. He would keep a houseful or a single companion entertained all day, yet never seem to dominate the talk or absorb it, rather he helped every one about him to discover and exercise unexpected powers of his own. His good will, his courtesy and his consideration for others were delightful.—American Cookery.

Aristocrats of the Road.

The Romance of the Romany.
(Gipsy.)

"If pride in one's ancestry is justifiable, have not these people far saner reasons for such pride than those who boast of having 'come over with the Conqueror'?" asks Mr. Frank Cuttriss in "Romany Life" (Mills and Boon, 7s. 6d. net). Those who were here when they came, Pict and Scot, Saxon and Briton, precede the Norman. And the Romany *chals* and *chis* came from India. In Persia, long ago, the Zotts lived in huts like the Berbers. In France and Germany as early as the beginning of the fifteenth century they had established themselves as fortune tellers.

Literature of Gipsydom.

In Prosper Merimee's "Carmen" we find this destiny-tangled race dwelling in Spain before Borrow busied himself amongst them. Later came Watts-Dunton with "Aylwin" and the poems called "The Coming of Love." So that we need not take the word of the policeman that they are mere tramps, nor of the devout gamekeeper that they are poachers. Behind all these things they are traditional nomads inheriting No-Man's-land, in desert or common. Likewise there are half-castes called "mumpers" and "diddecoys," and there are gipsies who live in houses. Those among whom Mr. Cuttriss invites us to wander, dwell in caravans and tents. And copious illustrations help us to realise the racial qualities of this people.

The Language.

In order to realise the closeness of the Indian bond, let us count up to six in English, Romany and Hindustani:

One, two, three, four, five, six.
Yeck, dui, trin, stor, pantsch, schowe.
Ek, du, tin, tschar, pansch, tscho.

That is fairly conclusive evidence of Hindu origin. A horse is "gry" or "ghora," a house a "ker" or "gurr." So that the gypsy could get on quite well in India. Of course, the English-speaking gypsy has taken to the language of his second home, and uses slang liberally. So that those who would talk with them have to acquire the freemasonry of language that in practical life is more binding than racial or geographical kinship.

Characteristics.

The gypsy is at once friendly and reticent. He (and she) hate being regarded as queer folk. They are suspicious of light complexions, but well disposed to *gorgios* of a wandering type, who happen to have dark skins. Many of them have well-equipped vans, and a certain amount of money. But however poor a gypsy may be, he will always share his last coin or loaf with the needy. Peddling and basket-weaving are their industries, but the illegal art of "dukkerin," or fortune-telling pays best, if we omit the science and art of horse-dealing in which they are adept.

Marriage and Death.

Their marriage practice is twofold. They are bound according to the rites of the Church, or they have their own system of public avowal. The one is as binding as the other, and the moral qualities of the family are high. Public opinion makes a very bad time for the faithless wife or unworthy swain. In conversation the gypsy does not keep to one subject, but branches off as fancy dictates, the mild following the wandering habit of the tribe.

As an example of gypsy song, Mr. Cuttriss quotes the following:

Mande's chavo's lelled oprey,
He's jalled to the prao tem,
Yeck divous I shall dick leste,
Though the poov he'll dick kek komi.

My child is taken above,
He's gone to the children's home;
One day I will see my love,
Though the earth no more he'll roam.

So sang a bereaved mother of her boy. When they sing it is as a direct expression of feeling. Literary they are not, though many can read the paper and follow the events of the wider world.

They have their secret signs by which the track of a caravan is made clear to others of the same clan. And the Romany has two surnames, one known to his own people and the other to those of the outer world.

Their family names include: Barney, Stanley, Smith, Wells, Shaw, Lovell, Boswell, Glover, Buckley, and Loveridge.

Chums and Dignity.

Christian names (male) include Pannel, Wester, Jobcy, Bendigo, Noah, Nelson, and Franny; (female) Sinfai, Fenella, Fezenta, Videy, Doha, Rhona, Rawnie, Zillah, and Leander.

Curiously enough our word "chum" is derived from the Romany, and means "a friend whom one kisses," which is rather different from the *gorgio* use of the term.

If you are dealing with a gypsy do not imitate a lady mentioned by the author. She ordered a man to make her some baskets for a bazaar. He took no notice. Had she asked him to do it he would have complied. But the Romany nature is quick to resent a suggestion of superiority. They are a free people in whom tradition, especially that of family repute, is strong.

The author has observed closely and written a book that deserves wide attention. For the Romany folk are healthy, lovers of music and dance, and have maintained an ancient mode of life athwart our vaunted civilization. They know how to live from day to day, as well as from one generation to another.

"Au Militaire"

A British soldier went into a grocery establishment to buy some articles. Seeing some red herring lying on the counter, he asked what they were.

"Soldiers, my friend," said the grocer, winking at the company.

"Are they?" rejoined the son of Mars. "Then I'll take them as deserters," and off he walked with his prisoners, to the discomfiture of the witty grocer and amusement of the bystanders—Tit-Bits.

Give the "Kiddies" All They Want of

CROWN BRAND CORN SYRUP



It is one of the delicious "good things" that has a real food value. A slice of your good homemade bread, spread with "Crown Brand", forms a perfectly balanced food, that is practically all nourishment.

So—let them have it on biscuits and pancakes, and on their porridge if they want it.

You'll like it, too, on Griddle Cakes—on Blanc Mange and Baked Apples. And you'll find it the most economical sweetener you can use, for Cakes, Cookies, Gingerbread and Pies.

Have your husband get a tin, the next time he is in town—a 5, 10 or 20 pound tin—or a 3 pound glass jar.

THE CANADA STARCH CO. LIMITED MONTREAL, CARDINAL, BRANTFORD, FORT WILLIAM. Makers of "Lily White" Corn Syrup—Benson's Corn Starch—and "Silver Gloss" Laundry Starch.



Our new recipe book, "Desserts and Candies", will show you how to make a lot of really delicious dishes with "Crown Brand". Write for a copy to our Montreal Office.

Lang Syne.

BY THOS. J. TAYLOR.

The cows stand close by the pasture gate Under the buttonwood tree, And watch my coming while they wait, Lowing impatiently. The western sun is sinking low, The summer eve draws nigh, As homeward through the lane we go, Daisy and Nid and I.

The busy insects' strident hum Pales with the afternoon, But in the brook quaint jug-gur-rum Soundeth his weird bassoon. The shadows deep the thickets stain, Sweet warblers nestward fly, As we meander down the lane, Daisy and Nid and I.

Along the field where the grassy plumes Shelter the mole's dark lair; Beside the grove whose locust-blooms Sweeten the drowsy air; The cows lead on, the boy behind— Familiar path we ply— Till through the farmyard bars we wind, Daisy and Nid and I.

Within the barn, to the stanchions tied, Dreaming their bovine dreams, The cows, content, stand side by side, Yielding their milky streams. The falling dusk makes soft appeals The whippoorwill makes cry, Night's peaceful benison we feel, Daisy and Nid and I.

The storms and stress of the flying year, Glance from the child's fresh soul, The stings of pain, the April tears, Faintly impress the scroll; But happy hours bid fond review How deep in time they lie, And we were chums, and gladness knew, Daisy and Nid and I.

Ah, many years have those bonny cows Cropped in celestial grain, And other cattle now may browse Clover-tops in the lane; But memory lingers o'er the charm Of boyhood days long by, When we so loved the dear old farm, Daisy and Nid and I.

The "Ists."

Mother is a suffragist— She states the fact with pride; A motorist is father, And he travels far and wide; Big Sister Julia laughs at care, An optimist is she, While Brother Will's a Socialist— He's for equality. Wee sister's a somnambulist— She walks round in her sleep; And Cousin Nell's a futurist— Her pictures make you weep. My Uncle Jim's a pessimist, Whose croaking never ceases; And Uncle Ike's a specialist In brain and nerve diseases. I guess I'm 'bout the only one Left out in all the list: But when I'm grown I'll write my name— "Ted Jones, a farmerist." —Helen Metzger, in American Agriculturist.

To Our Readers!

Keep your subscription paid in advance

97%

of our readers renew their subscriptions in advance and of their own accord!

The Farmer's Advocate and Home Magazine is sent to paid-in-advance subscribers for \$1.50 a year, fifty-two issues.

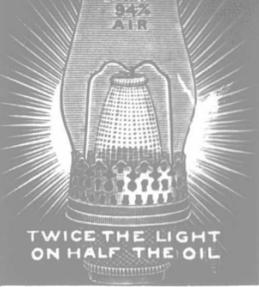
When not paid in advance, the price is \$2.00 a year. Some subscribers pay in advance for a year or two years, then allow their subscription to run behind. On these we are compelled to charge \$2.00 a year, even though the paper was sent for \$1.50 a year when paid in advance.

This has caused a few readers to think that the price of The Farmer's Advocate and Home Magazine has been raised, whereas the price remains as always, \$1.50 a year in advance, or \$2.00 a year when in arrears.

Keep paid-in-advance and save 50c.

The William Weld Co., Ltd., London, Ont.

New COAL OIL LIGHT BEATS ELECTRIC OR GASOLINE 10 Days FREE—Send No Money



We don't ask you to pay us a cent until you have used this wonderful modern white light in your own home ten days, then you may return it at our expense if not perfectly satisfied. You can't possibly lose a cent. We want to prove to you that it makes an ordinary oil lamp look like a candle; beats electric, gasoline or acetylene. Lights and is put out like old oil lamp. Tests by Government and 34 leading Universities show that it

Burns 70 Hours on One Gallon common coal oil (kerosene), no odor, smoke or noise, simple, clean, won't explode. Three million people already enjoying this powerful, white, steady light, nearest to sunlight. Won Gold Medal at Panama Exposition. Greatest invention of the age. Guaranteed. \$1000 Reward will be given to the person who shows us an oil lamp equal to the new Aladdin in every way (details of offer given in our circular). We want one user in each locality to whom we can refer customers. To that person we have a special introductory offer to make. Yours FREE under which one lamp is given free. Write quick for our 10-Day Absolutely Free Trial Proposition and learn how to get one free. MANTLE LAMP COMPANY, 508 Aladdin Building, MONTREAL Largest Coal Oil (Kerosene) Mantle Lamp House in the World.

Men With Rigs Make \$100 to \$300 Per Mo. Our trial delivery plan makes it easy. No previous experience necessary. Practically every farm home and small town home will buy after trying. One farmer who had never sold anything in his life before writes: "I sold 34 the first seven days." Christensen says: "I have never seen an article that sells so easily." Norrine says: "28 per cent of homes visited bought." Phillips says: "Every customer becomes a friend and booster." Kemorning says: "No money talk necessary. Get it fast!" Thousands who are coming money endorse the Aladdin just as strongly. NO MONEY REQUIRED. We furnish stock to reliable men to get started. Ask for our distributor's plan, and learn how to secure an appointment and make big money in unoccupied territory. State occupation, age, whether you have rig or auto; whether can work spare time or steady; when can start; townships most convenient for you to work.

Tom's Folk.

(BY "JUNIA.")

Marian went to her new home with "ideas." She had always had a number of ideas and theories, many of them floating about in her mind like a partially adjusted landscape on a camera plate; but when Tom Sinclair asked her to leave the city "for good" and go out to be the light and soul of the fine new house he was building at Inglevale, every notion in her head came to a focus.

To go back—all her life she had rebelled in a more or less decided way against restraint and conventionality. To be obliged to put on a collar and walk primly down street when one wanted to turn in the neck of one's dress and run, for sheer joy of living, had always seemed to her a bordering on slavery,—and there were many other things. Of these were keeping one's voice decorously modulated when one wanted to sing aloud, free as the birds, in the open air;—and sitting up on the front porch in dainty frills and ruffles when one wanted to lie on one's back on the cool grass under a tree, and gaze up and up through the rustling leaves to the blue sky.

The softly moving leaves always seemed to whisper to Marian at such times, and the clear-blue sky above to look right down through the greenery with an assurance that, this world is, after all, just the very best place for mortals to be in. . . . But there was no tree in the Bertram back-yard, nothing but a clothes-line and a most uninteresting view of the Smith's and Robson's kitchen windows and coal sheds. True, Marian had planted morning-glory vines at the clothes-post and wild cucumbers by the fence; but the maid was always grumbling that the morning glory got in the way of the clothes and kept the reel from working, and the cucumber-vine by no means shut out the sight of Smith's back-stair window with a broken shutter, or Robson's with a patched blind. So there was nothing for it but to sit on the front porch in filmy frills.

Marian was, nevertheless, by no means a "new woman." On the contrary she was, except when with her immediate friends, a rather shy specimen of femininity, giving way to her "wild Indian" impulses and unconventional doings only when no one was about to see; yet to quote one example, she believed as strongly as any dress-reform stump speaker in skirts, in the wisdom of loose and comfortable clothing, and she had, upon various occasions, expressed her opinions in regard to this all-important matter at the Alpha-Beta Club, whereat the young ladies of her set were wont to congregate once a fortnight for the righting of wrongs in general. At the same time, for all this happened in the not long past era of long skirts, she sailed to and from the upholding thereof in a skirt that "touched" whenever she let go of it, a hat that protected from the sun not at all, and a pair of shoes with heels which she detested,—all of which goes to show that Marian was really shy and timid, though not at all deficient in solid good sense.

As regards her other less fully defined notions,—these referred almost exclusively to house-keeping, and, as we have said, within twenty-four hours of the time Tom Brownlee had asked her to be his wife they came suddenly to a focus.

"I'm not going to have any curtains on my windows out at Inglevale, mother," she remarked the next evening, as she and her mother sat out on the porch in the mild spring air watching the people go by and talking over this new strange thing that had come into their lives.

"Not have any curtains" exclaimed Mrs. Bertram pausing with uplifted needle.

Marian complacently smoothed down the ruffles which she had spent two solid hours of the morning in ironing.

"No, mother," she said, "you know things like that always gather up dust and microbes and make so much work. You know I don't believe in doing quite unnecessary things,—do you?" It seems to me that life just



IT is hard to break the chains of habit. It took one man six months to stop saying "Gee Whiz."

It is astonishing how habit will keep a person asking for "the same as usual" tea long after she has intended to try Red Rose Tea. Why let habit prevent you enjoying this richly flavored Indian-Ceylon blend? Order a sealed package to-day.



711



JAEGER
For The Boys and Girls

To be clothed correctly is of vital importance to your children. Pure Wool wear prevents chills and lays the foundations of Health. Clothe your boys and girls with Jaeger throughout.

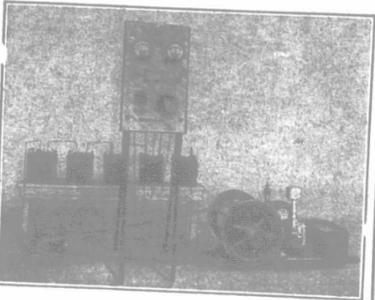
Combinations, vests, pants and drawers, knitted suits, sweaters, caps, gloves, stockings, etc., etc.

A fully illustrated catalogue and Dr. Jaeger's Health Culture will be sent free on application to:

Dr. JAEGER SANITARY WOOLLEN SYSTEM

TORONTO MONTREAL WINNIPEG
Incorporated in England in 1883 with British capital for the British Empire.

ELECTRIC LIGHT PLANTS FOR FARM BUILDINGS



\$300 Installed
Guaranteed outfit. High quality and low upkeep. New, low prices now in effect.
T. J. Lewis, 215 Jarvis St., Toronto

We are prepared to make good our claims that
The SHERLOCK-MANNING
20th Century Piano IS
"Canada's Biggest Piano Value"

and that we can save you fully \$100 on the price you would pay for equal value in any other make.
Write Dept. 18 for Catalogue T. 66

The Sherlock-Manning Piano Co.
London, (No street address necessary) Canada

Spruce Lodge Stock Farm. Short-horns and Leicesters. Special offering of a choice lot of ram and ewe lambs, good type and well woolled; also my imported stock ram.
W. A. DOUGLAS, CALEDONIA, ONT.

ought to be a pleasant rippling song, as far as we can have it so,—not all filled up with doing things that might just as well be left undone. . . . And I think every woman (at twenty-one and just engaged since five o'clock of the evening before Marian was already speaking of herself as "a woman"). . . . I think every woman should have time to improve her mind and be a companion to her husband. Don't you?"

Mrs. Bertram slowly resumed her fancy-work. "Ye-es," she hesitated, "but I think folk will think it queer not to have curtains."

"Oh for that part," Marian replied briskly, "You can do just as you like in the country, don't you know? That's the beauty of it! Of course I mean to have my house pretty, and sweet, and deainty, but as for curtains and upholstery and carpets—not for me!" and the girl swayed to and fro in her rocker with a consciousness that henceforth life was to be one grand sweet song, attuned to common sense and what one liked best.

"No carpets either?" Mrs. Bertram's needle went up again.

"Oh no, of course,—not too large. One can get them out of doors for cleaning so much more easily."

"Of course," Mrs. Bertram assented, "But I don't know how they'll take in the country."

Marian leaned over and pinched her mother's cheek playfully. "Mother dear," she said, "you are utterly, irrevocably wedded, or welded, or whatever it is, to the city. You can't see that in the country you can do just as you like,—you don't have to do as other folks do. . . . Of course all the neighbors may have carpets, good old fashioned ones, with tacks two inches apart all around the walls, and a quarter of an inch of filtered dust underneath—the regulation way of it,—but I with a big emphasis on the "I"—I shall have rugs."

Mrs. Bertram smiled indulgently, and then Marian rambled off into a visionary description of how happy her new home was going to be; and how beautiful the ravines of Inglevale were, and of how she and Tom would stroll through them on Sundays and sit listening to the water gurgling over the stones and looking at the reflection of the cardinal flowers in the water; and of how she would go out in the field with her sewing of week-days and sit under a tree by the fence while Tom ran his mower or binder, ready to talk to him and cheer him up at the end of the furrows (yes, she actually said "furrows"), or to give him a drink of lemonade or cordial.

Mrs. Bertram listened to the glowing dream with a quiet half-perplexed smile. "Well, I don't know much about the country," she rejoined, when the girl paused for breath, "but I'm afraid you'll make a queer farmer's wife, Marian, and I'm thinking Tom will be losing sometime."

"Oh for that matter, mother," Marian replied, "Tom and I will have some common-sense, I hope,"—and then she stopped suddenly, for Tom was driving up in all the glory of a Ford Motor Car and Panama hat.

The "ceremony" could not long be postponed, for summer was coming on a-pace and there was much need for a young wife on the pretty farm at Inglevale; so it took place when the apple blossoms were all a-flush and the girl wore a little cluster of them in her bridal veil and carried a big bouquet of them knotted with white satin ribbon that streamed to the floor. The wedding breakfast table was also decorated with them, and great festoons were draped above, and about the walls until the girls of the Alpha-Beta who swarmed about Marian like as many white butterflies, caught their breath and clamedations.

"Think what they must be at Inglevale!" Marian said. "These all came from there, and Tom says you would never miss them."

And then the girls all exclaimed again, and Clare Gilbert bravely declared that she should love to live on a farm.

But even Marian had not dreamed of the beauty of Inglevale, with its broad expanses of waving oat and hay fields in the foreground, its glory of pink apple blossoms beyond, and farther still the billows of green wood-

land stretching on over and beyond the ravines. The new house, too,—a thrill of pride ran through the girl as she looked at it. How fine and imposing it was, and how many possibilities there were in those broad verandas, once the clematis and trumpet-vine had had time to do their work!

"Welcome home dear," Tom said as he conducted her through the broad-hall doorway, "doubly your home, Marian, for you planned it all!"

"Now Tom, you know I gave you the chance to help with everything," she retorted.

"Yes, yes," laughed Tom, "but what did I know about fixing things up! I only hope it's been done as you said!"

And then they went gleefully from room to room like happy children, exclaiming over things a hundred times and making plans for future days. Yes, it had all been arranged as Marian had wished, rugs on the smoothly finished floors, little lambrequins of white or oriental colors at the windows, blinds up to the top everywhere letting in a flood of sunshine not yet hot enough to be denied entrance. To be sure the rooms looked a little bare as yet, but, as Marian remarked, "How much nicer not to have them all furnished up at once! There would be the fun of adding things for many a year."

Tom and Marian, it will be observed, had made no calculations for flies in their honey-pot, a rather astounding omission since it is well known that flies do get into marital honey-pots, although, of course, the owners of each individual pot are not over-anxious to advertise the fact. The first one came to Inglevale with the arrival of Tom's mother, on the very day succeeding the "ceremony". Now be it understood that this record by no means purports to contain a homily against mothers-in-law. They, poor souls, usually get more than their meed of criticism; although it may be open to debate as to whether they do not deal to sons-in-law and daughters-in-law an equal share of the commodity, and so preserve the equilibrium of things. There is usually a period of adjustment after every break in the ordinary routine of events, and it is not to be supposed that in so great an upheaval as marriage the settling of mothers-in-law, and sons-in-law, and daughters-in-law can take place without a crevasse or a scraping-off in some direction. However that may be—and to change a rather strenuous metaphor,—the fact remains that Marian Sinclair's mother-in-law was the first fly to enter the honey-pot.

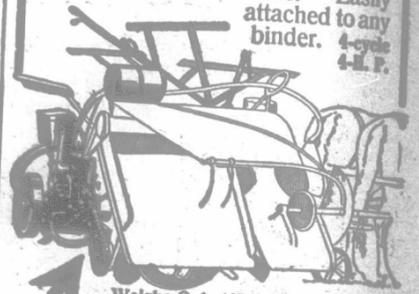
She came in the evening, prim and straight, in a gown of black silk, rather antiquated in cut, to be sure, but real silk, such as is not made now-a-days, with a real lace collar at the throat,—the very model of neatness and old-time conventionality and propriety. Marian would have liked it much better if she had run over with a straw hat and white apron on, as she had seen other country women do, but this, she learned, was not the way of Tom's folk.

Descended upon the paternal side from an ancestry which counted two baronets among its scions, they had a certain dignity to keep up, and to hold continually before the eyes of those who might otherwise forget the halo that beats down from a baronet-suffused ancestry. Inheriting from the mother's side—a good Pennsylvania Dutch stock—the traditions of a century's good housewifery, they could not be other than conventional even in the smaller things of life, and "set" to the sticking point in the time-honored ways of a "family." And the uniting of the two brands had resulted bodily, among the female representatives at least, in just such specimens as Tom's mother—excellent, virtuous, prim, decorous, never-mistaken, somewhat behind the times, narrow-minded, yet kindly creatures in silken skirts and lace collars,—this last, of course, on Sundays, gala days, and state occasions.

On ordinary days at home they wore blue gingham dresses, convenient and tidy, but straight and narrow in both skirt and waist, with a snow-white starched collar—which was never absent though the thermometer stood at ninety-seven in the shade. The personnel of this sister-hood was composed of Mrs.

Save a Team During Harvest — Run Your Binder with 2 horses and a Cushman Engine

Better than 4 horses without the engine. Team simply draws machine. Engine does all operating. Sickie never stops when bull wheel skids. Easily attached to any binder. 4-cycle 4-H. P.



Weights Only 167 pounds

Quickly detached for any other farm power work. Delivers full 4 H. P. Speed changed while running. Has patented clutch pulley with sprocket for chain drive to double sprocket on binder. Schebler Carburetor. Also 2-cylinder 6-H. P. up to 20-H. P. heavy duty, light weight specialty farm engines. — State size wanted.

CUSHMAN MOTOR WORKS OF CANADA, LTD.
283 Princess St., Winnipeg, Canada

Farm Cushman
The Original Binder Engine

The FAMOUS 4 h.-p. CUSHMAN ENGINE has just been mounted in combination with a fully pulling machine at Forest, Ont., and has proved a decided success. This has been the verdict on Cushman Engines wherever used as auxiliary power on binders, potato diggers, etc., etc.

GRAND TRUNK RAILWAY SYSTEM

HOMESEEKERS' EXCURSIONS

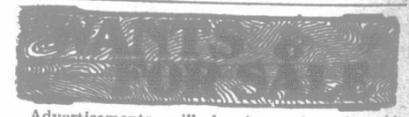
Round trip tickets to points in Manitoba, Saskatchewan and Alberta via North Bay, Cochrane and Transcontinental Route, or via Chicago, St. Paul or Duluth, on sale each Tuesday until Oct. 31st inclusive, at low fares.

Through Tourist Sleeping Cars to WINNIPEG on above dates, leaving Toronto 10.45 p.m., no change of cars, via Transcontinental Route.

RETURN LIMIT, TWO MONTHS.

Exclusive of date of sale. Final return limit on all tickets, December 31st.

Berth reservations and full particulars at all Grand Trunk ticket offices or write C. E. HORNING, District Passenger Agent, Toronto, Ont.



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.

ENTHUSIASTIC FARMER FRUIT GROWER with three thousand dollars cash in addition to farm stock and equipment, can secure one-half interest in excellent 100 acre farm (Ontario County) having 35 acres 5-year-old orchard. All standard varieties. Apply Box A, Farmer's Advocate, London, Ont.

FARMER LIVING NEAR PAKENHAM, Ont., with good crop of feed would rent farm and sell feed for the winter to man who has stock to keep over. Apply A.B., Farmer's Advocate, London, Ont.

"FARMS FOR RENT" SIXTY ACRES fruit and garden land — Raspberries, Cherries, Apples—close to Toronto on good roads and Radial. Low rent to right man. W. G. L. Spaulding, West Hill, Ont.

WANTED—TWO GIRLS, HOUSEMAID AND cook, in town, good home, every convenience, railway fare paid. Apply with particulars or references. Mrs. Lester Weaver, Hespeler, Ont.

WE REQUIRE PARTIES TO KNIT MEN'S wool socks for us at home, either with machine or by hand. Send stamp for information. The Canadian Wholesale Dis. Co., Dept. S., Orillia, Ont.

PATENTS AND LEGAL FETHERSTONHAUGH & CO., PATENTS

Solicitors—The Old Established Firm. Head Office Royal Bank Building, Toronto, and 5 Elgin St., Ottawa, and other principal cities.

Sinclair, Misses Mattie and Cora Sinclair, both older than Tom, and the aunts, the Misses Kenwig, (pronounced Kenwig, be it noted) who lived in true Pennsylvania Dutch style in an immaculate cottage next to the Sinclair's and who; to their Pennsylvania Dutch house-wifery had added (absorbing it at a remarkably rapid rate—for Mrs. Sinclair had always been the idol of the Kenwigs) all the dignity and pride of place of the Sinclaires.

When Mrs. Sinclair came stepping daintily in at Inglevale upon the evening after Marian's arrival, she proceeded at once quite naturally, upon the drawing-room rug. Now this rug—all moss-green and old-rose,—looked certainly inoffensive enough, and Marian was very proud of it. But to-day, like naughty children, who invariably show themselves off when expected to be on their best behavior, it seemed to be possessed of a spirit of impishness. Lying crisply upon the new, smoothly finished floor, unaccustomed, too, to the mincing step of Tom's folk, it gave way before the prim, highly-instepped gaiter. Mrs. Sinclair slid a good yard or more and righted herself with a jerk that set her bonnet awry. She was not hurt, but injury to the dignity of a Sinclair was something awful. Her dutiful smile of greeting changed to a frown, and she gave Marian her first lesson.

"My dear," she said, almost frigidly, "why didn't you have a carpet?"

Now, many a one could have said "why didn't you have a carpet?" and Marian would not have minded at all. But Tom's mother had a tone which carried a whole lecture in a single word, and a look which carried another one. When she said "didn't" Marian felt conscious of a whole world of sins of omission laid to her charge; and when she looked slowly from window to window, daintily applying her silver flagree smelling-salts bottle to her nostrils, and riddling the poor little lambrequins at every glance; the rooms, of which the girl had been so proud, looked suddenly bald and bare. Mrs. Sinclair would not have been conscious of lambrequins in anyone else's house, but in a daughter-in-law's there are privileges.

"My dear," she said finally, "I had curtains put up in my house before I entered it," and ostensibly there was nothing more to be said upon the subject.

For the first time since her childhood Marian felt riotously, fightingly rebellious. "What does she call me 'dear' for?" she said to herself. "Why doesn't she be honest? She doesn't like me, and she isn't suited with me, and oh, I'm sure I don't like—" and Marian stopped in sudden horror. Could it be possible that on the very second day of her honey-moon she was rising in arms against the very foremost of Tom's folk, and actually putting it into words, though mentally, that she didn't like her? . . . No, she would be true to Tom and his folk. She would try to like them, and try to do as they wished her to,—indeed she would. Upon the spur of her great pity for Tom, whose little wife had not been willing to make the first bit of allowance for his folk, she even considered the practicability of exchanging her beautiful new rugs for carpets and investing in curtains. By the time, however, that she had had a good cry in secret, and had slept on the question, she had decided that the rugs and lambrequins must stay. Marian had not focused her ideas for nothing.

But, although the curtains and lambrequins stayed, there were other things to which the girl's natural timidity yielded. For instance, whenever Tom's mother, or sisters or aunts appeared at the gate, which was likely to be anytime from daybreak until dark—such are the privileges of relatives,—she found herself hurriedly lowering the window-shades, so that when the visitors arrived they might find themselves confronted by a dim religious atmosphere suitable to dignity and the memory of two baronets. In fact those window-shades got quite on her nerves. Before she had been two weeks at Inglevale she found her eyes turning, in spite of herself, a dozen times a day toward the "concession" to see if the mother or sister or the aunts were in sight, and once when Aunt Hester and Aunt Ellen came in unawares and caught the dining-room shade up to the limit, with a golden shaft of sunlight



AFTER school the hungry boy
Calls for bread and butter,
Blythe remarks of ecstasy
He is sure to utter,
If the bread he joys to see
Was produced with Purity.

PURITY FLOUR

MORE BREAD AND BETTER BREAD



Made in Canada

Penman's Hosiery

THE STANDARD OF EXCELLENCE

—for children,
has the comfortable ruggedness necessary for sturdy little legs—legs inclined to destroy everything in sight.

You'll find in Penman's most astonishing wearing qualities—warm? Of course!

Penman's Limited
Paris

During
in Your
rises and a
ngine

without the
draws ma-
l operating
n bullwheel
s. Easily
ched to any
der. 4-cyle
4-H.P.

other farm
H.P. Speed
as patented
r chain drive
r. Schebler
-H.P. up to
ght specialty
ed.

MAN
Engine

ENGINE has
with a flux-
d has proved a
he verdict on
as auxilliary
tc., etc.

ALWAY
SYSTEM

URSIONS

leeping
n above
o 10.45
cars,
Route.

MONTHS.
al return
ber 31st.

at all Grand
HORNING,
t.

nder this
Help and

h insertion.
figures for
e counted.
order. No
cents.

GROWER
addition to
re one-half
n (Ontario
hard. All
Farmer's

ENHAM,
rent farm
has stock
Advocate,

ACRES
aspberries,
on good
ght man.

ID AND
venience,
culars or
eler, Ont.

MEN'S
machine
n. The
Orillia,

TENTS
Head
and 5
tics.

WRIGLEY'S

LARGEST SELLING GUM IN THE WORLD



THE place of all places for a keen enjoyment of **WRIGLEY'S** is in the driver's seat of a speeding machine.

This delicious, lasting, minty morsel allays thirst, steadies nerves, helps appetite and digestion.



Sealed tight Kept right

Write Wm. Wrigley Jr. Co., Ltd., Wrigley Building, Toronto for "MOTHER GOOSE" book in colors.

Are your hens winter layers?

The time to prepare for winter eggs is during October, November and December. Have your hens get over the moulting season early and enter the winter months healthy and vigorous. This you can do by feeding Royal Purple Poultry Specific, put up in four sizes, viz.: 25c, 50c, \$1.50 and \$5.00.

Use Royal Purple Roup Cure in the drinking water to prevent and cure diseases—25c tins only.

Royal Purple Lice Killer—the hen's best friend and the worst enemy of lice. It smothers them and will permit the hen to sit comfortably on the nest to lay her eggs. It is made from the flowers of an Oriental plant which we grind to the very finest powder. Guaranteed. 25c. and 50c. a tin.

Thoroughly disinfect your hen houses with Royal Purple Disinfectant—put up in three sizes, 25c, 50c and \$1.00. For sale by our dealer in your town.

Free—We will send absolutely free one of our 80-page illustrated booklets on the common diseases of stock and poultry. It tells how to prevent and cure diseases; describes fully our Royal Purple Calf Meal on which you can raise calves without using milk if necessary. This book is given free, no postage required. Write for your copy to-day. Dept. B

The W. A. Jenkins Manfg. Co., Ltd., London - Ont.

When writing please mention this paper

streaming through and a blue-bottle buzzing on the pane, the girl almost trembled.

"Sunshine fades things dreadfully," remarked Aunt Hester laconically, and Aunt Ellen solemnly added, "And lets in flies."

Marian promptly assailed the fly, and by the time its mangled body lay on her hand she was ready to go off into hysterics, of restrained temper it must be confessed. It was not what Tom's folk said, but the way in which they said it, that was exasperating.

That was just the beginning. "The connection" evidently soon came to the conclusion that Tom's wife was a most wonderfully ignorant specimen as regards the rule and order of things, and straightway, with the compassion which people feel towards relatives, they hastened upon the task of instructing her. They inspected her little dairy room critically and methodically twice a week; they made pretexts to go down cellar, and although nothing was found to complain of, Marian resented the intrusion; they looked interestedly at a table cloth she had hemmed, and offered to teach her hem-stitching; they sent her cooking recipes ad infinitum, and insisted on staying to "help through" with the first trying of each.

Alas, poor Marian! Awkward with confusion she found herself dropping pans and burning her fingers, and throwing dry corn starch into the boiling blanc-mange milk, while her dreams of the simple life and a cream and eggs and raw fruit diet went up into thin air with the steam of "Welsh rabbit" and English plum pudding. Of a Sunday, it is true, she was able to escape with Tom to the ravines; but when, one day, she attempted to settle down with her fancywork by the fence and watch him at his work, Aunt Serina—there was no end to Tom's aunts—came and found the kitchen door blown open and the kitten in. So she gave it up and stayed in the house and scoured well-nigh spotless floors, and burnished scarcely dulled stoves, and made Prince of Wales cake and Welsh rarebit.

Marian now thought that the whole of her annoyances had surely been accomplished. But scarcely were the housekeeping arrangements well in order, when a new series appeared,—this time in the shape of baskets, and crates and droves of feathered things, chickens and ducks, and goslings and turkeys, in all stages from the fluff to the half feather. Tom's folk, it will be seen, believed in thriftiness. Thriftiness, in fact, was a tenet of the family—of the Kenwig branch, of course, not the one that bore two baronets on its outermost twigs, and it was among the ethics of thriftiness that every young wife owed it to her husband to help him along. That Tom was a trifle more than well-to-do made little difference. So there was nothing for it but to accept the gifts graciously, and make the best of an unaccustomed and uninvited business.

The sequel came, however, when the secret leaked out that Tom had to undertake all the care of the goose detachment because Marian was "afraid of the gander," while she, unthrifty housewife, managed to forget the old sitting Dorking in the box, and left her there until she was nearly starved.

The tears rushed to Marian's eyes when she beheld the poor wreck. "Oh I am so sorry!" she cried, but Tom's mother merely said with more emphasis than ever before—

"My dear, young women should keep their wits about them."

After that Marian trailed dutifully after turkeys in the wet grass, and down the creekside after the young ducks, as had been the way of the Pennsylvania Dutch ancestry,—and scrubbed and baked, and boiled with such assiduity that the most critical could not have found room for a word or a thought as to her management. But she was not a strong girl, and the ceaseless work began to wear on her. Tom was kindness itself, but he did not seem to "see," and so, sometimes, the hazy thought began to float around if marriage were worth while, or if it were not a great mistake. So tired! So tired! came to be the main story of her life, and yet she did not complain. Neither did she ever think of getting a maid, for that had never been the

way of the maternal Sinclair ancestry. Only she did not feel spirited enough to talk to Tom as in the old days, and sometimes she felt annoyed at him. Then, one day, she actually "snapped" at him.

The way of it was this. She had been ironing all the afternoon, and after that, in fear of Aunt Hester's almost daily visit, there was the extra polishing up to do and the tea to get. She was very tired, but the house was in perfect order. Then just when she had settled down for a little rest, Tom, in carrying a can of machinery oil, managed to spill a great blot of it on the kitchen floor.

"Tom! How careless!" snapped Marian.

Tom looked at her for an instant solemnly. "I'm sorry, Mike," he said, using his pet name for her, "I'll scrub it up."

Almost hard at heart she watched him while he blotted and rubbed at the spot. At last it was finished, and he put the scrubbing cloths away. In a moment he came back and looked at her for a moment again.

"I'm sorry Mike," he repeated, laying his hand on the fluffy, curly hair which he would never let her brush down into Kenwig trimness.

That one touch undid her. "Oh Tom, Tom!" she exclaimed and burying her curls on his shoulder she sobbed her heart out.

"Why, what's the matter, girlie?" he said soothing her, and she could only sob, "Oh I don't know! I'm—I'm—horrid!"—to all of which Tom protested, as a young husband must who has not got wholly over the romance of the honeymoon.

Presently Tom had to go, and Marian, much relieved after her crying, watched him as he strode off to the barn, with the sunset light following on his straw hat and broad shoulders.

"Poor Tom! How could I have said it!" she mused, then—"Oh dear!—Here's Aunt Hester!" as a step sounded on the veranda.

But it was not Aunt Hester, prim in ancient bombazine and a bonnet with an ostrich tip in it. It was good Mrs. Flarity from across the way, panting and red, with her big straw hat in her hand, her print apron fluttering in the breeze, and smiling good-nature beaming out all over her fat commonplace face.

"Mrs. Flarity!" exclaimed Marian, almost flying to meet her, while the thought flashed through her naughty mind, "Oh how I wish Tom's folk were like Mrs. Flarity!"

"Never mind a chair. I'll just pop down here on the step," Mrs. Flarity said, fanning herself vigorously, and then Marian became conscious of her red eyes.

"I've been—crying," she faltered, half ashamed. "I don't know what made me so—so cross—but I got so impatient and then I cried."

Mrs. Flarity sat for a moment thinking. "If you don't know, I do," she said briskly. "I don't want to be meddlin', but I'll just say this,—you've had too much to do, that's what you've had. Mebbe it's none of my business, but them Sinclaires and Kinnific's (she meant Kenwigs of course) is just killin' you by inches, and if I was you I'd just cut loose and take things easier. If things has to be kept up like they are over at Sinclair's and Kinnific's, where there's six hands for your two, Tom ought to get a girl. Tisn't as if he couldn't afford to, dear knows, nor as if his wife had to work like a poor man's."

A great throb came to Marian's heart. Yes, this great, kind hearted, perhaps, vulgar Mrs. Flarity understood. And then for the first time the poor girl's lips were opened, and cuddling down by Mrs. Flarity, with her head buried in the blue spotted apron, she sobbed out a bit of the story, of her dreams and ideals and of how there had been so much to do that she could not realize any of them. "Of course Tom's folk did not understand," she said.

But Mrs. Flarity was not disposed to be over-lenient. "If they didn't they ought to have," she said, "There's none so blind nor deaf as them that won't see nor hear. Them folks works by rule and measure, and if you know what's what you'll just go your own way, and let them like it or lump it as they choose. An angel out of heaven couldn't stand it, to scrape away

clair ancestry. ited enough to d days, and moyed at him. lly "snapped"

his. She had ernoons, and Aunt Hester's was the extra e tea to get. ut the house en just when n for a little of machinery eat blot of it

an instant /ike," he for her, I'll

he watched abbed at the nished, and away. In a and looked

re repeated, uffy, curly ver let her trimness. l her. "Oh and bury- she sobbed

girlie?" he could only I'm—I'm Tom pro- must who ne romance

and Marian, atch, watched barn, with n his straw

d I have "Oh dear! s a step

ster, prim a bonnet was good the way, big straw on flutter- ood-nature common-

Marian, hile the naughty m's folk

just pop s. Flarity usly, and s of her

faltered, ow what got so

thinking. she said meddlin', had too ve had. ess, but s (she is just was you s easier.

they are, where o, Tom s if he or as if man's."

arian's hearted, erstood. he poor uddling or head on, she of her ere had ld not Tom's said.

sposed didn't There's n that works you your lump out of away

at workin' all the time with nary a rest or change, and wear starched collars all the time, and never make a mistake in grammar nor etikit like them Sinclaires and Kinnifics."

The metaphor was too much for Marian's gravity, and she laughed until the tears rolled down her cheeks, laughed as she had not for months, but the outburst did her good.

"But if I don't do as they wish I shall displease them all," she said, presently.

"Let it. Tom's more to you than them, and if you're going to wind up by bein' cranky with Tom—home-makin' first, etikit and house-keepin' second, say I. I believe in folks bein' clean, and I'll defy anyone to say my house isn't clean; but I don't believe in makin' oneself a slave to work altogether, nor makin' one's life out with rule and tape-measure like them Kinnifics do. Lord save us! Hester Kinnifics wouldn't go over to Brown's rasin'—the biggest time o' the year—just because 'twas wash-day, and the clothes would have eaten them out of house and home if they'd stood over till Tuesday! Don't you go turnin' into a machine like that, Marian."

That night Marian faced the question fairly. Yes, she was just growing into a machine, as Mrs. Flarity had said,—no time to read, or to think, or to rest,—and she was so, so tired! True, perhaps, she had been worried more than necessary by Tom's folk; perhaps she had not made enough allowance for them; perhaps her eyes had been open to all their faults, and shut, too much, to their good qualities. Come to think of it they had done many kind things for her. After all it was not their fault if they were built differently.

But, with her strength, she couldn't keep up all the ends as the Sinclaires and "Kinnifics" (with a smile) did. She must bring in a new state of affairs. But she would do it gently—oh so gently—and she would try to keep her temper, that wretched little temper that made her feel, sometimes, so bitter and rebellious. Yes, she would begin the very next day. She had intended to make a big plum-pudding and a lot of pies, but she would leave that out. She would just get a dear little lunch ready, and go off to the ravines early in the afternoon, and take a book, and have Tom go there for tea. The cardinal flowers must be out along the brook now—the cardinal flowers—the cardinal flowers—oh she was so, so tired—so tired—

But Marian did not go to the woods next day. Instead she tossed and turned in a burning fever, and raved about the work, and how Tom's folk would be vexed with her if she didn't keep it up. "It's killing me, mother!" she would say, and then she would babble of the brook in the ravine, and of the cardinal flowers, always of the cardinal flowers, and she would call Tom to come and see the pretty luncheon she had. After that the refrain would come again, "So tired! So tired!"

And all the while Tom's mother, and sisters and aunts stepped about on velvet feet, waiting on her, and sobbing their hearts out, while Tom ran out from time to time to hate himself where no one would see. "We've been blind, sister," sobbed Miss Cora, "oh, poor child!"

And the aunts nodded. "Yes. We've all been blind! Think of those two bits of hands trying to keep up with what it took all of us to do!" and then again the tears flowed.

When Marian came to herself it was in a darkened room, but across in the hall she could see a bar of golden sunlight.

"Have I been ill?" she said, and a cool touch came on her forehead, while a gentle voice almost breaking in sobs said, "Yes dear, you must hurry and get well, and go back with Tom for that little picnic—in the—the ravines."

"Miss Mattie!" Marian exclaimed, in a voice whose surprise broke Miss Mattie's heart.

"Yes, it's I," she said, "and no wonder you ask that, we've"—hurrying in a sudden rush to get through with it "We've all been too hard on you, but we're not going to be any more,—and we've taken the chickens and little ducks over to our house, and

you're never to bother with them more, at least until you get stronger than you were, or have more help, and want to yourself,—and," but Miss Mattie could say no more.

Marian closed her eyes. "Where's Tom," she said. But Tom, hearing her voice, her old fatural voice, was coming up the stairs (three steps at a time.)

Marian was too weak yet to say much, but closed her eyes very happily, while Tom sat drinking her face almost. Presently she looked up and whispered.

"Tom are the cardinal flowers all gone yet?"

"No dear, no," Tom said, in a breaking voice. "There are lots of them yet, and we'll have our little picnic just as soon as you are able." He knew she was thinking of the little picnic in the ravine of which she had raved all through her illness.

At last a day came when Marian was able to sit up and make ready a dainty luncheon with her own thin white hands, sandwich, and salad, and raw fruit and cheese-sticks, each wrapped in its own bit of white waxed paper, and with a few glowing nasturtiums on top. It was very pretty, and when at the last minute Miss Cora came running over with some cold chicken and a glass of quivering orange jelly it was perfect. At first Marian had thought of having the whole connection, sisters, aunts and all, to her little picnic,—they had been so kind to her through those weary days of illness, and she, perhaps, had been too hasty. But on second thought it seemed better not. Again, assuredly, but not to-day. This day should be sacred to Tom and to her,—this the day of her emancipation, when she should bid adieu to the old worry and, she trusted, to the old bitter thoughts, and welcome in the ideal life of which she had dreamed. There would be worries of course, and there would be many modifications, but things would be different,—one can do so much towards making things different if one only sets about it in the right way.

Tom would not let her walk, but came in from his harvesting to put Dobbin in the buggy, and drive her back to the ravine. As they entered it he said, "See Mike, the cardinal flowers are still out," and she said, "Yes, the cardinal flowers are out."

He had to leave her for a while, but she took out her book and read a bit, and then she lay down as in the old days under the trees and looked up and up, and listened to the leaves.

When at last Tom came straying into the ravine at tea-time, it was a very happy little wife who met him and conducted him to the spot where "covers for two" were laid in the very loveliest spot of the ravine, with a tiny bouquet of cardinal flowers at each place. Very sweet and child-like she looked too, with her pink dress turned in comfortably beneath the round white throat, and her fluffy hair all tousled by the wind, and the color coming back to her pale cheeks.

Tom could not keep his eyes off her, as she chatted away merrily, laughing as in the old, care-free days; and a hundred times he said to himself, "Oh heavens, what a fool I was not to understand!" But he said nothing about it aloud, for Marian had forbidden him to say more.

He did however, say something that pleased her very much "I say Mike, this seems like old times. It's jolly."

And Marian felt that her little picnic by the rippling brook was by no means a failure.

From that day Marian went on living up to her own ideals, slept out on the upper verandah, took her sewing to the fields, had tea in the woods whenever she took the notion, and did all sorts of unconventional things. Perhaps Tom's folk did not always approve, but there was no open rupture, for the Sinclaires were too proud to quarrel. As for Marian, now that her eyes were opened, she began to see very many nice things in Tom's folk. "I see," she said to herself. "People just have to live their own lives, and keep ready to see all the good in other folks. We can't all think alike or act alike."

—And this, probably, was about all the philosophy of it.

CALDWELL'S

How are Your Cows Milking?

Are they doing as well as you would like them to do at this season of the year, when the price of milk is so high? If not, coax them along with

CALDWELL'S DAIRY MEAL

You will notice a ready response in—fuller milk pail—healthier, "sleeker" looking herd—a larger monthly cheque.

Caldwell's Dairy Meal is not a medicinal tonic but a pure, palatable, nutritious, easily digested and fully balanced meal, prepared for the special purpose of producing more milk. This it does. Order a sack or a ton of Caldwell's from your feed store or direct from us. Booklet and prices on request.

The Caldwell Feed and Cereal Co., Limited
 Dundas, Ontario
 MAKERS ALSO OF
 Molasses Meal, Cream Substitute, Calf Meal, Molasses Horse Feed, Poultry Feeds

STANDARD FEEDS

15

95 AMERICAN

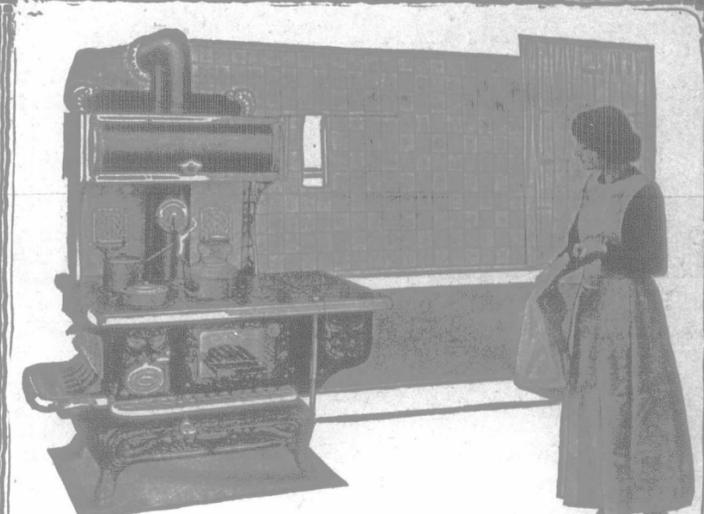
Upward CREAM

SEPARATOR

Sent on trial. Fully guaranteed. Easy running, easily cleaned. Skims warm or cold milk. Bowl a sanitary marvel. Shipments direct from Winnipeg, Toronto, and St. John. Whether large or small dairy, write for handsome catalogue. Address: American Separator Co., Box 5,200, Balnbridge, N. Y.

BECOME A REGISTERED NURSE and receive pay while learning. The Beth Israel Hospital of New York City (founded 1890). Accredited by the New York State Education Dept. Offers a 2½-year course in training for nurses, with allowance and maintenance. Applicants must have had one year high school instruction or its educational equivalent. For particulars, address: BETH ISRAEL HOSPITAL, 46 Jefferson Street, New York

Please mention "The Advocate."



The glass door saves half the time on bake days

Look through the door instead of opening it. The baking is always in sight. Glance at the range as you attend to other work. Now, you can feel that you are less tied down to your baking. The clear, glass oven door makes the Pandora of even greater help than it was before. Somebody has surely told you what a fine range the Pandora is. Among the thousands of friends it has made there must be one who has told you about the sensible ideas for saving time, the fine bakings they get with a small amount of fuel, the way the range withstands the wear and tear that wreck ordinary ranges.

McClary's Pandora

Range

The new booklet, just off the press, "The Magic of the Pandora," tells everything in an interesting way. Why not send for your copy now, while you think of it?

McClary's

London Toronto Montreal
 Winnipeg Vancouver
 St. John, N.B. Hamilton
 Calgary Saskatoon Edmonton

849A

Name Address Kindly send me a copy of your booklet, "The Magic of the Pandora."

THE appetizing fresh-from-the-oven crispness in which McCormick's Jersey Cream Sodas reach you is retained by packing them in wax-lined sealed boxes.

Sold fresh everywhere in different sized packages.



McCormick's Sodas So good that butter seems unnecessary



OSTERMOOR «O» OSTERMOOR

THE FIRST COST OF THE FAMOUS

OSTERMOOR

MATTRESS

is the only cost. Look for the name "OSTERMOOR" woven in the binding as in this border. It's there for your protection.

\$18 for 50 years of restful sleep

Ask your dealer for the "OSTERMOOR" or write us for the name of your nearest agent.

The PARKHILL MANUFACTURING Co. Limited
Successors to The Alaska Feather and Down Co. Limited
Makers of Bedsteads and Bedding
Winnipeg MONTREAL Vancouver
"ALASKA on an article means High Grade Every Particle."

OSTERMOOR «O» OSTERMOOR



Fill Your Silo With a 5 h.-p. Gasoline Engine

This No. 7 Ensilage Cutter and Carrier works satisfactorily on the above power, which is less than half of what the blower type requires. It is much cheaper to buy, and can be used throughout the winter for cutting hay and other feed.

Peter Hamilton
No. 7 Ensilage Cutter and Carrier Silo Filler

will enable you to put your corn crop in the silo at the right stage of its growth—before it gets too ripe and dry, and before it is "whitened" by the frost. You'll not have to "wait your turn" and watch your corn spoil.

This Outfit and Your Gasoline Power

make an ideal combination for handling corn. The No. 7 is built rugged and strong in every detail. The concave knives cut from the outer end of the mouth toward the axle. The carriers are supplied the length you desire, and either mounted on a stand or on our universal jack, which permits the carrier to be quickly swung into any position within the radius of a half circle. This is an ideal outfit for yourself, or co-operate with your neighbor and buy one.

Write for our illustrated booklet describing the No. 7, or see it at your dealer's.

The Peter Hamilton Co., Ltd., PETERBOROUGH, ONTARIO
SOLD BY ALL JOHN DEERE PLOW CO. DEALERS

Questions and Answers.

1st—Questions asked by bona-fide subscribers to "The Farmer's Advocate" are answered in this department free.

2nd—Questions should be clearly stated and plainly written, on one side of the paper only, and must be accompanied by the full name and address of the writer.

3rd—In veterinary questions, the symptoms especially must be fully and clearly stated, otherwise satisfactory replies cannot be given.

4th—When a reply by mail is required to urgent veterinary or legal enquiries, \$1.00 must be enclosed.

Miscellaneous.

Storing Celery—Combating Garden Pests.

1. I have grown some celery this season and I should like to know how to keep it for winter use.

2. What is the remedy for worms that eat into the tomato, celery and cabbage? I have experienced considerable trouble with them this year.

J. G.

Ans.—1. Celery can be stored in an ordinary cellar by trimming them and standing them up close together in moist sand. The place should be dark and well ventilated. When celery is stored in this way it should not be bleached in the field, and it should be dug in the fall before severe frosts set in. The trench method is most commonly used where cellars are not available. A trench 10 to 12 inches wide is dug in some well-drained part of the field, and to a depth sufficient to hold all the plant except the very top leaves. The celery is then dug and stood up in this trench as close together as it can be packed. Two boards are then nailed together to form a V-shaped trough which is inverted over the top of the trench. Straw and earth are piled on this as the weather becomes cold. Some ventilation is necessary where any considerable quantity is stored.

2. The common tomato worm is usually controlled by picking them off. Poisoning with arsenicals is possible early in the season, but usually small growers do not resort to this method. We have assumed that the celery caterpillar is referred to here. It is green or yellowish and ringed with black and spotted with yellow. If the first brood is picked off and destroyed before much damage is done the pest will not become serious. For the cabbage worm, Paris green can be used till the heads are about half formed; one pound to about 150 gallons of water is recommended as a spray. Pyrethrum powder is not poisonous to humans but it will destroy the worm. This substance discolors the heads slightly if used in too large quantities.

Gossip.

Holstein Dispersion Sale.

On Wednesday, October 18, R. O. Morrow, Hilton, Ont., will sell at public auction 33 head of Holstein females, consisting of 1 four-year-old, 3 three-year-olds, 13 two-year-olds, 10 yearlings and 6 under one year. They have all been bred on the farm from high-class sires and dams. The farm is five miles north of Brighton Station on the G. T. R., C. P. R., and C. N. O. where conveyances will meet all morning trains. For full particulars of their breeding secure a catalogue, from Mr. Morrow.

London Sale Announced.

In this issue of "The Farmer's Advocate" Harry Smith announces the date of the next annual sale of Shorthorns, to be held by the Western Ontario Consignment Sale Company, for Wednesday, November 8th. The sale will be held at the Fraser House stables, London, and will include nearly 80 Shorthorns, carefully selected from some of the leading herds throughout Western Ontario. The number of bulls and females will be about equal, and there will also be a choice for those who want straight Scotch breeding or something from some of the heaviest-milking strains of the breed. Requests for all information regarding catalogues, etc., should be made to Harry Smith, Hay, Ont., Secretary of sale, as soon as possible after October 12.

The O. A. C. Annual Sale.

The Agricultural College, Guelph, at the regular annual sale, is offering a particularly fine lot of young breeding stock, comprising Scotch Shorthorns, dairy grades, Yorkshires, Ayrshires, dairy sows, Leicester and Shropshire ram lambs, and Southdown and Oxford ewes.

The Scotch Shorthorns offered represent some of the very best families. An outstanding young bull is Proud Augustine—107866—, a thick, fleshy calf of excellent quality, undoubtedly one of the best bulls ever offered by the College. He is by the Claret bull, Proud Diamond—92562—, and his dam is a granddaughter of the Willis-bred cow, Augustus Duchess, by Bapton Duke (76078). Roan Diamond—107864—, a well-bred Roan Lady calf, is rather young to sell to advantage, but his full brother, at about the same age, topped the prices for bull calves at the College sale last year. Lancaster Diamond—107865—, also looks like making a good bull. Among the females is College Augusta 4th, with her second calf by her side. A heifer from the same cow was sold at the College sale in 1914 for \$200, and in June of this year she sold at public auction for \$1,300. Augusta O. A. C. 3rd, carrying her second calf, is a large, promising heifer. This heifer and College Augusta 4th are both by Burnbrae Sultan—80325—, grand champion bull at Toronto and all the leading western shows this year. In addition to the above, a yearling Lancaster heifer, and two very sweet heifer calves, a Roan Lady and a Lancaster, should prove attractive to purchasers.

In the Holstein offering, comprising twelve females and four bulls, there is included the senior herd bull, Boutsje Lad, a son of Johanna Rue 4th's Lad, and out of Boutsje Q. Pietertje De Kol, with a record of over 20,600 lbs. milk and 960 lbs. butter in one year. This bull is an extra fine specimen of the breed, and it is interesting to note that the College herd of Holstein females, most of which are half sisters and daughters of this bull, produced, during the past year, an average of 15,072 lbs. milk and 689 lbs. butter, with an average test of 3.6 per cent. Among the females offered is Toitilla Rue, a six-year-old daughter of Johanna Rue 4th's Lad, with a record of 4,041 lbs. milk and 641 lbs. butter, and a seven-day record of over 20 lbs. Another is Molly Rue 2nd, six-year-old daughter of the same bull. She produced 586 lbs. butter in the R. O. P., and her full sister, Molly Rue, produced 16,466 lbs. milk and 753 lbs. butter in the R. O. P. this year. Molly Rue O. A. C., a two-year-old daughter of Molly Rue and Boutsje Lad, is also being offered. This heifer, a large, straight individual, is entered in the R. O. P. as a junior two-year-old, and will produce at least 10,000 lbs. milk and 450 lbs. butter. Her sister, Molly Rue Rattler, has just finished a three-year-old R. O. P. record of 16,975 lbs. milk and 800 lbs. butter, also a four-year-old R. O. M. record of 24.50 lbs. butter in 7 days, both of which records were made on twice-a-day milking throughout the year. A fine bull calf from Molly Rue Rattler is also being offered, and a heifer calf from Molly Rue O. A. C. The calves are all sired by Pride of Pontiacs—18351—, a son of King Pontiac Artis Canada, now leading the list of bulls with tested daughters in Canada, and also the leading bull of the breed in regard to the number of record daughters at five years of age, and in addition no other bull of the breed has sired as many two-year-old daughters with records over 20 lbs. in 7 days.

The Ayrshires offered are three bull calves, sired by Hobsland Sunrise (imp.), a son of the noted Hobsland Masterpiece (imp.), grand champion at Toronto for three years. The dam of one of these calves, Toward Point Ann 3rd, has a three-year-old R. O. P. record of 7,552 lbs. milk and 284 lbs. fat. In the R. O. P. this year, at four years old she has, in the first six months,



For deli pres

L S

The prese FIN

2 10

"The

PRESE gumm

ball trad

Atlantic

70v

P

We are of crate kinds. paid, Wri

Henry

Wholesale a

348-350

Men's C

Get your ne England, for ha materials, style Write for free and patterns.

CATESBYS

119 West v

Mentic

Scientifi

Correct Glasses—

Con

THE BROW

223 Dundas

Cider A

we are prepared

cider apples

not suffice

themselv

neighb

W

BELLEVILLE C

H

VIOLI

DREADNAUG

Strength

6-E-4-A,

In

THOS. C

TORO



Pears

For clear, white delicately flavored preserved pears use

Lantic Sugar

The ideal sugar for all preserving. Pure cane. "FINE" granulation.

2 and 5-lb cartons
10 and 20-lb bags

"The All-Purpose Sugar"

PRESERVING LABELS FREE: 54 gummed and printed labels for a red ball trade-mark. Send to

Atlantic Sugar Refineries, Ltd.
Tower Bldg., Montreal 70

Poultry

We are open to receive shipments of crate-fattened poultry of all kinds. Highest market prices paid, according to quality. Write for quotations.

Henry Gatehouse & Son
Wholesale and Retail Fish, Game, Poultry, Eggs and Vegetables
348-350 West Dorchester Street, MONTREAL

Men's Clothing For Sale

Get your new suit from Catesby's, London, England, for half what you pay local tailor. Best materials, style, fit guaranteed or money back. Write for free catalogue, self-measurement form and patterns. Address:

CATESBYS LIMITED, Canadian Office
119 West Wellington Street, Toronto
Mention "Farmer's Advocate"

Scientific Eye-Examining

\$3.00

Correct Glasses—Free of Charge to Every Patient Consulting our Specialist.

THE BROWN OPTICAL COMPANY
223 Dundas Street, London, Ont.

Cider Apples Wanted

We are prepared to pay the highest cash prices for cider apples in car lots. Farmers who have not sufficient to make up a whole car themselves can arrange with their neighbors for joint shipments. Write us if you have any to offer.

BELLEVILLE CIDER & VINEGAR COMPANY
Hamilton Ontario.

VIOLIN STRINGS

DREADNAUGHT—Strength and Durability Warranted
6-E, 4-A, 2-D \$1.00 Postpaid
In Hinged Metal Box

THOS. CLAXTON LIMITED
TORONTO, ONT.

produced 8,400 lbs. milk and 344 lbs. butter-fat, and may reach nearly 12,000 lbs. milk by the end of the year. O. A. C. Minnie, dam of one other bull offered, this year in the R. O. P. in the first seven months produced 9,120 lbs. milk and 350 lbs. fat. She should also reach the 12,000-lb. mark. Barger White Soncie, the dam of the third bull, is one of the best individuals in the herd. In five months in the R. O. P. she has produced 5,298 lbs. milk testing 4.6 per cent., although she almost went dry in June through sickness. She also will make a creditable record. Two high-producing grades will be sold.

Among the swine are offered a number of young sows bred to farrow in November and early December. These are a particularly choice lot of sows, and with the thrifty spring-born sows will enable the discriminating buyer to make an excellent selection.

All the cattle over six months old will be tuberculin tested.

Questions and Answers.
Miscellaneous.

Storing Corn in a Mow.

Kindly let me know through your next issue if corn cut with the cutting-box and put in a mow with straw will keep satisfactorily. I have the cutting-box and engine and thought of trying this method. I purpose spreading a layer of the straw, then about four inches of corn, then more straw and continue this until the corn is all in. The mow is about 24 feet square and I have about seven acres of corn to put in.

H. W. C.

Ans.—We have known of corn being cut and stored in a mow all spoiling. Evidently it contained too much moisture at the time it was put in the mow. Some farmers have stored a small quantity of corn the way you mention and had it keep fairly well until towards spring. Care would have to be taken to have the corn thoroughly dry, as a very small amount of moisture will start heating. Of course in a silo a certain amount of moisture is necessary in order to heat and cure the silage. A correspondent recently gave his method of storing corn which he found gave good results. The corn was let stand in the shock till it was perfectly seasoned and entirely dry, then the cutting-box was set at the corner of the straw stack and for every sheaf of corn run through a small forkful of straw was cut and blown into the mow. A pail of salt was sprinkled over it about every foot deep. This material neither heated nor moulded and the cattle ate it readily, never leaving any of the straw either. With a number of hands the corn crop is stored in a day, and if plenty of straw is mixed in there appears to be practically no danger of heating or spoiling in the mow, but it seems to lose its feed value when spring sets in.

Trade Topic.

Homeseekers' Excursions to Western Canada.

The Grand Trunk Railway System issue round-trip, homeseekers' tickets at very low fares from stations in Canada to points in Manitoba, Saskatchewan and Alberta, each Tuesday until October 31st, inclusive, via North Bay, Cochrane and Transcontinental Route, or via Chicago, St. Paul and Duluth, and are good returning two months from date of issue.

Through tourist sleeping cars are operated each Tuesday for Winnipeg, leaving Toronto 10.45 p.m. via Transcontinental Route without change. Reservations in tourist sleepers may be obtained at nominal charge on application to any Grand Trunk Ticket Office. The Grand Trunk Pacific Railway is the shortest and quickest route between Winnipeg, Saskatoon and Edmonton, with smooth roadbed, electric-lighted sleeping cars, through the newest, most picturesque and most rapidly developing section of Western Canada.

Before deciding on your trip ask Grand Trunk Agents to furnish full particulars, or write C. E. Horning, District Passenger Agent, Toronto, Ont.



Little Miss MAIDEN CANADA

To-night!

Try a cup of this famous cocoa before retiring. Next morning note the vigor it imparts. The reason is simple — the best cocoa beans are highly nutritious and wholesome. Perfection Cocoa is made from positively the finest cocoa beans grown — blended skillfully.

It's a good habit — a cup of cocoa a night — but be sure that it is

COWAN'S COCOA
"Perfection Brand"

"I Didn't Know You Could Play Like That!"

"NO? Well, there is no music written that is too difficult for me to play since we bought our new Dominion Player Piano. And the tone is simply superb! So full, and sweet, and sonorous."

More than 80,000 Dominion Pianos, Player Pianos and Organs now in use.

Write for Free Catalogue. It tells why.

Dominion Piano Co.
Bowmanville - Ontario

Makers of the celebrated "Dominion" Organs of world-wide reputation.

Since 1870

DOMINION PIANOS

Best Prices for Furs

How much we can give for furs, not how little, is always the question with us. We pay bigger prices because this method gives us first chance at best furs, and manufacturers come to us for their supply. Trappers, hunters and farmers all over the country send catches to us because they know no one else could pay more or would pay so much. We will take your furs, too, on the same basis. Write at once and get our price list early. We tell you about every change in the market. You get the prices shown. No deductions for commission or transportation. Liberal grading.

BECKER BROS. & CO., Originators of Classified Price List
Dept. 75, 418 N. Dearborn St., Chicago
Dept. 75, 129 W. 29th St., New York



THE BEST LINIMENT
OR PAIN KILLER FOR THE HUMAN BODY
Gombault's
Caustic Balsam
IT HAS NO EQUAL

For the Human Body—It is penetrating, soothing and healing, and for all Old Sores, Bruises, Wounds, Felons, Insect Bites, Corns and Bunions. CAUSTIC BALSAM has no equal as a Liniment.

We would say to all who buy it that it does not contain a particle of poisonous substance and therefore no harm can result from its external use. Persistent, thorough use will cure many old or chronic ailments and it can be used on any case that requires an outward application with perfect safety.

A Perfectly Safe and Reliable Remedy for
Sore Throat
Chest Cold
Backache
Neuralgia
Sprains
Strains
Lumbago
Diphtheria
Sore Lungs
Rheumatism
and all Stiff Joints

REMOVED THE SORENESS—STRENGTHENS MUSCLES
Cornhill, Tex.—"One bottle Gombault's Caustic Balsam did my rheumatism more good than \$100.00 paid in doctor's bills."
OTTO A. BETER.
Price \$1.50 per bottle. Sold by druggists, or sent by us express prepaid. Write for booklet No. 2.
The LAWRENCE-WILLIAMS COMPANY, Toronto, Can.

Be Safe!

Don't take too many chances with growth, spins, curbs, ringbones, bony growths, swellings and of lameness. Use the old reliable remedy—

KENDALL'S Spavin Cure

In the hands of horsemen, veterinarians and farmers for 33 years it has proved its worth in hundreds of thousands of cases.

St. FERDOL, Dec. 4th, 1915.
Will you please mail to my address a copy of your *Treatise on the Horse*. I have been using your valuable remedies for some time, and found them safe and reliable.

JOSEPH L. BATZINGER.
Dr. B. J. KENDALL COMPANY
Enosburg Falls, Vermont, U.S.A. 118

Dr. Page's English Spavin Cure

Cures the lameness from Bone-Spavins, Side-Bones, Ringbones, Curbs, Splints, etc., and absorbs the bony growths; does not kill the hair, absorbs Capped Hocks, Bog-spavins, thick pastern joints; cures lameness in tendons; most powerful absorbent known; guaranteed, or money refunded. Mailed to any address, price \$1.00, Canadian Agents:—

J. A. JOHNSTON & CO., DRUGGISTS
171 King St. East, Toronto, Ont.

Louden Barn Equipments

SAVE Time—Save Labor—Save Expense

Our new catalogue describes every kind of device for money-making and labor-saving on farms. Write to:

LOUDEN MACHINERY CO.,
Dept. 1, Guelph, Ont.

ALLOWAY LODGE STOCK FARM
Angus, Southdowns, Collies

—PRIZE BULL CALVES AND RAMS—
COLLIE PUPS

Robt. McEwen, R.R. 4, London, Ont.

FOR SALE
Two Percheron Stallions
formerly owned by the late Colin C. Munroe. Apply to Mrs. Colin C. Munroe, Walkers, Ont.

BEAVER HILL ABERDEEN-ANGUS CATTLE AND OXFORD DOWN SHEEP. Bulls from seven to nineteen months old. Females all ages. Shearling ewes, ewe and ram lambs.

Alex. McKinney, R.R. No. 1, Erin, Ont.

Questions and Answers.
Miscellaneous.

Galinsoga.
This is a new kind of weed that has come into the neighborhood. None of the farmers seem to know what it is. They think it came in on a road grader for it came up along the ridge left by the grader and thence around our buildings. Is it a bad weed and how should it be treated?
E. B. M.

Ans.—The botanical name of the weed enclosed is Galinsoga. I do not know its popular name if it has one. It comes from the south, and is a weed in Mexico and the Southern States. The first time I saw it was in a patch in this city near a mill, ten or twelve years ago, and it has been gradually spreading ever since. It may have been carried by a road grader or waggon wheels from this city as the seeds are minute and very numerous. It is an annual and should be treated in the usual way for that class of plant. It is not, however, likely to become very troublesome, judging from what I have observed of it. The plant belongs to the daisy family. It is of weak, spreading growth, has opposite leaves, yellow-green discs like the fleadaisy and few, very short, somewhat three-pointed white rays.

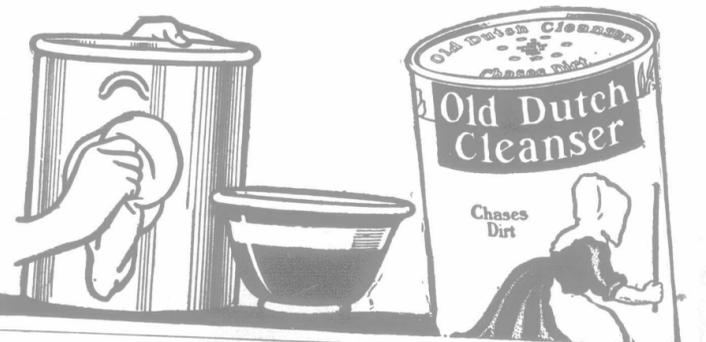
Creosote in a Chimney.
What is an effective way to get rid of creosote in a chimney? Last winter a lot of this annoying material was deposited in our front chimney. It even worked through and ran down into the attic. The chimney is a double flue and quite high above the roof. It was built twenty years ago. We believe it would be dangerous to light a fire this fall on account of the stuff readily catching fire.

J. F. S.
Ans.—It is difficult to state why one chimney should give a lot of trouble with dampness, creosote and oil of smoke when another one apparently identical works satisfactorily. A chimney on an outer wall usually gives more trouble than one on an inner wall; it gets cold and moisture condenses. The way a chimney is built also has something to do with the way it works. If glazed tile are used on the inside there is seldom any bother with dampness. A wide narrow flue is never as satisfactory as a square one; there being so much more outside surface. It is doubtful if you can do anything to prevent this material running down your chimney. We have read that by burning a piece of old zinc in the stove occasionally, the soot is reduced to a powder which will be carried out by the force of the draft. We cannot say whether this will work or not. It might be worth trying.

Periodic Ophthalmia.
About ten years ago we had a valuable young mare which began running water from the eyes; would appear sore for a few days then get all right, sometimes one eye then the other, then both, finally the mare became blind. We have her on the farm yet. The inside of eyeballs has a milky appearance. Now we have another young mare with similar symptoms. Is there any remedy? Is this trouble contagious? What treatment do you advise?

SUBSCRIBER.
Ans.—Your mare is evidently affected with a disease known as Periodic Ophthalmia. It is a constitutional disease and appears periodically without apparent cause and, after a few attacks, usually results in blindness from cataract. The weakness toward this disease is believed to be hereditary, rather than contagious. Treatment consists in administering a laxative, as one and a half pints of raw linseed oil. Keep the mare in a comfortable stall, free from drafts and partially darkened. Apply a lotion made of 10 grains sulphate of zinc, 20 drops fluid extract of belladonna, and 2 ounces of distilled water. Bathe the eyes well three times daily with hot water, and after each bathing put a few drops of the lotion into each eye. Recovery is slow and it may be necessary to continue the treatment for some length of time.

In cleaning earthenware
crock and bowls
Old Dutch
saves a lot of work



HALLAM'S GUARANTEED FUR COATS AND SETS

Write to-day for the 1916-17 edition of HALLAM'S FUR STYLE BOOK. 32 Pages illustrated, which shows beautiful stylish fur sets and fur coats moderately priced, and also gives full particulars of HALLAM'S ZOOLOGICAL CONTEST. 64 Prizes. \$300.00 in CASH given away free.

Address as follows:
John Hallam Limited
306 Hallam Bldg., Toronto

GUNS, traps, animal bait, nets and supplies are described and priced in our 32 page Sportsman's Catalog which we mail free.

RAW FURS—We are the largest Cash Buyer of Raw Furs direct from the Trapper in Canada.—Our Raw Fur Quotations sent Free.

\$11.00 fits out a work team

This complete draught for heavy teaming includes clip or hook hames, hame straps, wide leather plow pads, belly bands and billets, and the Griffith Giant Rope Trace. (\$12.00 west of Fort William.)

\$4.00 Giant Rope Traces alone, complete with malleable ends and electric-weld heel chains at \$4 a set! Man, you couldn't repair an old set for that price. Leather traces would cost four times as much. (\$4.50 west of Fort William.)

Griffith's GIANT Trace

See them at your dealer's or write us for booklet. Address G. L. Griffith & Son, 68 Waterloo St., Stratford, Ont.

Hillsdale Clydesdales Richest Breeding

I am now offering a number of in-foal young mares from Imp. sires and dams bred from Scotch and Canadian winners and champions for generations. They represent the highest standard of the breed's quality and breeding. B. Rothwell, Ottawa, R.R. 1, L.-D. Bell Phone, Farm, 3 miles from city.

Clydesdales We have still left some exceptionally good drafty stallions, ranging in age from one to eight years, prizewinners, including champions; also in-foal mares and fillies. There is a horse boom coming. Buy now

SMITH & RICHARDSON, Columbus, Ont.

ORCHARD GROVE HEREFORDS
Have several young bulls and heifers for sale. Satisfaction guaranteed.

L. O. Clifford
Oshawa, Ontario

ELMPARK ABERDEEN-ANGUS
Bred from prize-winners and sired by my 1916 grand champion. My offering this year in young bulls is the choicest lot I ever bred. In Suffolk sheep for sale are ram and ewe lambs of extra merit.

JAMES BOWMAN, GUELPH, ONT.

WOODLANDS BROWN SWISS AND PONIES
We have no Clydes. left for sale. Our special offering is Brown Swiss bulls, out of high-testing and big-producing dams. Strictly high-class. Also Shetland and Welsh ponies.

R. BALLAGH & SON
GUELPH, ONTARIO

Shorthorns
Pure Scotch and Scotch topped—Booth. Also five (5) young bulls from ten to twenty months old, of the low down, thick kind, good colors—reds and roans. Prices reasonable.

G. E. MORDEN & SON, Oakville, Ont.

IRVINEDALE SCOTCH SHORTHORNS
Our offering this year in Scotch Shorthorns is probably the best we have offered for many years; there are several young bulls of serviceable age, right good ones and breeding the very best; also females of any age.

JOHN WATT & SON,
ELORA, R.M.D.

the
me
Re
tin
wi
inf

Bo

Question
Mi

Concrete

1. What are the depend altogether of the posts. If they should tap square at the top. Some than this. Satisfactory for eight inches square at the A mould of the ordinary lumber bottom being clamps, or na is placed in the ment then laid heavy wire, be use angle iron bar of iron or The mould is and thoroughly face can be sr not require a be inserted in to hold the w taken to space strands of the in the proporti five of sand or moulds it is on board wider at top. The side and nothing i must be reme post the same not start the reinforced. Ho

NOTICE TO STALLION OWNERS

The inspection of stallions under the Stallion Enrolment Act will commence October 18th. The Enrolment Report just issued gives date and time of inspection. Stallion owners will present horses promptly. For information write,

R. W. WADE
Secretary, Ontario Stallion Enrolment Board, Parliament Buildings, Toronto.

AUCTION SALE OF Pure-bred Stock

Under instructions from the Minister of Agriculture, there will be held at the

Ontario Agricultural College
Guelph, Ontario

ON
THURSDAY, OCTOBER 26th, 1916
at one-o'clock p.m.

A Public Sale of Surplus Pure-bred Stock

belonging to the Ontario Government, and comprising:—Shorthorn (beef and dairy), Holstein and Ayrshire cattle; Leicester, Shropshire, Oxford and Southdown Sheep; Yorkshire and Berkshire swine.

For Catalogues apply to

G. E. Day or A. Leitch, Ont. Agricultural College, Guelph, Ont.

Escana Farm Shorthorns

FOR SALE: Two imported bulls, proven valuable sires; 12 bulls, 10 to 20 months old, all by imp. sires and from high-class dams; also for sale 20 heifers and young cows, several with calves at foot, all of very choicest breeding and especially suitable for foundation purposes.

Mail orders a specialty. Satisfaction guaranteed.
MITCHELL BROS., BURLINGTON P.O., ONT.
Jos. McCrudden, Manager. Farm ¼ mile from Burlington Jct.

Robert Miller Still Pays the Freight—And he is offering in Shorthorns some of the best young bulls and heifers that can be produced. Young bulls fit for service, some younger still; heifers ready to breed and younger, and some in calf. They are of the best Scotch families and some of them from great milking families. They are in good condition and made right, just what you want to make a proper foundation for a good herd, and suitable to improve any herd in the land. They will be priced so that you can afford to buy, if you will tell me what you want. Our business has been established 79 years, and still it grows. There is a reason.
ROBERT MILLER, Stouffville, Ont.

Questions and Answers. Miscellaneous.

Concrete Posts—Dutch Sets.

1. What are the proper dimensions of a mould for making concrete fence posts? How are they made, and what is the proportion of cement and gravel to use? What should be used for reinforcement? Would coloring in the concrete be injurious to it?

2. What are the details in the production of Dutch sets? Are they produced from seed? If so, in what manner?

3. What preparation is used on cotton to be used on hot-beds to take the place of glass?

A. J. S.

Ans.—1. The size of mould would depend altogether on the use to be made of the posts. If they are for anchor posts, they should taper from 15 to 18 inches square at the bottom to about 12 inches at the top. Some make them even larger than this. Smaller posts would prove satisfactory for holding the fence. Posts eight inches square at the bottom and five inches at the top are sometimes used. A mould of the desired size is made out of ordinary lumber, the two sides and bottom being held firmly in place by clamps, or nails. A little concrete is placed in the bottom and reinforcement then laid in. For this some use heavy wire, bent in U-shape; others use angle iron and again a straight bar of iron or steel is sometimes used. The mould is then filled with concrete and thoroughly tamped. The one surface can be smoothed off and does not require a board. Staples should be inserted in one face of the post to hold the wire and care should be taken to space them according to the strands of the wire. Concrete is mixed in the proportion of one of cement to five of sand or gravel. In making these moulds it is only necessary to cut the board wider at the bottom than at the top. The sides are held against this and nothing is required on top. It must be remembered that a concrete post the same size as a cedar post, will not stand the same strain, unless well reinforced. However, if properly made

Canada's Grand Champion Shorthorns of 1914-1915

are headed by the great "Gainford Marquis" Imp. Write your wants.
J. A. WATT, ELORA, ONT., G.T.R. & C.P.R.

Scotch Shorthorns, Yorkshires, and Oxford Downs
Our Shorthorns are of the most noted Scotch families and the Scotch (imp.) bulls, Joy of Morning (imp.) = 32070 =, Benachie (imp.) = 69954 =, and Royal Bruce (imp.) = 80283 = have been used in succession. Two choice bulls of breeding age and heifers for sale. Also sheep and swine.
Erin Station, C. P. R. L.-D. Phone Geo. D. Fletcher, Erin, R. R. 1

OAKLAND SHORTHORNS 51 to select from. 20 breeding cows and as many choice heifers, many of them bred, also a lot of choice young bulls, all of the dual-purpose strain. All sired by choice bulls and registered and offered at prices to live and let live.
JOHN ELDER & SONS, HENSALL, ONT.

SPRING VALLEY SHORTHORNS
Herd headed by the two great breeding bulls, Newton Ringleader (imp.) 73783, and Nonpareil Ramsden 83422. Can supply a few of either sex.
KYLE BROS., DRUMBO, ONT. Phone and telegraph via Ayr

Spruce Glen Shorthorns When in want of Shorthorns visit our herd. We have 70 head to select from, Minas, Fames, Miss Ramsden, Florence, etc. Many of them one and two-year-old heifers. Also several young bulls of breeding age—level, thick, mellow fellows and bred just right.
James McPherson & Sons, Dundalk, Ont.

GLENGOW SHORTHORNS AND COTSWOLDS
Pure Scotch in breeding, we have an exceptionally choice lot of bulls for this season's trade, ranging in age from 8 to 15 months, big mellow fellows and bred in the purple. Also ram and ewe lambs of first quality.
Wm. Smith & Son, Columbus, Ont. Myrtle, C.P.R., Brooklin, G.T.R. Oshawa, C.N.R.

ROYAL BREEDING SCOTCH SHORTHORNS HIGH-CLASS TYPE
of high-class, fashionably-bred Scotch Shorthorns in calf to Sittyton Sultan's Dale, a Mina-bred son of Avondale, dam by Whitehall Sultan is of interest, come and examine my offering.
A. J. HOWDEN, COLUMBUS, ONT. Myrtle, C.P.R., Brooklin, G.T.R.

SHORTHORNS AND SHROPSHIRE—T. L. Mercer, Markdale, Ont.
Have sold all the Shropshires I can spare this season. Present offering in Shorthorns—ten really choice young bulls, sired by Broadhooks Golden Fame = 50018 = Imp. and out of such noted families as Campbell-bred Clarets, Nonpareils, Marr Missies, Stamfords, Crimson Flowers, Village Girls and Charming Jems, ranging from 9 to 16 months old. All good reds and roans.

IMPORTED SHORTHORNS 40 more imported Shorthorns have arrived home from quarantine. We now have 18 heifers in calf and 19 cows with calves at foot, also a few good imported bulls. They are all good individuals and represent the choicest breeding.
We can meet visitors at Burlington Jct. at any time if notified.
J. A. & H. M. Pettit, Freeman, Ont.

For Sale 2 imported Clydesdale Stallions, one French coach and two Hackneys ranging in price from \$500 to \$1,200, on easy terms. All are show horses. Warranted sound and sure, good workers and quiet to handle.
HENRY M. DOUGLAS, ELMVALE, ONTARIO

Choice Breeding SCOTCH SHORTHORNS High Quality
We are offering this fall the choicest lot of young herd headers we ever bred, several are of serviceable age, high in quality, rich in breeding. Also a number of heifers.
GEO. GIER & SON, WALDEMAR, R.M.D. Grand Valley Sta.

Maple Grange Shorthorns Pure Scotch and Scotch-topped. Breeding unsurpassed. A nice selection in young bulls, and a limited number of thick, mossy heifers.
R. J. DOYLE, Owen Sound, Ontario

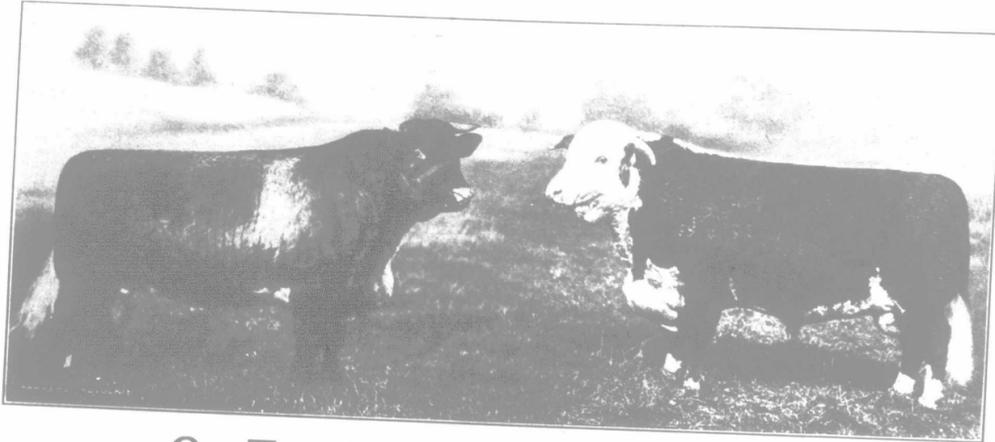
they will last practically a lifetime. Coloring matter can be used without any detrimental effect on the concrete.

2. There is nothing complicated about the growing of Dutch sets. However, it is necessary to have the ground in good tilth before attempting to sow the seed. As soon as the soil is prepared the seed should be sown in rows three to four inches wide, with about ten inches of space between the rows for cultivation. The seed is sown very thickly in these wide rows, some growers using from 80 to 100 pounds of seed per acre. This prevents the bulbs from growing very large. In early fall the sets are harvested and dried in small heaps in the field and cured on trays in storage houses which permit of an ample circulation of air. It is important that the soil be free from weeds, and that it contain plenty of plant food. The seed should be tested for germination before sowing, as it is necessary that the plants be thick in the rows. Growing sets requires a lot of labor, but the returns are fairly remunerative.

3. Unbleached heavy cotton cloth may be used as a substitute for glass on hot beds and the material used for dressing it is three pints linseed oil, one ounce acetate of lead, and four ounces of white resin. Grind the acetate in a little oil, then add the resin and the rest of the oil. Melt in an iron kettle over a fire until it is well mixed and apply it to the cloth while warm.

King Ferdinand of Roumania was born Aug., 1865, a son of Prince Leopold of Hohenzollern-Sigmaringen. He is a Roman Catholic. His wife, Queen Marie, is an English Princess, a daughter of the Duke of Edinburgh, brother of King Edward. . . The Prime Minister, who is also Minister of war, is M. Jou. J. C. Bratiano, a member of the Liberal party. The Liberal-Conservative leader, M. Take Jonescu, is one of the most prominent leaders of the Irredentist party, and is a most brilliant orator. He, as well as M. Filipescu, the former conservative war minister, have always been strongly on the side of the Allies. Roumania's Commander-in-Chief of the army is Gen. Hiesco, a man still in his early forties.

Shorthorns and Herefords



On Tuesday, October 17th, 1916

THE ELGIN COUNTY PURE-BRED BREEDERS will place on sale at Durdle's Feed Stables, Elgin St., St. Thomas, a specially selected lot of Shorthorn and Hereford cattle.

The offering consists of 20 males and 30 females, some of which are show animals, and all are bred in the purple, and many of the females are well on in calf. Among the sires heading these herds are: Golden Lavender 2nd, Trout Creek Wonder, Masterpiece, Baron Wimple, Roan

Chief and Sea King. Herefords are sired by the noted bull, Bonnie Brae 31st. Families represented in the offering are: Rosebuds, Lady Janes, Mayflowers, Symes, Lavenders, Rosewoods, Broadhooks, Jealousy, etc. Write for catalogues and plan to attend the sale.

CAPT. T. E. ROBSON, Auctioneer

DUNCAN BROWN, Shedden, Ont.
Manager of Sale

W. E. BURTON, Pt. Stanley, Ont.
Sec. of Association

Questions and Answers. Miscellaneous.

Share Farming.

A is working a farm of 100 acres on shares. He owns implements and stock. The farm is valued at \$11,000. B, the owner, accepts for his share one-third of everything that may be produced on the farm. If A should purchase any feed for his stock should B contribute anything towards cost of same?

Ans.—Evidently the agreement is that the owner receive as his share one-third of everything produced on the farm. We naturally suppose that this includes live stock as well as crops. Consequently, if feed other than that grown on the farm is required for the stock, it would be unfair for the man working the place to pay the entire cost of this extra feed. Paying for the feed should be divided in a similar ratio to the returns, namely, the owner paying one-third and the man working the place two-thirds of the cost.

Concentrates for Cows.

Which is the better to feed to a cow giving milk, cotton-seed meal or oil-cake meal? What is the price of each?

SUBSCRIBER.

Ans.—Both feeds prove very satisfactory, as they both contain a high percentage of protein. Cotton seed is a trifle higher in this nutriment than the oil cake, and where only two or three pounds are being fed daily it might be advantageous to feed it in preference to the oil cake. However, many feeders like to mix the two together, especially if considerable quantity is being fed. Oil-cake meal is usually considered a little safer concentrate to feed and it aids in putting the animal system in good condition. It is a safe feed for all classes of stock. The price varies considerably, depending on freight, etc. Some dealers quote cotton-seed meal at \$2.05 per cwt. at the present time, and oil-cake meal at \$2.25. This is in small lots; possibly closer prices could be secured by purchasing in bulk.

Molasses Versus Bran.

1. What is the feeding value of molasses made from sugar cane?
2. What is the feeding value of molasses made from sugar beets?
3. Are either as valuable as bran?

Answer, 1 and 2.—There is very little difference in analysis between the molasses made from beets and that made from cane. They are about equal in percentage of carbohydrates, but the beet-pulp molasses is a trifle higher in crude protein. The carbohydrates, or nitrogen free extract, are nearly all sugar. Molasses from sugar beets has a laxative effect and that from cane has the opposite. Care must be taken not to feed too large an allowance of either, and the animal must be brought to it gradually. Two to three pounds per head daily is a fair allowance, and it has the tendency to put the animal in good condition. The effect is noticed by the sleek appearance of the animal. Molasses is a sticky substance to feed and it is frequently mixed with cut roughage. In this way there is very little loss.

3. Wheat bran has considerably higher feeding value. It is easier to feed and there is less waste. According to Henry's "Feeds and Feeding", wheat bran contains ash 6.3 per cent.; crude protein 16 per cent.; fibre 9.5 per cent.; nitrogen free extract, 53.7 per cent.; fat, 4.4 per cent. The best pulp molasses, according to the same authority, contains ash 5.6 per cent.; crude protein, 9.5 per cent.; fibre, 15.9 per cent.; nitrogen free extract, 60.7 per cent.; fat, 7 per cent. For putting an animal in condition the molasses may be fed to advantage.

In the Seine-et-Oise district of France, nearly 500 acres of land have been devoted to the growing of umbrella handles and canes. By a special process the trees have been induced to grow the knobs and crooks desired for the handles.

ABSORBINE
TRADE MARK REG. U.S. PAT. OFF.

Will reduce Inflamed, Strained, Swollen Tendons, Ligaments, Muscles or Bruises. Stops the lameness and pain from a Splint, Side Bone or Bone Spavin. No blister, no hair gone. Horse can be used. \$2 a bottle delivered. Describe your case for special instructions and Book 2 K Free.

MESSRS. A. J. HICKMAN & CO., (late Hickman & Scruby), Court Lodge, Egerton, Kent, England. Exporters of

PEDIGREED LIVE STOCK

of all descriptions. Specialty made of draft horses, Beef and Dairy breeds of cattle, Show and Field Sheep. Illustrated catalogues and testimonials on application. All enquiries answered with pleasure. Now is the time to import, prospects were never better, and insurance against all war risks can be covered by payment of an extra 1% only.

Glenfoyle Shorthorns

Large selections in females, all ages, bred from the best dual-purpose families. One extra choice fifteen-months bull, some younger ones coming on. Priced well worth the money.

Stewart M. Graham, Lindsay, Ont.

Maple Leaf Shorthorns and Shropshires. Now offering some choice heifer calves; also two Show bulls, fit for service, a Mina and a Gloster. In Shropshires some good ram and ewe lands; shewing ewes by Neck 16 (Imp.), this ram also for sale, one of the best show and breeding rams in Ontario. John Baker, R.R. No. 1, Hampton, Ontario.

Burnfoot Stock Farm—Breeders of dual-purpose Shorthorns with a splendid conformation for beef. Visitors welcome.

S. A. MOORE, Prop. Caledonia, Ont.

Shorthorns and Swine. Have some choice young bulls for sale; also cows and heifers of show material, some with calves at foot. Also choice Yorkshire sows.

ANDREW GROFF R.R. NO. 1, ELORA, ONT.

Shorthorns—Males, females, one good red bull 16 months, five younger, three fresh cows, calves by side, heifers. Right dual-purpose breed and kind.

Thomas Graham, Port Perry, R.R. 3, Ont.

Northlynd R.O.P. Shorthorns and Jerseys Present offering: One Shorthorn bull old enough for service, whose dam, his dam's full sister and his grandam in six yearly tests made an average of over 8,500 lbs milk, testing over 4% in an average of 329 days. G. A. Jackson, Downsview, Ont.

No doubt there will be a number of sales this year, but

Wednesday, November 8th

will be the date of the Annual sale of

The Western Ontario Consignment Sale Company

AT THE
Fraser House Stables, London, Ont.

In all there will be eighty head, all Shorthorns, including both the Scotch topped and deep milking strains. If you want something right, bred right, and be treated right, come to London. Catalogues Oct. 12th. Apply to—

Harry Smith

Secretary of Sale

Hay, Ontario



Bulls to Head the Best Shorthorn Herds

His Majesty = 106890 =, Royal Favorite = 106891 =, Campaigner = 106892 =, Royal Triumph = 106893 =, Commander's Heir = 106131 =, Royal Ambassador = 16894 =, etc. The best we ever bred, our bulls have made good—bulls bred them in the leading exhibitions. In themselves they are desirable, big, sappy, and characteristic of the breed. Their breeding is faultless. They are attractive reds and roans, and will keep on improving. We have Princess Royals, Wimples, Rosebuds, Scouts, Killian Beauties, Mysias, Cecillas, Victorias and Orange Blossoms. "Pushinch Plains" at Arkell, C.P.R. Station, 3 miles from Guelph.

The New Home of the Auld Herd
The Land of the Big Bees

A. F. & G. Auld, R. No. 2, Guelph, Ont.

SHORTHORNS

Have still on hand one bull fit for service by Newton Sort = 93019 =. Some good young things coming along. A few young cows and heifers. Come and see them. 2 1/2 miles from Brooklin, G.T.R. 4 miles from Mervin, C.P.R.

SHROPSHIRE

W.M. D. DYER, R.R. No. 3, OSHAWA, ONT.

CLYDESDALES

4 miles from Brooklin, C.N.R.

Meadow Lawn Shorthorns

We are offering a choice lot of bulls at very reasonable prices. An exceptionally good one wanting a rich good herd leader would do well to secure this bull, as he is a smooth, well proportioned fellow that attracts attention at first sight.

F. W. EWING, G.T.R. and C.P.R.



Walnut-Grove Shorthorns

Bred by the great Sir J. Trout Creek Wonder and one of his cows and their daughters, we have Scotch and several extra fine young bulls and

BUNGAN BROWN & SONS, R.M.D. SHEDDEN, ONT., T.M. & M.C.R.

Willowbank Stock Farm Shorthorn Herd

Established herd bred at the Willowbank Stock Farm, founded 1855 and the prize-winning sire of the famous "Sally" cow. An extra good lot of young stock to offer of either sex. Splice bulls, sires, and dams. Write for catalogue.

JAMES DOUGLAS, Caledonia, Ont.

Pleasant Valley Shorthorns

Special offering—Sittyton Favorite, one of the best bulls and females bred to Jimmy Royal Scot and Sittyton Favorite. Write your wants. We can supply to you in merit, breeding and price.

GEO. AMOS & SONS, M.P.S., Ont. Menard, 11 miles east of Guelph, C.P.R.

Lighter
It cost
ing or Ou
good, and
is ask for
Shirt. So
DEACO
BEI
He
Fleming
Veterin
Advis
FLEI
75 C
O
Mi
Othe
Ye
dem
bloo
time
shir
We'l
tion.
W.F.
Can.
LIV
OIL
THE DO
1 YE
Bull cab
Could
bred
SEGIS
R. M. H
Waln
C.R. Lar
W. J. G
W. J. G

Answers.
is.
ng.
of 100 acres
plements and
\$11,000.
or his share
that may be
A should
stock should
rds cost of
D. T.
reement is
his share
roduced on
suppose that
as well as
d other than
is required
e unfair for
to pay the
ed. Paying
vided in a
ns, namely,
d and the
o-thirds of



The Deacon SHIRT

Lightens Work and Heightens Pleasure

It costs no more to get a really good Working or Outing Shirt, one that fits right, feels good, and wears splendidly. All you have to do is ask for, and see that you get, a "Deacon" Shirt. Sold at all good stores.

DEACON SHIRT COMPANY
BELLEVILLE CANADA

Heaves CURED

—by removing the cause—and cured to stay cured—If 3 boxes of **Fleming's Tonic Heave Remedy** fail to effect a cure of any case, old or new, we will refund the full amount paid.

For Box, \$1.00; 3 for \$2.50. Mailed on receipt of Price.

Scratches Disappeared—I gave a course of your Tonic Powders, which has put a horse and his mate in fine shape, and a touch of scratches has quite disappeared. Geo. A. Miles, Oxville, Alta.

Full information in Fleming's Vest Pocket Veterinary Adviser. Write us for a Free Copy.

FLEMING BROS., Chemists
75 Church St. - Toronto, Ont.

Ottawa Demands Milk up to Standard
Other Cities Will Fall in Line.

You can easily meet this demand if you have Ayrshire blood in your herd. Now is the time to buy a pure-bred Ayrshire sire or a foundation female. We'll gladly send you information.

W.F. Stephen, Secy., Huntingdon, Que.
Can. Ayrshire Breeders' Assoc.

LIVINGSTON BRAND
The purest and best

OIL CAKE MEAL

THE DOMINION LINSEED OIL CO., Ltd.
Manufacturers, Baden, Ont.

1 YEARLING BULL
Bull calves from 10 months down. Could spare 10 cows or heifers, bred to the great bull, KING SEGIS PONTIAC DUPLICATE. R. M. HOLBY, Port Perry, Ont.

Walnut Grove Holsteins

Heifer, 1915, May Echo Champion, full brother to W. J. 1884, who made 36 lbs. butter in 1915. Available for sale from one year old. Write for right for quick sale.

C. R. James, R.R. 1, Richmond Hill, Ont.

HOLSTEIN BULLS

De-Kol Senator, 14373; calved May 1915. Duhallow Senator De-Kol, 9274; dam, 1915. Bred 105 lbs. milk in 1 day. Also Sir 1915, 2821, calved March 17, 1916; sire, Senator, 14373; dam, Lady Alice May, 1915. These are choice individuals.

W. J. Walker & Sons, Franklin, Centre, Que.

Bulls, Bulls We have several young Holstein bulls for sale, bred for service. Sired by the great bull, De-Kol Duplicate, and our junior herd, the great Pictorje, and from high-class sires. Prices low for the quality. Write for catalogue. Manchester, G.T.R., and Myrtle, Bell Phone.

W. J. Walker & Sons, R.R.4, Port Perry, Ont.

What Forest Fires Cost Canada in 1916.

Canada has lost through forest fires in 1916 over nine million dollars. This equals more than six times what has been spent on forest protection work from coast to coast.

The enormous sum wasted through this year's forest fires, most of which were preventable, would add another \$180 to the first year's pension allowances of nearly 19,000 Canadian soldiers.

It is noteworthy that while some parts of the Dominion owe to rainy weather their immunity from fire damage, the season's record proves beyond gainsay that in areas where first-rate fire protection systems were in operation, losses of life and property were held down to a remarkable minimum.

Quebec had some heavy fires in the Lake St. John and Saguenay districts, also in Gaspé Peninsula and west of Escalana on the Transcontinental Railway. It is a striking fact, however, that within the 24,000 square miles of Quebec, covered by the two well-organized associations of limit holders, the amount of green timber burnt is practically negligible. This immunity was not a matter of luck but of consistent, patient effort to educate settlers, lumberjacks and others in care with fire, coupled with a system of promptly reporting all outbreaks, and attacking forest fires in their incipency with large forces of men and modern equipment.

British Columbia faced fairly favorable fire conditions through the summer months, and the cost of fire fighting was reduced by about 75 per cent. over the record of 1915. The number of fires was about half of last year. The British Columbia forest protection service is the most complete in Canada thus far, and the saving of timber is a logical consequence.

A heavy average of rainfall kept fire troubles at arm's length in Alberta, Saskatchewan and Manitoba, and this weather condition was undoubtedly responsible for the escape of the main areas of big timber throughout Ontario. The Clay-belt fires at the end of July and first week of August provided a tragic sacrifice of 262 lives, and what is estimated to be six million dollars worth of property. There was practically no forest guarding organization in the fire-swept district, except along the railway track.

New Brunswick escaped the risks of 1916 with a very small timber loss, Nova Scotia having a similar experience. The records of the Dominion Railway Board show that the private-owned railway lines of Canada have not been responsible this year for any damaging forest fires. Those that were started were promptly extinguished by railway employees.

Questions and Answers. Veterinary.

Stumbling Horse.

1. When my five-year-old horse trots he seems to become dizzy and stumbles. When walking or hitched to a plow he is all right.

2. For a year he has had the habit of getting his fore feet into the manger at nights when idle. I have the manger as high as is convenient for him to feed out of it, and have tried tying him short and other means, but cannot break him of the habit.

L. M.

Ans.—I do not think he is suffering from any disease, or that he really becomes dizzy, but simply stumbles by reason of awkward and lazy movement. If driven up sharp and forced to pay attention when trotting it is probable he will not stumble. There is no brain trouble that will consistently interfere with a horse when trotting and not when walking.

2. We can suggest nothing more than you have done except building the manger so high that he cannot get his feet into it. If you could give him a box stall without a manger it would be the best treatment, or take the manger out of his stall and feed him off the floor, but build a small box for grain in one corner, so high that he will not be able to reach it with his feet.

V.

For fire-safety, inside the home use 'Metallic' Ceiling Plates

YOU can make your home fireproof and more attractive at small cost by using Metallic Ceiling and Wall Plates. Many beautiful designs with cornices and mouldings for any style of room. You can put them on old walls as easily as new. Wash them or brighten up with paint whenever desired.

"Metallic" Ceiling Plates are sanitary, fireproof, inexpensive and good for a life time.

Write for booklet and prices. We manufacture all kinds of "Metallic" building materials and sell direct at lowest prices.

Metallic Roofing Co. Limited, Toronto and Winnipeg

FREE LAND FOR THE SETTLER IN Northern Ontario

Millions of acres of virgin soil, obtainable free, at a nominal cost, 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 information as to terms, regulations and settlers' rates, write to:

H.A. MACDONELL, Director of Colonization, HON. G. HOWARD FERGUSON, Parliament Buildings, TORONTO, ONT. Minister of Lands, Forests and Mines

Holstein Dispersion Sale

ON
Wednesday, Oct. 18th, 1916

At my farm, five miles north of BRIGHTON STATION, on the G.T.R., C.P.R. and C.N.O., where conveyances will meet all morning trains, I will sell unreservedly **33 head of high-class and well-bred young Holstein females**, consisting of one 4-year-old, three 3-year-olds, thirteen 2-year-olds, ten yearlings and six under one year. All bred on the farm from high-class sires and dams. For full particulars of their breeding, write for catalogue to the undersigned.

TERMS: Cash or ten months on bankable paper, with 6 per cent.

Auctioneer: **NORMAN MONTGOMERY, Brighton, Ont.**

ADDRESS
R. O. MORROW **Hilton, Ontario**

King Segis Pontiac Paul 15940

WE have for sale a few sons of the above bull, ready for service, and whose dams are large, heavy-producing cows. Here is an opportunity to get the blood of KING SEGIS and KING OF THE PONTIACS at reasonable prices. Correspondence solicited.

Also Berkshire and Yorkshire Swine

Larkin Farms **Queenston, Ontario**

HOLSTEIN CATTLE

Our present offering is a bull born February 1916. Dam gave 106 lbs. milk a day, sire's dam 116 lbs. a day. Nicely marked and a show bull. We make a specialty in foundation stock.

D. C. FLATT & SON, **R. R. No. 2, Hamilton, Ont.**

For Sale---Sons of King Segis Walker

From high-testing daughters of Pontiac Korndyke. Photo and pedigree sent on application.

A. A. FAREWELL, **OSHAWA, ONTARIO**

DUMFRIES FARM HOLSTEINS

Think this over—we have 175 head of Holsteins, 50 cows milking, 25 heifers due to calve in the fall, and 60 heifers, from a class up to 2 years, as well as a dozen yearling bulls, and anything you may select is for sale. Breeding and individuality the very best. **S. G. & Erle Kitchen, St. George, Ont.**

HOSPITAL FOR INSANE, Hamilton, Ont.

Holstein bulls only for sale, four fit for service, one being a son of Lakeview Dnt. blood. Best range, and the others from one of the best grandsons of Pontiac Korndyke, and large producing, high-testing R. of P. cows. **APPLY TO SUPERINTENDENT.**

Clover Bar Holsteins

We are offering at the present time a few young bulls, two of which are being raised from both sire and dam, and sired by Frank 3rd Hartog 2nd, whose two nearest dams average 103 lbs. milk per day. Prices reasonable.

PETER SMITH, **R. R. No. 3, STRATFORD, ONT.**

Evergreen Stock Farm, High Class Registered Holsteins

Please order early if you expect to get ahead of the crowd. We have the only kind we keep. No herd in Canada has ever had so many and so many better than we have. Come and see us or let us know about it. **EVERGREEN STOCK FARM, N. W. G. WICH, ONT.**

PIONEER FARM HOLSTEIN BULLS

Of long distance record makers, the kind that will give you a good cow. Of the six highest butter fat record cows in the Dominion, four are at Pioneer Farm. Young bulls for sale from the same stock. Write for catalogue. **HARTOG, whose 3 nearest dams average 103 lbs. milk per day.** **WALBURN RIVERS, R.R. No. 5, INGLEWOOD, ONT.** **3-11-16** **100 lbs. milk per day.** **Independent.**

DOUGLAS EGYPTIAN LINIMENT

Stops Bleeding at once.
Removes all Inflammation.
Prevents Blood Poisoning.
A Speedy Cure for Thrush.
For Sale Everywhere.
Free Sample on Request.

DOUGLAS & COMPANY MFRS. NAPANEE, ONTARIO

VETERAN

THRESHERMEN, READ THIS!
The Improved Veteran Endless Canvas Drive Belts will give you better service than any other. You want the best. Order now. Sold only by

WINDSOR SUPPLY CO., Windsor, Ont.
Headquarters for Suction Hose and all other Thresher Supplies. Write for catalogue, "Engineers' Bargains."

CREAM

Where are you shipping now?
And what are you getting for your cream?
We want more individual shippers and more men to gather cream for us.
Write for our proposition.

Silverwoods Limited
LONDON, ONTARIO

Cream Wanted

Advancing markets, together with our twenty years' experience, should interest you. We invite your inquiry for particulars.

References: Any Banker Any Cream Shipper

TORONTO CREAMERY CO.
Toronto, Ontario

CREAM WANTED

Ship your cream to us.
We pay all express charges.
We supply cans.
We remit weekly.
We guarantee highest market price.

Ontario Creameries, Limited
London - Ontario

JERSEY BULLS For sale: Knoothood's Redoubt, sire Fairy Glen's Redoubt (imp.), 22 daughters R.O.P.; dam Eminent Honeycomb (imp.). R.C.P. 596 lbs. butter; reserve champion on Island. Capt. Raleigh ready for service, sire Knoothood's Redoubt, dam Mabel's Post Snowdrop; first as calf, 1914; first Junior Champion, 1915; 2nd 1916 Toronto. Milked 38 lbs. day, 4 per cent, milk, first calf. Ira Nichols, Burgessville, Ont., R.R. No. 2.

Glencairn Ayrshires Herd established 40 years. Producing ability from 8,000 to 11,022 lbs. If that sort of profit you require, write to us. We have buyers all ages and we pay the best price.
Thos. J. McCormick, Rockton, Ont., Copetown Sta., G.T.R.

Questions and Answers. Miscellaneous.

Biennial Wormwood or False Tansy.
Will you kindly identify the enclosed weed?

ANS.—The weed received at this office is a specimen known as *Artemisia biennis*. The common names which this weed sometimes goes by are Biennial Wormwood, and False Tansy, the latter is a poor name for it. This weed is not particularly common, nor yet is it troublesome on a well-managed farm. It is a biennial plant and if prevented from going to seed it is possible to eradicate it in two years. After harvest cultivation and the use of a broad-sharred cultivator are means of eradicating it from the fields.

Probably Toad Flax.
Will you kindly let me know the name of the enclosed plant. There is a patch of it in one of my fields and I should like to know if it is a troublesome weed.

ANS.—There was neither flower nor fruit on the plant received at the office, consequently it was difficult to say definitely what family it belongs to. However, we believe the plant to be toad flax, *Linaria vulgaris*. This weed is not particularly troublesome, where short rotation of crops is followed. It is quite a common weed and is gradually spreading, especially in light and shallow soil. In waste places, road sides and meadows it is a persistent weed, being a perennial and also deep-rooted. Badly infested meadows or pasture land can be cleaned by bringing them under cultivation in July, summer-fallowing until autumn and planting a hoe crop the following spring.

Strawberry Culture.
I planted a patch of strawberries last spring but I don't know when to replant the young plants, or how to care for them before winter sets in. I would like information regarding strawberry culture.

ANS.—It is not customary to replant the same year as the plants are set out, but if it is desired to extend the patch another year the plants forming on the runners are frequently selected to start the new patch. We presume that thorough cultivation has been given through the summer, and that the strawberry bed is free from weeds. In cultivating, care should always be taken not to allow the cultivator to injure the roots of the parent plants. If weeds once get a start among new plants and runners the labor is much increased. While cultivating with a hoe, a careful man can do much towards increasing the crop. The new plants formed by the runners could be spaced so as to prevent crowding. A runner placed where wanted and a little earth put on it, will take root and grow, provided the terminal bud is free. Sometimes the plants become overcrowded, and it is necessary to cut off some of the growth. If there is a heavy growth, some do not give the plants any winter protection. However, it is usually advisable to mulch the plants with a light covering of farmyard manure or straw. It is not necessary to have a very heavy covering, but yet it should be of sufficient thickness to prevent freezing and thawing; possibly three inches of straw or strawy manure would be ample. The time to apply this is in late fall as soon as there is sufficient frost to hold the wagon, but the covering should be applied before the snow falls. The general practice is to take this mulch off the plants in the spring and leave it in the middle of the rows. This tends to conserve moisture and helps to keep the fruit clean. Some growers claim that it does not pay to mulch in more than one year, and that a single winter, insects, and diseases will do away with the second year's crop. It is a matter of opinion, and it is best to follow the plan of sowing a new patch each year, and bringing the old patch into fruit season by season, and then to mulch for next season.

It Pays to Help Your Moulting Hens

Moulting is a weakening process. Hens are out of sorts. It takes all their strength and energy to grow new feathers. Give your hens help. Hurry the weakening, do-nothing period along and get it over quickly as possible, so hens will start laying again.

Dr. Hess Poultry PAN-A-CE-A

Hurries Moulting Along because it conditions and makes hens feel well. It has just the tonic properties chickens need and it is a blood purifier, blood builder. Use it to whet the poor appetites, to help digestion, to increase the vitality and strength.

My Guarantee
So sure am I that Dr. Hess Poultry Pan-a-ce-a will make your poultry healthy, help them through the moult, start your hens and pullets laying, that I have authorized my dealer in your town to supply you with enough for your flock and if it doesn't do as I claim, return the empty packages and get your money back.

Send for free book on poultry

Dr. Hess & Clark, Ashland, O.

Dr. Hess Stock Tonic **Dr. Hess Instant Louse Killer**

A conditioner and worm expeller. Just what your animals need when they are taken off pasture and put on dry feed. It supplies the laxatives and gets the worms.

Kills lice on poultry and all farm animals. Dust or sprinkle in dust bath, in corners, roosts, etc. Dust in feathers, in hair of animals. Destroys bugs on cucumber vines, cabbage worms, slugs on roses. In handy sifting-top cans. 1 lb. 85c; 5 lbs. 85c (duty paid).

Costs 1 Cent a Day for 30 Fowls

1 1/2 lbs., 35c
5 lbs., 85c
12 lbs., \$1.75
25-lb. pail, \$3.50 (duty paid)

DR. HESS POULTRY PANACEA

THE BISSELL DISK

has made a great record throughout all Canada. There are good reasons why this is so. Balanced Right—Does not hump up. Improved Plate—Cuts and turns soil over. Hitches well Back—Easy draught. This Disk has several imitators, but no equal. None genuine without the name "BISSELL." Test trials given on hard land with anything that cultivates. Write Dept. W for free Catalogue.

T. E. BISSELL CO., LIMITED, ELORA, ONT.

Ayrshires and Yorkshires

Bargains on Aug. 1916. Bull calves, R.O.P. dams. Others from 6 months to 2 years old. All sired by our grand champion bull, Toronto, 1914. Nov. and Dec. freshening cows. Females all ages. Select now and get the choice July 1916 pigs at special prices. Write us, or call and see.

ALEX HUME & CO.,
Campbellford, Ontario, R.R. No. 3

Glencairn Ayrshires For 50 years I have been breeding the great Flos tribe of Ayrshires, dozens of them have been 100 lb. milkers of 300 lbs. a day on twice-a-day milking. Young bulls, write me.

James Benning, Williamstown, Ont.

GLADDEN HILL AYRSHIRES

For sale: Milkmaid at 100 lbs. a day. A few choice young bulls for sale from dams with records of 100 lbs. a day. Write for prices.

Laurie Bros.,
AGINCOURT, ONT.

YOUNG Brampton Jerseys BULLS

For sale: 10 young bulls, some special offering on young bulls, bred from the highest production Jersey herd in Canada. Brampton Jerseys and their descendants hold all Jersey records in Canada. All ages, also for sale. **B. H. BULL & SON, Brampton, Ont.**

THE WOODVIEW FARM
JERSEYS
LONDON, ONTARIO

Canada's Most Beautiful Jersey Herd

Some high-class bull calves ready for service, including grand sire of the late Westmore Fair and his full brother; also cows and heifers. Jas. Pringle, Prop. We work our show cows and show our work cows

Cost and Service

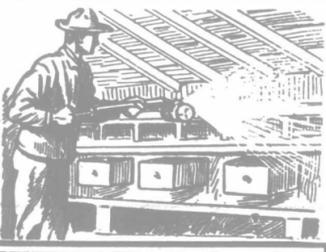
The two factors considered before a purchase is made.

Steel Truss Barns

measure up to every requirement. They are as sturdy as a skyscraper. They have no cross-beams to hinder unloading or mowing away. They are fire and lightning-proof. They have metal clad, roller doors, lift roof-lights, sliding side windows and "Acorn" ventilators. The cost will compare favorably with a wood frame barn.

Send for a copy of new book, "The Steel Truss Barn."

The Metal Shingle & Siding Co., Limited
Preston, Ont. Montreal, Que.



SAFETY FIRST

BEFORE you coop up your fowls for the winter, spray the roosts, nest boxes and dropping boards with

Pratts Poultry Disinfectant

and rid the poultry houses from lice and mites. Also kills germs, prevents disease and keeps down bad odors.

Prices: 50c qt.; \$1.50 gal., at your dealer's.

Write to-day for New Book, "Poultry Wrinkles." It's FREE.

Pratt Food Co. of Canada, Limited
68J Clarendon St., TORONTO. P-14

Cotton-Seed Meal

GOOD-LUCK BRAND

Calf Meal, Oil Cake Meal, Flax Seed, Distillers' Dried Grains, Gluten Meal, Brewers' Dried Grains, Bran, Shorts, Poultry Feeds.

Write for prices.

Crampsey & Kelly
Dovercourt Rd., Toronto, Ont.

Bowhill Leicesters

A few shearing rams and ram lambs for sale at right prices. Choice breeding and good individuals. Write for particulars.

Geo. B. Armstrong, Teeswater, Ont.

For Sale PEDIGREED DORSET (HORNED) **RAM LAMBS**

5 to 10 months old, your choice of nine. **MARTIN S. TODD, GALT, ONT.**

Tower Farm Oxfords

Champion Oxford flock of Canada. Choice Oxfords of all ages for sale. Prices reasonable. **E. Barbour & Sons, R.R. 2, Hillsburg, Ont.**

Leicesters and Embdens for sale—A few choice quality ram lambs, also a few ram heads. All well woolled with the best of wool. Prices reasonable, correspondence invited.

G. A. Galt, Trout Creek Farm, Lucknow, Ont.

SHROPSHIRE

Write for particulars. Particularly good in Ram and ewe. This year, and a choice lot of young sheep, lambs and heifers. **Peter Christie & Son, 100 Chester P.O., Port Perry, Ont.**

Gossip.

Elgin County Breeders' Consignment Sale.

Breeders will have an opportunity to purchase right good representatives of the Shorthorn and Hereford breeds, at the Elgin County Pure-bred Breeders' Association Consignment Sale, to be held in St. Thomas, on October 17. A choice lot of young stuff is being offered together with a few mature animals that have already proved their worth. Some of the stock is in show condition and all is in good breeding condition. The Association purpose making this sale an annual event and are therefore offering only animals of high quality. The Herefords are a very creditable lot, from every point of view, most of the young stuff being sired by that noted bull, Bonnie Brae 31st., a champion at a number of the large exhibitions. They are the straight, deep, thick kind that will give a good account of themselves. Breeders will have an opportunity of securing some show stock from the lot offered for sale. There is an exceptionally fine lot of Shorthorns, males and females, for sale. They are either Scotch-bred or Scotch-topped. Among the offering are a number of beautiful heifers that are a credit to any man's herd, and a number of bulls of the right type and conformation to make herd headers. They are out of big, strong cows and give every indication of being even better than their dams. A few are from cows that are heavy milkers and tend towards dual-purpose type. Anyone desiring females or males of either the dual-purpose strain or the straight Scotch, should attend this sale. Animals sired by Trout Creek Wonder, an aged bull that has left many show animals, are among the offering. One bull a show animal is a full brother of Sea Gem's Pride, a bull that won many championships on this year's show circuit. Offspring of such sires as Roan Prince, Masterpiece, Golden Lavender 2nd, Baron Wimple 2nd., Roan Chief and Sea King are in the sale.

Animals are consigned by W. A. Galbraith, Iona Station; D. McPhedran, Dutton; D. McMillan, Dutton; Duncan Brown & Sons, Shedden; McCallum Bros., Iona Station; D. L. Purcell, Wardsville; S. M. Pierce, Fingal; A. McKillop & Sons, West Lorne; J. Fitcher, St. Thomas. Herefords are consigned by Jas. Page, Wallacetown, and McNeil & McNeil, Dutton. There are 20 bulls and 30 females for sale. The place is St. Thomas; the date is Tuesday, October 17. Breeders should plan their work so as to attend this sale. For catalogue and further details, write Duncan Brown, Shedden.

Questions and Answers.

Miscellaneous.

Sweet Clover—Wheat Prices.

1. What is the best time to sow sweet clover without a nurse crop? Can it be sown in the fall?

2. I am financially interested in a small flour mill. Could you tell me if wheat can be bought direct from elevators? What is the most advantageous way to buy it (a car every two months or so)? And for oats?

3. Where can be found (in a table or otherwise) the price of wheat at Toronto for the last ten years or so? H. DE M.

Ans.—1. Some sow with a nurse crop early in the spring. Sow the nurse crop of barley or spring wheat rather thinly. Others sow just after the regular grain seeding alone at 20 pounds per acre, after thoroughly working the land and getting it as clean as possible. We prefer sowing alone.

2. We presume you can buy direct from the elevator companies or their representatives. Make arrangements with them regarding delivery. We know of small mills which get in a car or two at a time.

3. If you have saved your Farmer's Advocate for ten years look up the market reports. We have such material here but it would require considerable compilation, but we might be able to give it to you for a month or two of each year for the past ten.

Take the hard work out of Washday

THIS MAXWELL "HOME" WASHER takes all the back-breaking work out of washing. Just put the clothes in. The washer does the work—easier and better—in less than half the time. Delicate fabrics are washed and cleaned just as easily and well as blankets, table-cloths or sheets—no tearing or wearing

Maxwell

"HOME" WASHER

—is light, noiseless and easy running. Enclosed gears make it safe in operation. The "springs" in the lid make the cover lift up easily. Constructed of best quality Cypress, and handsomely finished.

Insist on seeing this Maxwell "Home" Washer at your Dealer's, or write to us.

MAXWELLS LIMITED
St. Mary's, Ont.
Dept. A



The Original Summer Hill Farm

WHERE YOU'LL ALWAYS FIND A

First-class Oxford

I have eighty head of very fine yearling ewes for sale, also a number of yearling rams for show purposes or flock headers, fifty head of ram lambs and fifty head of ewe lambs, all bred in the purple. All recorded and first-class individuals. No grades registered as pure-breds, and no grades handled except by order.

PETER ARKELL & CO., Proprietors
Mildmay, G.T.R. Stn. Box 454 Teeswater, C.P.R. Stn.
VISITORS WELCOME

H. ARKELL W. J. ARKELL F. S. ARKELL

Summer Hill Stock Farm

Largest and oldest importers and breeders of

OXFORDS

in Canada. Look up our show record, it will give you an idea of the kind of Oxfords we have for sale.

PETER ARKELL & SONS, Proprietors, Teeswater, Ont.
Customers, beware of imitations of this advertisement.

Oxford and Hampshire Down Sheep

Farnham Farm The oldest established flock in America

Having quit the show ring we hold nothing back. Our present offering is a number of superior yearling and two-shear rams for flock headers, a carload of yearling range rams, a hundred first-class yearling ewes; also a fine lot of ram and ewe lambs of 1916.

ALL REGISTERED HENRY ARKELL & SON, ROUTE 2, GUELPH, ONTARIO PRICE REASONABLE

BLAIRGOWRIE SHROPSHIRE AND SHORTHORNS

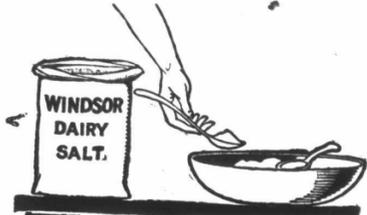
PRESENT OFFERING: 100 Imported Shearing Ewes 75 Canadian-bred Shearing Rams JOHN MILLER, Ashburn, Ont.

25 Imported Shearing Rams 20 Cows and Heifers in Calf Myrtle, Sta., C.P.R. & G.T.R.

75 Canadian-bred Shearing Ewes 5 Bulls of serviceable age

MAPLE SHADE SHROPSHIRE

A number of splendid ram lambs, fit for service this fall. Sired by one of the best imported rams that we ever owned, and from imported dams. Prices and description on application. **W. A. DRYDEN, Maple Shade Farm, Brooklin, Ont.** Brooklin, G.T.R., C.N.R., Myrtle C.P.R.



The Salt is mighty important Windsor Dairy Salt
 Made in Canada
 THE CANADIAN SALT CO. LIMITED

YOUNG TAMWORTH Sows & Boars

FOR SALE
Herolds Farms, Beamsville, 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.**

Pine Grove Yorkshires. Bred from prize-winning stock of England and Canada. Have a choice lot of young pigs of both sexes, pairs not akin, to offer at reasonable prices. Guaranteed satisfaction. **Joseph Featherston & Son, Streetsville, Ont.**

Townline Tamworths We can supply worths of both sexes and any desired age of superior quality. Also Leicester ram and ewe lambs, Pekin ducks, Langshan cockerels and pullets. Write us your wants. **T. Readman & Son, Streetsville, Ont. R.M.D.**

Duroc Jerseys For 13 years our breeding stock has been choice selections from the champion herds of the U.S. We have both sexes, all ages, over 100 to select from. Bred from champions. **L. A. Pardo & Sons, R. R. 1, Charing Cross, Ont.**

Alderley Edge Yorkshires

Young pigs both sexes for sale.
J. R. KENNEDY, Knowlton, Que.

ELMFIELD YORKSHIRES
 Choice ones—ranging from 2½ to 5 months. Will be ready for fall service. Prices right.
G. B. Muma, R.R. 3, Ayr, Ont., Paris, G.T.R., Ayr, C.P.R., Telephone, 55 R.2, Ayr, Rural.

DUROC JERSEY SWINE

A few choice sows bred, both sexes, all ages, bred from imported stock. Heading herd: Farough's King #2012—Brookwater, B.A.B.'s King 5042 from U.S. Importer and breeder. **CHARLES FAROUGH, Maidstone, R. R. No. 1, Ont.**

Meadow Brook Yorkshires. Sows bred, others ready to breed; 20 sows, 3 to 4 months old, and a few choice young boars. All bred from prizewinning stock. Also one Shorthorn bull, 18 months old.
G. W. MINERS, R.R. 3, EXETER, ONT.

Morrison Tamworths and Shorthorns Bred from the prizewinning herds of England. Tamworths, both sexes, 140 to choose from. Short-horns, 5 bulls from 5 to 10 months old, reds and roans, dandies. Females of the best milking strain. **Chas. Currie, Morrison, Ont.**

Berkshire Pigs Registered stock, choicely bred, young boars and sows in pig, all ages. Can supply pairs not akin.
CREDIT GRANGE FARM, J. B. Pearson, Mgr. Meadowvale, Ont.

Yorkshires Sows bred, others ready to breed from carefully selected stock.
Shropshires Ewes, 2 to 4 years, ewe and ram lambs. Write us your wants.
WM. MANNING & SONS, Woodville, Ont.

TAMWORTH'S

Young sows bred for September farrow, and some nice young boars. Write:
JOHN W. TODD, R.R. No. 1, Corinth, Ont.

CLEARVIEW CHESTER WHITES
 For many years my herd has won the highest honors at Toronto, London, Ottawa and Guelph. For sale are both sexes of any desired age, bred from winners and champions.
D. DeCoursey, R.R. No. 5, Mitchell, Ontario

Lakeview Yorkshires—If you want a brood of the greatest strain of the breed (Cinderella), bred from prizewinners for generations back, write me. Young pigs of all ages.
JOHN DUCK, Port Credit, Ontario

Cloverdale Berkshires and Shropshires—In Berkshires I can furnish boars or sows, all ages, pairs not akin. All breeding stock imp. or from imp. stock. In Shropshires can furnish rams or ewes, any age, from imp. stock. Prices reasonable.
G. J. Lang, R.R. No. 3, Burketon, Ont.

Questions and Answers, Miscellaneous.

Miscellaneous Questions.

1. If my pigs run on my own farm and my neighbor's fence will not keep my pigs out of his farm, can he put my pigs in pound and collect damage?
2. Where the township council does not collect a dog tax, are they compelled to pay for sheep killed by dogs?
3. Can an assessor assess a landlord who keeps part of the house for his furniture, but does not live there?
4. Can a man collect pay for the loss of his dog if he is run over and killed while chasing an automobile?
5. A cow lying on the road at night is run into by an automobile. The car is damaged and some of the occupants in the car are hurt. Is the owner of the cow subject to damages?
6. Can I trap fur-bearing animals without procuring a license?
7. What is the law regarding spraying of fruit trees when they are in full blossom? Some growers in the neighborhood sprayed their trees when the blossoms were out and killed a number of bees.
8. Give the names of roses which are hardy enough to endure the winter of Eastern Ontario.
9. What are the most productive and best market varieties of plums and cherries?
10. What is the salary paid the Governor General of Canada and also the Lieutenant Governor of Ontario.

J. L.
 Ans.—1. It is advisable to consult the Township fence viewers and have them pronounce on the stability of the fence. If they condemn the fence, then the neighbor has no authority for collecting damages, if the pigs gain entrance to his farm through his own fence.

2. According to the Act the council is supposed to make good a certain percentage of the loss of sheep killed by dogs. It is the council's fault that they do not collect the dog tax.

3. The house cannot be assessed twice. If the tenant is assessed for the whole house and pays taxes, it will be necessary for him to make it right with the landlord regarding the share of taxes he should pay for the rooms he has reserved.

4. No.
 5. A cow has no right on the road unless accompanied by an attendant. Therefore the owner is subject to any damages which might result in the cow interfering with traffic.

6. We believe so, during open season. There are certain animals such as deer, for which a license must be procured for anyone to hunt them.

7. The law forbids spraying a tree with any poisonous material when the blossoms are open.

8. Frau Karl Druschki H. P.; Her Majesty H. P.; General Jacqueminat H. P.; Hugh Dickson; Ulrich Brunner, H. P.; Dean Hole, H. T.; Conrad F. Meyer; Madame Georges Bruant, Admiral Dewey, Victor Verdier. Climbing roses, not particularly hardy in the East: Crimson Rambler, Dorothy Perkins, and Lady Gay. For a complete list of roses which have been experimented with and tried out at the Ottawa Experimental Farm, write W. T. Macoun, Dominion Horticulturist for Bulletin No. 85, on Hardy-Roses, their culture in Canada. This bulletin contains valuable information relative to the varieties and culture of roses.

9. Varieties of plums recommended: Abundance, Burbank, Bradshaw, Lombard, R. in Claude, Monarch. Cherries: Early Richmond and Montmorency for the sour, Black Tartarian and Windsor for the sweet varieties. There are numerous other varieties of both plums and cherries on the market which some growers prefer to those mentioned. However, the varieties named are among the most popular.

10. The salary paid the Governor General of Canada is \$57,000, and the Lieutenant Governor of Ontario is \$12,000.

The Farmers' Union of Ontario has a plan to reduce the tolls on the highways. It is about to introduce a bill which will throw the tolls on the highways into the hands of the farmers. By this means the tolls at the highways will be reduced in number.

Power Makes Farms Pay



Put our Engine on your farm to give you power. Then plan to use power, instead of muscle, for every possible farm job. With it, separate cream, pump water, saw wood, grind chop, clean grain, pulp roots, mix feeds, etc. The jobs done in half the time. Besides, you can save a hired man's wages and yet raise more beef and pork than now. This Chapman Engine has the working parts in a detachable box. In case of trouble, ship us only the box by express, instead of the whole engine by slow freight, or lose time waiting for an expert to come, as with other engines. With ours, ship us the box only, we rush it back, saving time and money.

Our AIRMOTOR, with or without tank on tower, pumps water for your barn and house—no fuel cost. Write for our Engine or Airmotor Catalogue, ask for our catalogue on chop mills, feed grinders, saw tables, fire pumps, piping, stall water basins, house water systems, etc. Ask for it to-day.

Ontario Wind Engine & Pump Co., Ltd.
 93 Atlantic Ave., Toronto.
 Branches: Montreal, Winnipeg, Regina, Calgary.

Our Grind-er at the left saves mill fees, and does your grinding for feed. Ask for prices. A big boon to farmers.

It Kills Lice on Cattle, Pigs, Sheep, Poultry.

THE GREAT COAL TAR DISINFECTANT
ZENOLEUM
 MADE IN CANADA

Zenoleum is recommended by Veterinarians, Agricultural Colleges, Breeders, Stockmen and Poultrymen all over the continent. Non-injurious, non-inflammable, cheapest and best of germicides. One \$1.50 gal. tin makes 80 gals. dip. Your dealer can supply Zenoleum, or we will ship carriage paid, on receipt of price. Various sizes—5c., 10c., 25c., 50c., \$1.50. Write for FREE book—"How to Cure Sick Live Stock." **ZENNER DISINFECTANT CO., Sandwich Street WINDSOR, Ont.**

Cotton Seed Meal

In car lots and L. C. L. Write, phone, or wire for prices.
THE CHISHOLM MILLING CO., Limited Toronto, Ontario

Harab-Davies Fertilizers

Yield Big Results
 Write for Booklet.
THE ONTARIO FERTILIZERS, LTD. West Toronto

Yorkshires and Berkshires

I have for immediate sale several Yorkshire hogs and sows 7 months and over. Also 1 Berkshire hog 2½ years old, a prize-winner. He is the improved type, very long. All hogs guaranteed to satisfy. All bargains if sold at once.

W. G. BAILEY, Prop. R.R. No. 4, Paris, Ont.

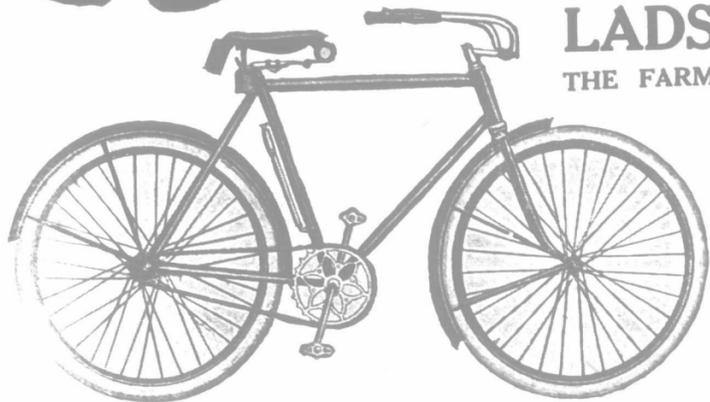
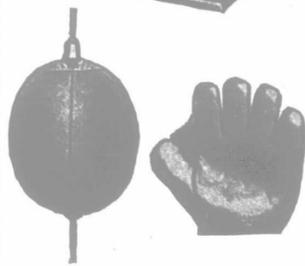
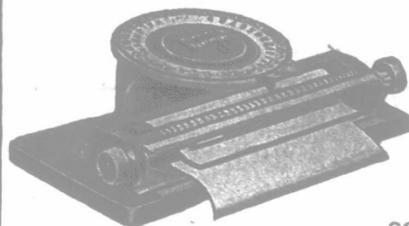
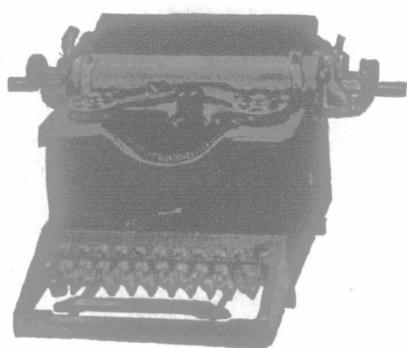
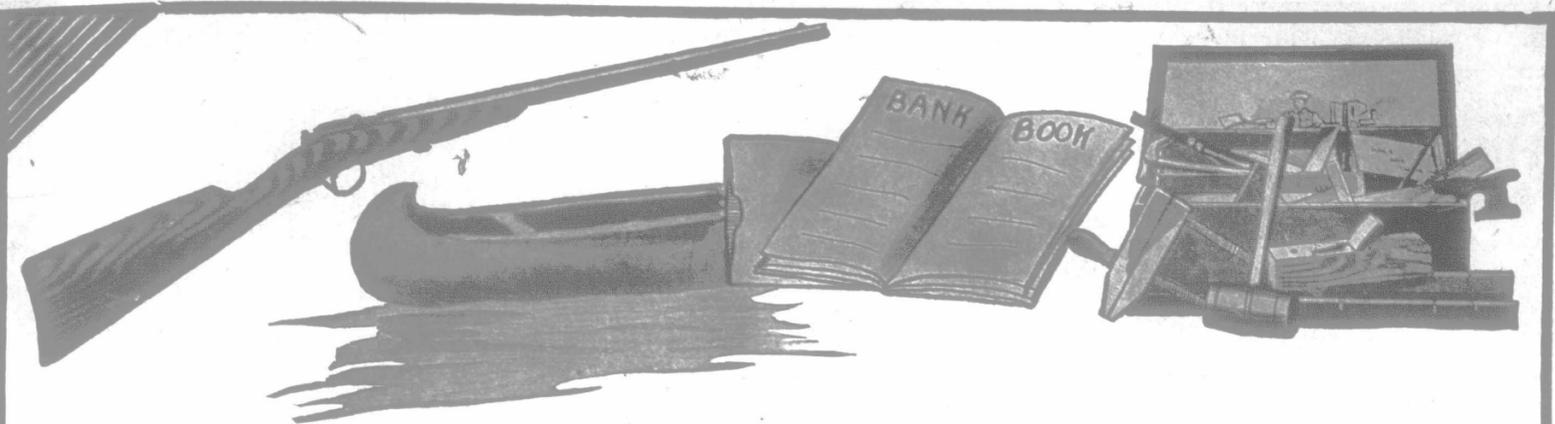
Newcastle Herd of Tamworths and Shorthorns—Stock boar and 2 aged sows for sale; fit for any show ring; also boars ready for service, and a number of sows bred for imported and championship stock. A few choice bull calves, from 2 weeks up to a year old, from Broadlands, my present stock bull. Show stock a specialty. Prices reasonable. Long-distance phone. **A.A. COLWILL, R.M.D. No. 1, Newcastle, Ont.**

Oak Lodge Yorkshires We are in a position to supply boars and sows of different ages. We have an established type of Yorkshires that has been produced through many years of careful breeding and selection.
J. E. BRETHOUR & NEPHEWS, Burford, Brant County, Ont.

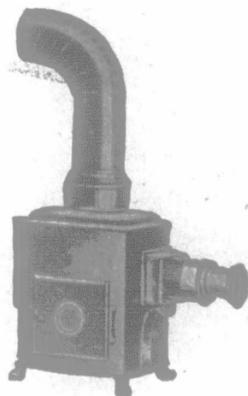
ELMHURST LARGE ENGLISH BERKSHIRES
 From our recent importation of sows, together with the stock boar, Suddon Torredor, we can supply select breeding stock, all ages. Satisfaction and safe delivery guaranteed.
H. M. VANDERLIP, Breeder and Importer, R. R. 1, Brantford, Ontario Langford Station on Brantford and Hamilton Radial

CHERRY LANE BERKSHIRES AND TAMWORTH'S
 In 1915 we made a clean sweep at all the Western shows in Berkshires and Tamworths; we have for both breeds of any desired age, winners in the West. First and third prize Berkshire boars at Guelph, first and champion Tamworth boar at Guelph.
S. Dolson & Son, Norval Station, Ont.

DUROC JERSEY SWINE, JERSEY CATTLE
 In Duroc Jerseys we have either sex of any desired age, bred from winners and champions for many years. In Jerseys we have young cows in calf and young bulls, high in quality and high in milk production.
MAC CAMPBELL & SONS, NORTHWOOD, ONT.



This page is for the boys



THE FARMER'S ADVOCATE helps boys to earn money getting new readers for the paper at \$1.50 a year.

If you have been wanting something for a long time and haven't been able to get it, why not EARN it yourself. All the things you see pictured here can be got. What will get them? Money!

How can you get the money? By doing easy, pleasant work in your district for this paper.

You can earn a few dollars the very first day, and work up a good business for yourself that will grow and grow. First thing to do is to fill in and mail us the coupon. If you like to write us a letter, too, we will be glad to have you tell us all about yourself.

Plenty of boys like you are making good money working for The Farmer's Advocate, and we want to see you get started, too; but don't write in unless you mean business. If you intend to work sincerely, send in the coupon to-day to:

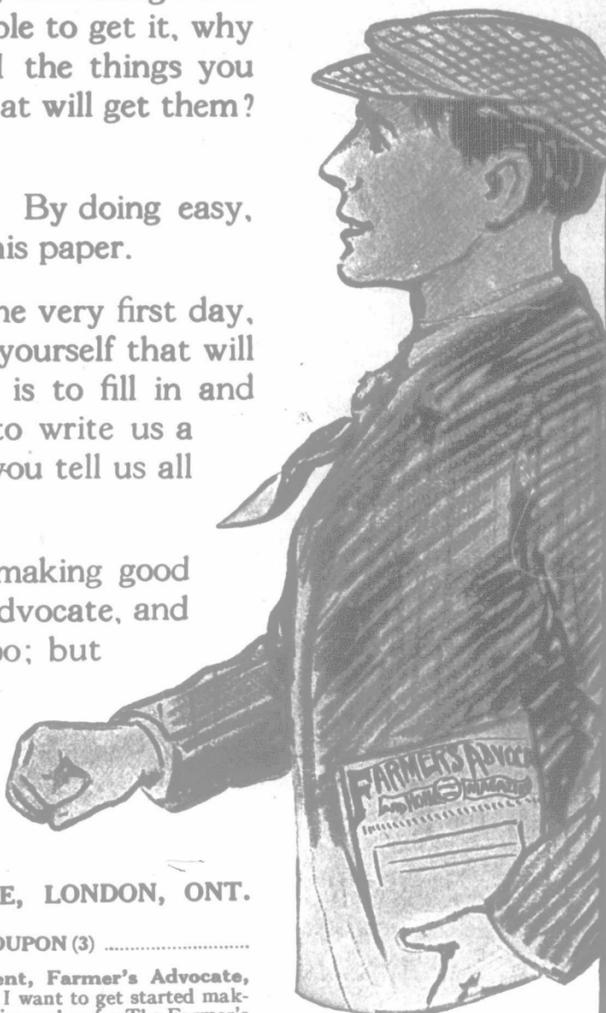
LADS' DEPT.
THE FARMER'S ADVOCATE, LONDON, ONT.

..... COUPON (3)

Lads' Department, Farmer's Advocate, London, Ont.: I want to get started making money by taking orders for The Farmer's Advocate. Please send information.

Name.....

Address.....



A Whale for Work

Willys KNIGHT

Sleeve-Valve Motor

- ☛ When it comes to pulling long hard hills with twisting, turning country roads—
- ☛ When it comes down to real work, day in and day out, month after month, year after year—
- ☛ The Willys-Knight is the one type of motor that can stand up and deliver—never weakening but getting stronger all the time.
- ☛ It's the sleeve-valve motor—the Willys-Knight motor—a whale for work—and always at it.
- ☛ Carbon doesn't hurt it—valves can't get out of adjustment—so you say good-bye to the two chief causes of motor layups, when you get a Willys-Knight.
- ☛ It will pile up thousands upon thousands of miles more running than you can get out of any other type of motor.
- ☛ And the last miles will be better than the first.
- ☛ The motor almost never needs go to the shop—
- ☛ That's a vital advantage to the man who doesn't live on a paved street next door to the garage.
- ☛ Besides all the tremendous advantages of the Willys-Knight motor for everyday work in any kind of weather on every kind of road, the Willys-Knight has everything else you could ask in a strictly up-to-date motor car.
- ☛ Style—beauty—
- ☛ Comfort—conveniences.
- ☛ Is there any doubt in your mind about what car belongs on the farm? There's only one answer—
- ☛ It's the Willys-Knight—the beautiful car with the work-motor.
- ☛ See the Overland dealer—he'll show you the simple mechanical reasons for the greater power, durability and economy of the Willys-Knight motor.
- ☛ Get right down to business with him—go to the bottom of this motor question—get a Willys-Knight and know the satisfaction no other motor car can give you.

Catalogue on request. Please address Department 847

Willys-Overland, Limited

Head Office and Works, West Toronto, Canada