

1918  
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# THE FARMER'S ADVOCATE

AND HOME MAGAZINE

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FOUNDED 1880

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

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Vol. LIII.

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LONDON, ONTARIO, MAY 16, 1918.

No. 1338

## A Kitchen Reference Book : THE PURITY FLOUR Cook Book

Reviewed by the Domestic Science Department of Macdonald College

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## HAY-MAKING A PLEASURE

### FROST & WOOD "CHAMPION" SIDE DELIVERY RAKE

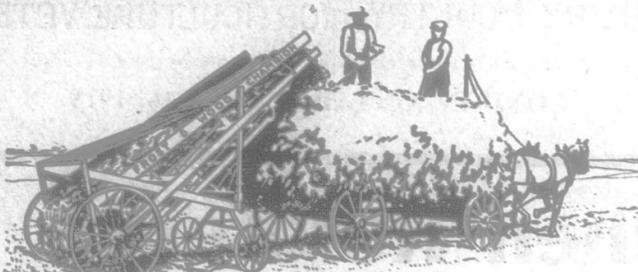
Cleans up a wide swath and gives you a nice, even, loosely-piled windrow, through which the air can circulate and give you perfectly-cured hay. The three tooth-bars, arranged on a cylinder, give a perfect clean-up. No work about it—all you do is drive. This Rake is made of the highest grade materials, rigidly braced, and will handle the heaviest crop.



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Limited  
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Sold in Western Ontario and  
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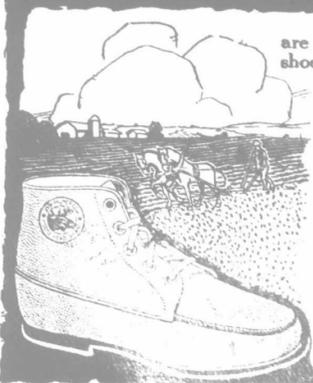
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Excellent hotel service at the  
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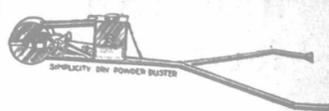
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**Y**OUR son or daughter will be able to handle your shopping in town,—to take your produce to market, or to invite "hands" to the threshing or silo-filling, if you own a Ford. Furthermore they always will be glad to make the trips.

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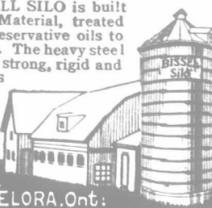
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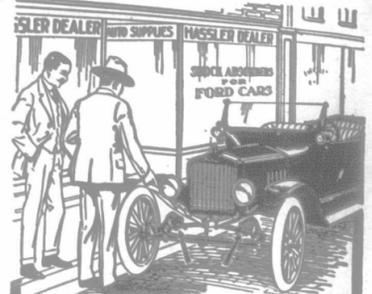
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**F**OR ten days we want to transform your Ford into a \$2,000 car. We will do this by putting on a set of Hassler Shock Absorbers.

If you are willing, we will take them back without question when the ten days have elapsed. But you won't bring them back.



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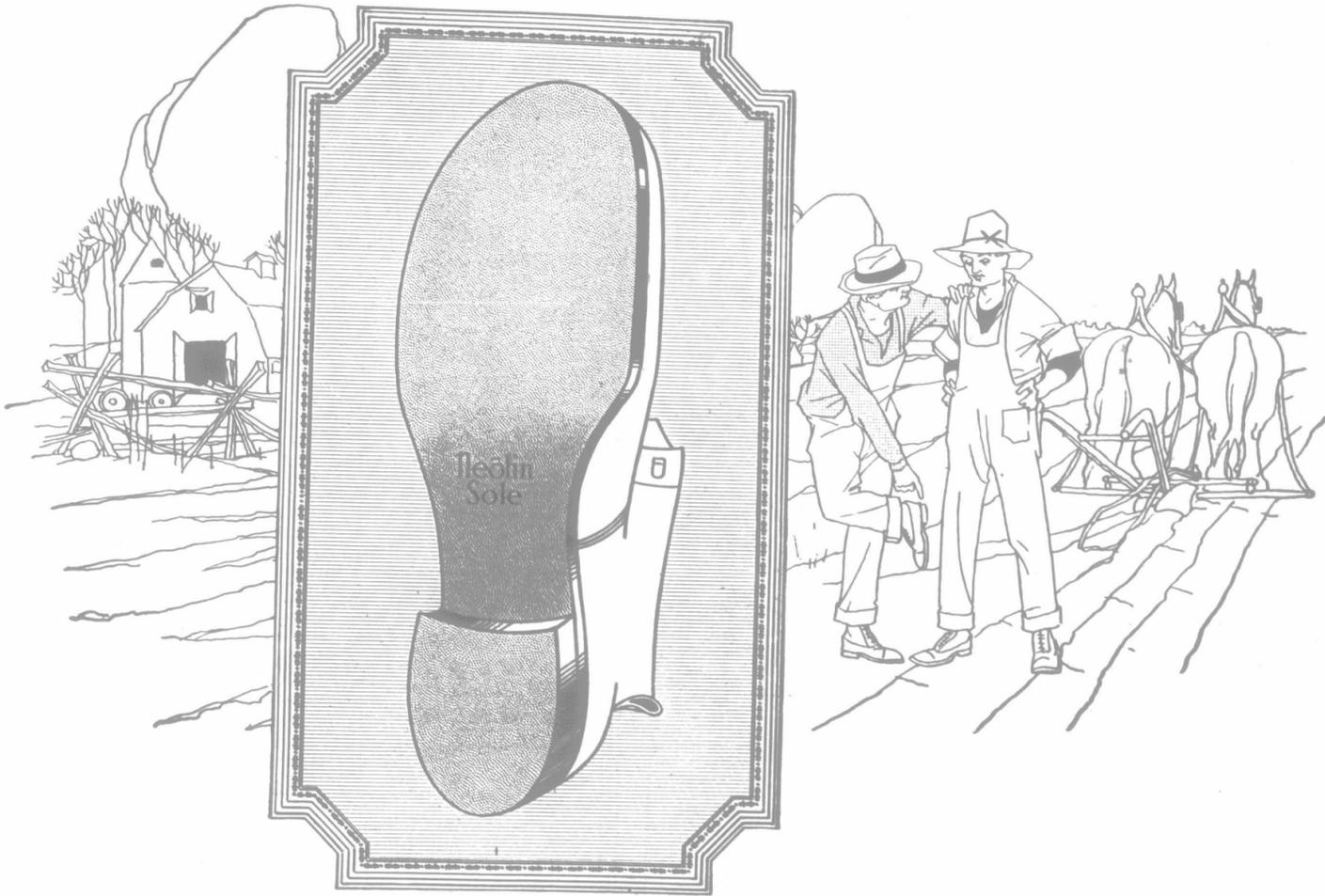
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## Neolin Now for Work Boots

**I**N two years Neolin has proven to millions that it is better than anything ever used for the soles of boots.

Neolin makes shoes easier on the feet. It is pliable, springy, "gives" with the step.

Neolin keeps out the wet. It is water-tight.

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There are many grades of leather, but Neolin is always the same. No matter what the price of the shoe, "Neolin" stamped on the sole means the longest wear you can get from a sole.

Some thousands of pairs of Neolin Soles are bought in Canada every day—millions of people would hardly buy Neolin, and even pay more for it, were it not better than leather.

This hard-wearing sole, this water-tight sole, this pliable, comfortable sole, this Neolin, proved absolutely to thrifty buyers that it was better than leather.

Now Neolin is being put on Work Boots, for people on the farms. There are several thicknesses of Neolin Soles.

Everyday work boots with Neolin Soles will now be comfortable as old Sunday shoes. They will *keep* pliable. They won't get hard, and curl with the wet.

Every man on his feet as much as a farmer should wear Neolin for the extra ease on his feet every day. The dryness for dewy mornings and showers is an extra comfort.

Everybody who sells shoes can quickly supply you shoes with Neolin Soles. Shoe-repair men, hardware stores and general stores have half-soles for your old shoes.

Try them—but do look for the word "Neolin" stamped on the soles, so you don't get fooled with something else.

THE GOODYEAR TIRE AND RUBBER COMPANY OF CANADA, LIMITED

# Neolin Soles

# PEERLESS PERFECTION

In all that represents strength, character, real worth, permanency and the elements which builder and buyer recognize as the stamp of honest accomplishment,

## The Peerless Perfection Fencing

stands every test. Made by the open hearth process, all the impurities are burned out of the metal, thus removing one of the greatest causes of rust. The wire is also galvanized so thoroughly that it will not flake, chip or peel off. Every intersection of the wires in our farm and poultry fence is locked together with our Peerless lock. While these locks



hold the wires securely together, yet this fence can be readily adjusted and perfectly stretched over uneven ground. It's easily erected and on account of heavy, stiff stays used, few posts are required.

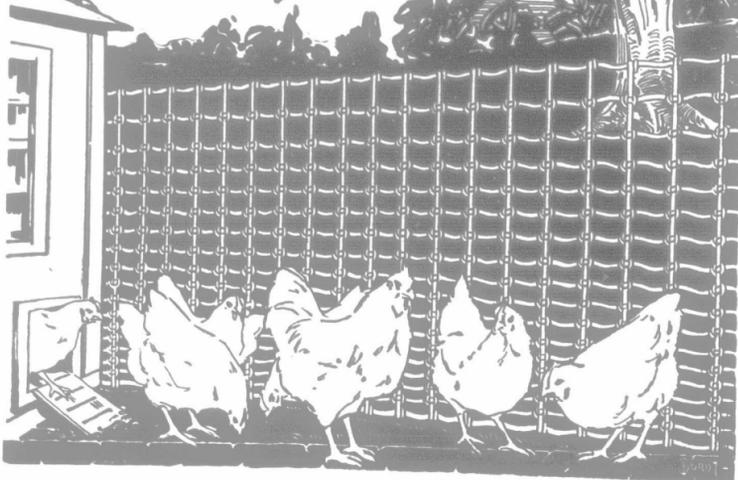
## PEERLESS Perfection Poultry Fence

is true to its name, a perfect fence strong enough to keep strong animals out and close enough to keep even small poultry in. Every Peerless fence is guaranteed against sag, rust or break and we stand back of your dealer unconditionally.

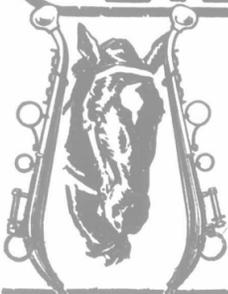
## PEERLESS Ornamental Fencing

for lawns, parks, cemeteries, etc., are handsome. Also lawn borders, flower bed guards, trellises, etc. **Send for Catalog** and get familiar with the best, cheap ornamental and serviceable fencing to be had in the Dominion. Go and see it at your local dealer's store. Dealers nearly everywhere. Dealers wanted in unassigned territory.

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### STRONG - WON'T BREAK

Draft studs; forged steel-rings electrically welded; Anti rust treated water proof, weather proof.

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—not from a wooden storage tank, but direct from the well, spring or cistern—by means of an Empire Water Supply System.

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## Empire WATER SUPPLY System

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Fresh Water — and plenty of it—also improves the health of live stock and cuts down feeding costs.

### WRITE FOR FREE BOOKLET TO-DAY

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

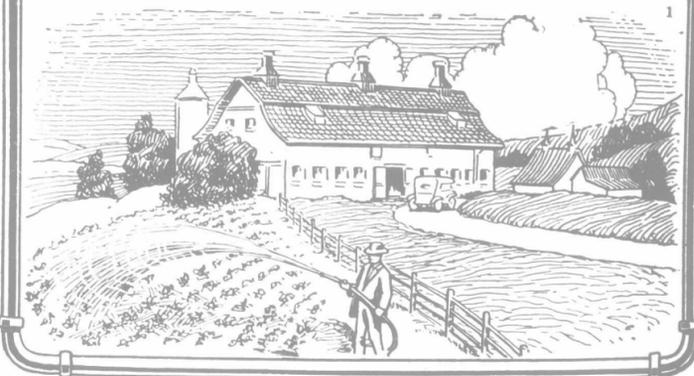
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Iron rods make unsatisfactory hoops. They can't expand and they are hard to put on. Our patented, seven-strand, steel cable bands, with cast steel couplings, stretch or contract, as the silo is full or empty. They are easily put on, and make the perfect silo hoop.

Only No. 1 Norway Pine is good enough for Burlington Cable Band. The staves are 2 inches thick and matched at both sides and ends. All staves are treated with a wood preservative and red, waterproof paint, making the silo vermin-proof, air-tight and waterproof.

## Burlington Cable Band Silos

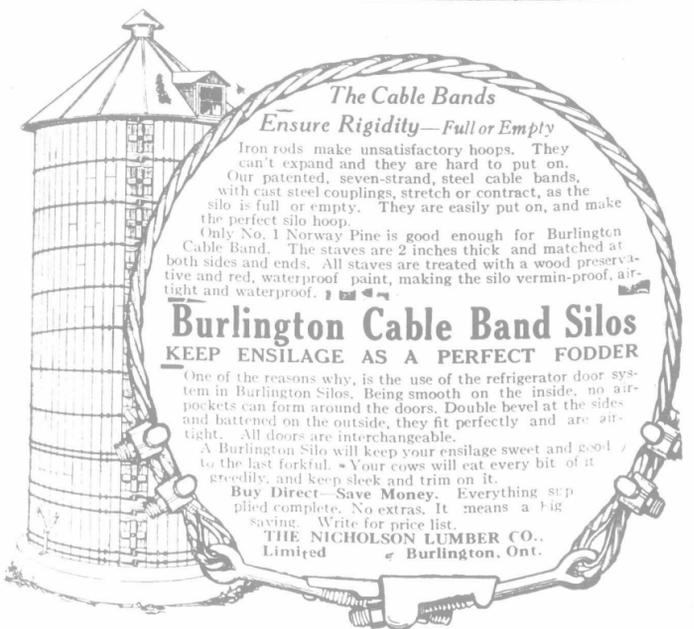
### KEEP ENSILAGE AS A PERFECT FODDER

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A Burlington Silo will keep your ensilage sweet and good to the last forkful. Your cows will eat every bit of it greedily, and keep sleek and trim on it.

**Buy Direct—Save Money.** Everything supplied complete. No extras. It means a big saving. Write for price list.

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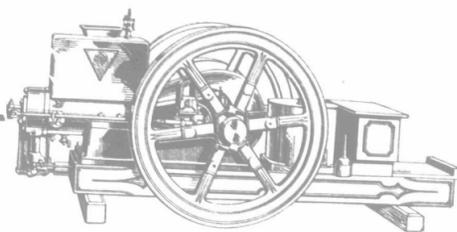
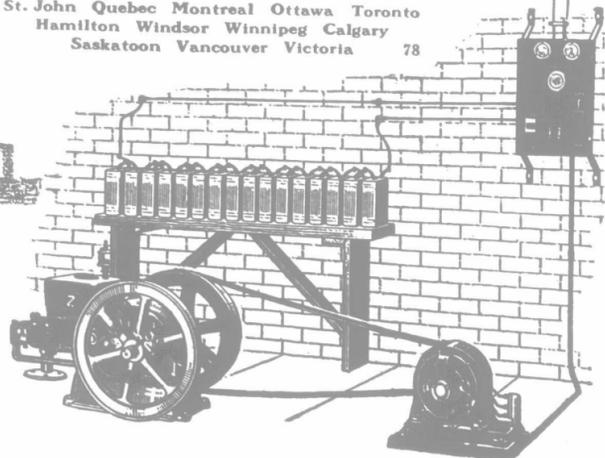
### Fairbanks-Morse Type "F" Electric Light Plant

—the plant that guarantees a 24-hour-a-day electric service on your farm. A Type "F" plant means all the lights you want in the home, stable and other buildings—all the comforts and convenience of the city. The ironing, the washing, the churning and many other household duties are made easier. The Type "F" operates 50, 65, 100 or 200 lights, according to the plant. It is complete, simple and easily installed. The engine is a separate unit and provides surplus power for other work while charging batteries, or its full power may be used to operate other farm machinery.

Write today for full particulars regarding this equipment for your country home.

The Canadian Fairbanks-Morse Co., Limited

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**D**EPENDABILITY is the keynote of the Alpha. It RUNS when you want it to—chugs away all day and you never need to think about it.

It's always reliable; always ready.

Why?

Because it's so simply and sturdily designed and so expertly and honestly built.

There's nothing complicated about the Alpha—no electric batteries; no delicate attachments to "keep you guessing."

Just oil it; turn on the fuel—either gasoline or kerosene—and the Alpha does the rest.

It takes a whole lot of the drudgery out of farmwork, and, in addition, saves time and fuel.

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Alpha Gas Engines are made in 12 sizes, 1½ to 28 H. P., and in stationary, semi-portable or portable style, with hopper or tank-cooled cylinder.

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MONTREAL PETERBORO WINNIPEG VANCOUVER  
50,000 BRANCHES AND LOCAL AGENCIES THE WORLD OVER

ONTARIO WIND ENGINE & PUMP CO. LIMITED

# TORONTO SILOS

### See the Hip Roof

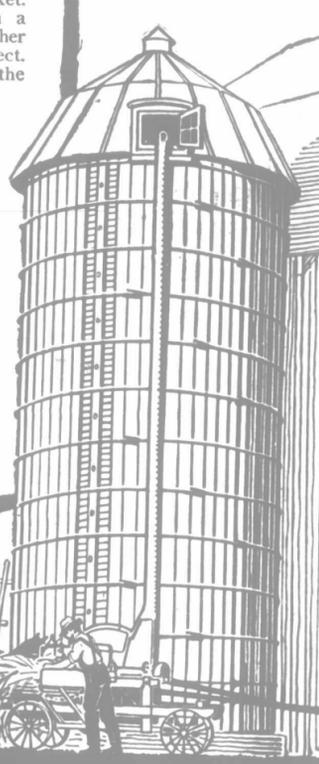
**I**T will put money in your pocket. Get tons more ensilage in a Toronto Silo than in any other silo costing about the same to erect. The hip roof lets you tramp down the ensilage right up to the top of the walls.

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

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

Ontario Wind Engine & Pump Co., Limited

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Dunlop Tires—"Traction,"

"Special"—represent doing

best what other tires may

have been trying to do well.

### "Masters of the Road"

A.95

# DUNLOP TIRES

# GALVANIZED American Steel Fence Posts

STAND FOR

## Durability - Service - Economy

The up-to-date, progressive farmer is confronted with the necessity of finding a satisfactory substitute for wood posts, not only on account of the scarcity of timber, but also on account of the rapidly increasing price of lumber and the scarcity of labor.

Steel is the only logical substitute, because it is more durable and less expensive in the long run. Steel is being substituted for wood in many lines of commerce and it is only natural that steel should replace wood on the farm.

The average life of a wood post is very short, whereas the life of the American GALVANIZED Steel Post is indefinite. There are no culls; every post is a perfect one. No staples are required, which in itself represents quite a saving of money, time and labor.

They possess sufficient strength and flexibility for the purpose they are called upon to serve.

They are not damaged by fire, lightning, heat, cold, or moisture, like the old-time wood post. They are uniform in size, length and appearance. They occupy less space than a wood post. They are adapted for any style of woven wire fence, barbed or smooth wire.

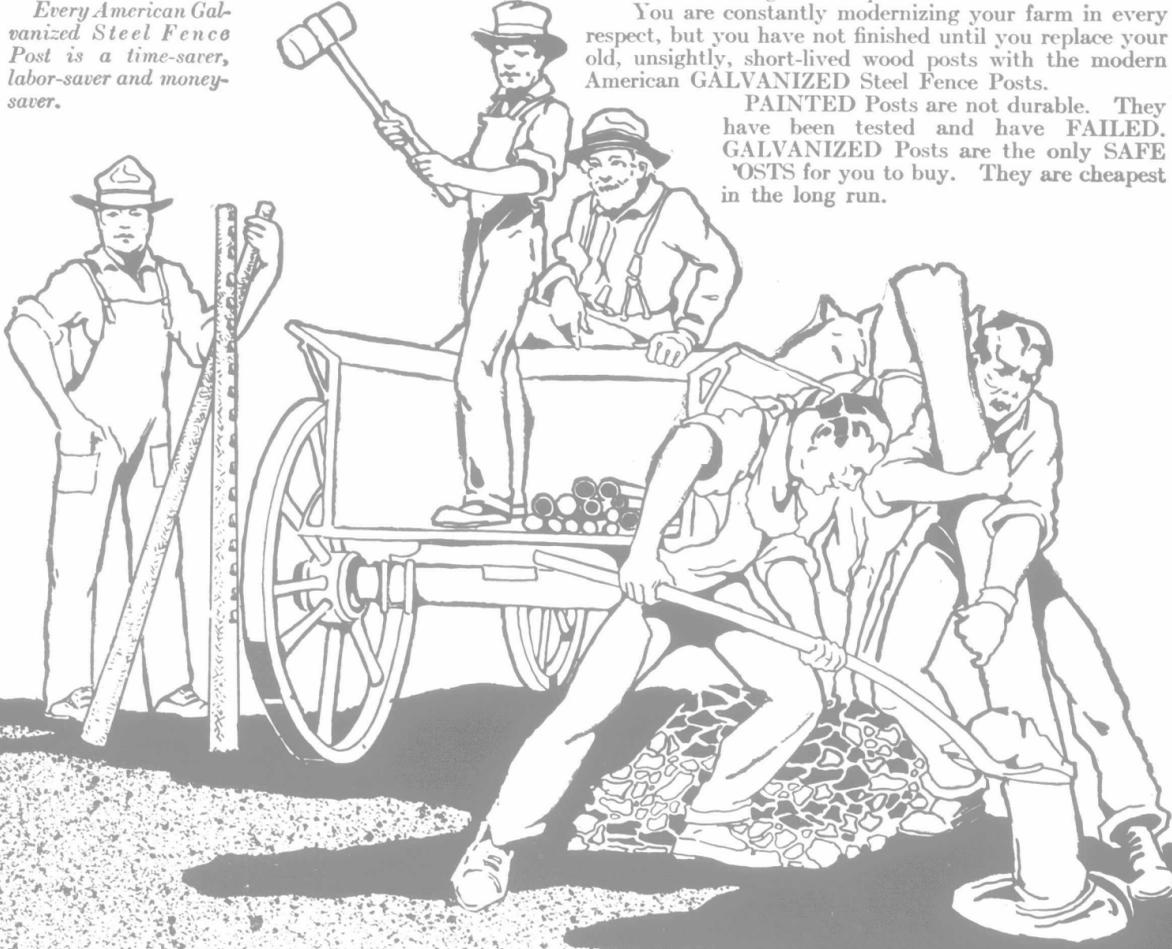
In ordinary soil, the line post can be driven. Two to three hundred American Posts can be set, very easily, in one day, whereas the setting of thirty to forty wood posts represents a full day's work and requires much heavier labor.

One of the most important reasons why you should use American GALVANIZED Steel Posts, is because every post is a perfect lightning conductor. Thousands upon thousands of dollars of valuable stock is killed annually as a result of using WOOD posts.

*Every American Galvanized Steel Fence Post is a time-saver, labor-saver and money-saver.*

You are constantly modernizing your farm in every respect, but you have not finished until you replace your old, unsightly, short-lived wood posts with the modern American GALVANIZED Steel Fence Posts.

PAINTED Posts are not durable. They have been tested and have FAILED. GALVANIZED Posts are the only SAFE POSTS for you to buy. They are cheapest in the long run.



Manufactured by

### THE CANADIAN STEEL AND WIRE CO., Limited

Hamilton, Ontario

Winnipeg, Manitoba

LIII.

Is the wo

Banish th

Once aga  
fleece.

Scabby  
kind unless t

If half th  
not a very pl

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# The Farmer's Advocate and Home Magazine

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1866

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875

LIII.

LONDON, ONTARIO, MAY 16, 1918.

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## EDITORIAL.

Is the wool clip stored in a dry place?

Banish the scrub sire for good and all.

Once again, don't use binder twine for tying the fleece.

Scabby potatoes will likely produce after their kind unless treated with formalin.

If half the reports are true the Dual Monarchy is not a very pleasant ally for Germany.

Make all the pork possible on grass. It will save the grain and mean a larger profit.

Milk and its products are necessary foods. Don't substitute them with cheaper imitations.

Don't neglect to sow a field of rape. It will make excellent feed for sheep or hogs in the autumn. Even cattle will do well on it.

The amount of seed corn required per acre this spring will depend on the percentage of germination. Make the test; don't guess.

The growing shortage of labor on the farm increases the necessity for more co-operation and exchange of work between farmers.

The third Liberty Loan in the United States has been heavily over-subscribed. Every one is now willing to pay to see the Kaiser licked.

The man who buys an automobile under the new tax regulations is helping to win the war, and the more expensive the car the more he helps.

Are you keeping up with the Orders of the Food Control Board? One has to have a good memory or some Order might be violated unintentionally.

Canada's national debt is growing rapidly, and our obligations after the war is over will necessitate enormous production. In this the farm will play a leading role.

Since icing is now banished from the cake perhaps, we can get more good, old-fashioned ginger bread, which has never been excelled by the product of any fancy recipe.

Australia should not suffer any food shortage with five million tons of wheat stored awaiting bottoms now being built in America. Still grain production is being urged there.

It is time that non-essential industries were curtailed, especially when the most essential industry of all is being handicapped to an alarming extent through the lack of hands to do the work.

The recent advanced prices paid for butcher cattle have not been more than sufficient to allow the feeder, who put them in last fall at a long price, to clear himself and have something to show for his winter's work.

Sunday labor seems to be under discussion again. The question seemingly will not down. Outside of efforts necessary to save a crop nothing apparently can be gained by working seven days a week instead of six. A day on the farm is a real day, and Sunday should afford an opportunity for a real rest.

### What Only Butter-fat Can Do.

Now that the word "substitute" has become so popularized and people are replacing those foods needed Overseas with perishable articles of diet, we should take care that a great mistake is not made, an important industry handicapped and the vigor of the entire race impaired. We can substitute a great deal, that is true, and by careful conservation we can add to the volume of beef and bacon which we have to spare; but in our enthusiasm there is a danger of saving that which it is unnecessary to save and going far enough to injure health and lessen the chances of our children developing into men and women equal to their forebears. Scientists have come to the conclusion that certain foods may contain all the necessary ingredients of a suitable diet so far as the demands for protein, starches, sugars, fats, etc., are concerned, and yet lack the very elements essential to life. According to Dr. E. V. McCollum, of John Hopkins University, there are only two foods upon which one can depend to supply these life-sustaining parts; they are called "protective foods" because they make good the dietary deficiencies of the long list of other articles commonly used. These protective foods are: "first of all, milk; that is the best one there is. The second best is the leaf of the plant." In an interesting address before the National Dairy Conference of the United States, Dr. McCollum pointed out that some peoples, such as the Oriental races, neglected dairy products and resorted largely to the leaves of plants as a protective food. In comparison with some European races and inhabitants of the western world the Orientals, he said, were inferior, and there was ample proof that nations which used milk and milk products freely were ever at the front in the matter of human achievement in any field of activity. Dr. McCollum also asserted that the infant mortality in the non-milk-consuming countries was higher than in even the worst part of the United States. Furthermore, vegetable fats do not function the same as butter-fat, nor can they in any way replace it as one of the protective foods.

In the face of these unchallenged facts the blunder should not be made of substituting a great national product, such as butter, with a composition of vegetable and animal fats which, while it may satisfy the eye and the taste, cannot function in the upbuilding of a sturdy race, free from disease. Milk and its products make good the dietary deficiencies in whatever kinds of food we care to eat, and products of the dairy should be widely used during this period of substitution and conservation.

### Getting Acquainted Abroad.

Owing to the modest manner of Canadians and our methods of marketing, the products of this country are not known abroad as well as they should be. We have been too quiet and have not blown our own horn loud enough to be heard in the din of national advertising. This is particularly true in regard to our live stock and farm products. Dr. Issa Tanimura, Commissioner of Live Stock for the Japanese Government, when making a tour recently through Canada, told a representative of this paper that choice Canadian products are used in Japan, but we do not get the credit for them. As an instance of this he said that the Japanese were under the impression that Canadian breeders went to the United States for their good sheep, but he had found, upon thorough inspection, that the reverse was true. Dr. Tanimura was particularly interested in this class of live stock, and his acknowledgement of the facts was gratifying indeed. In regard to our wheat he also remarked that extra good flour had been purchased in his country, and the buyers were under the impression all the time that it originated in the United States, when in fact it was made from the choice product of the Canadian Prairie. The Commissioner suggested that mutual benefit to both countries would accrue if Canada adver-

tised herself more in Japan, and made known the good qualities of our live stock, for such is required there to replenish and improve the herds and flocks they already have. What is true in Japan must be true, to a greater or less extent, in other commonwealths. We are known far enough but not well enough. Through the Department of Trade and Commerce, Canadian manufactured articles have been heralded abroad, which is good business, since it enlarges the market and thus builds up the industries at home. The Canadian National Live Stock Council might impress upon the Government the necessity of a similar policy in regard to our live stock, and advise them in any action they might see fit to take. The time is quickly coming when Canada will be in a position to fill large orders for good stuff; and the earlier the demand comes the sooner will we be prepared to supply it. We must look ahead in matters pertaining to the development of agriculture in this Dominion, for we have only touched the fringe of our possibilities and a great future lies before.

### Our Imperative Duty.

The financial transactions of the nations are bewildering to the lay mind, and even experts must find the maze of figures, with which they deal, more or less perplexing. However, one phase of this colossal scheme of finance is plain to all Canadians, namely, that the country must have revenue and some form of credit must be advanced to Britain in order that trade may not suffer. England is now a borrowing instead of a loaning nation, but when our cheese, our wheat, or our manufactured articles go to the Allies they must be settled for in some way or the producer would soon be without funds with which to "Carry on." According to the recent Budget, exports to Great Britain last year amounted to about \$850,000,000, while our imports rose to only \$81,000,000 from that source. We had at the same time an unfavorable trade balance with the United States approximating \$350,000,000, and in normal times this would be easily offset by the moneys receivable from Great Britain. That procedure is now changed, and since July last Britain has been obliged to secure dollar credits for her purchases in Canada, in order that trade might go on. It is manifest that commercial disaster would follow any failure on the part of the Dominion to advance credits to our European Allies, or to sell to them on the strength of credits advanced by the neighboring Republic. The Canadian Government has made advances to Great Britain of \$25,000,000 per month; the Canadian banks have made advances to the British Government totalling \$200,000,000, on the security of Imperial Treasury Bills, and the Government of the United States has established credits for British purposes in this country. All this is necessary in order that industries may continue and agricultural products move to those markets which constitute the natural outlet for the results of our labor. The Acting Minister of Finance emphasized these facts when presenting the Budget, but it was furthermore made plain that after all sources of revenue are exhausted there will probably be a balance of some \$280,000,000 which must be raised to carry on the war and the business of the current year. There is only one way left whereby this vast amount of money can be gathered together for public use, and that is through the sale of Victory Bonds, which simply means that the people must lend the money to the Government. In this regard Mr. Maclean said: "I want to make it clear that if we are to continue our part in the war and maintain our overseas trade at its present dimensions, the people of Canada must loan to the Government the money to accomplish that end. That is, they must, year after year, purchase Victory Bonds."

This part of the perplexing conditions of finance is evident to even the uninitiated, for without funds our Governments would be as helpless as an army without

**The Farmer's Advocate  
AND HOME MAGAZINE.**

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DOMINION.

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JOHN WELD, Manager.

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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.
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London, Canada

supplies. Business must go on; wheat, bacon, cheese and other exportable farm products must move freely or our agriculture would be seriously handicapped. Manufactured articles must be placed on the market or the country would come face to face with commercial disaster, and the wheels would stop. When purchasing Victory Bonds, the buyer is making a first-class investment, for the security is good and the rate of interest compares very favorably with that now being realized on investments with similar freedom from risk. Bonds were a new thing to many when the last loan was floated, but that strangeness has been dissipated and practically all who give the matter any attention, realize that it is our imperative duty to invest in the country's resources in order that we may carry on to the end. A period of saving is now in our hands that we may be prepared to answer effectively our country's call when the next appeal is made.

**Nature's Diary.**

A. B. KLUUGH, M. A.

During the next two weeks people living in districts in which the White-marked Tussock Moth was common last year should make every effort to remove as many egg-masses of this pest as possible, as the eggs will begin to hatch about the end of May.

The White-marked Tussock Moth is chiefly injurious to shade-trees, particularly to Soft Maples, Elms and Horse Chestnuts, but it also sometimes attacks the Apple, Pear, Plum, Cherry, Black Walnut and Hickory. It is usually most destructive in cities, towns and large villages, the reason apparently being that in these places House Sparrows are abundant and this bird not only does not feed on the Tussock caterpillars itself but has driven away many native birds which do feed upon this pest.

The life-history of the White-marked Tussock Moth is as follows: From the eggs, which hatch at the end of May or early in June, there emerges a tiny caterpillar, one-twelfth of an inch in length, very pale yellow in color and covered with long irregular hairs. The caterpillars feed upon the tender tissues of the expanding leaves, grow, and molt several times. From the time they are about half grown until they are mature they have the following appearance: The head is bright corded. At the head end are a pair of long, black, plum-like tufts and at the opposite end of the body is a single tuft of dark chestnut tipped with black. On the back are four white, or pale yellowish, dense, brush-like tufts. Along the back, except in the region occupied by the four white tufts, is a black line, and in the centre of this

on the sixth and seventh segments of the abdomen, are two red projections. Below this black line is a yellow stripe and below this a pearl gray stripe, bordered beneath by a fine black line. Below this line is a pale yellow stripe. The under surface is a pale green. In addition to the tufts mentioned above there are many long, bristly hairs on the body.

When the caterpillars are abundant they often completely defoliate the trees by eating all the substance of the leaves except the midrib and principal veins.

When the larvæ become mature, which in Ontario is about the first of August, they descend the trees and spin their cocoons in crevices in the bark of the trunk and main limbs, or on the underside of a branch just at the point at which it leaves a larger limb. They make their cocoons of silk interwoven with the long hairs which they pull from their bodies.

As soon as the cocoon is completed the caterpillar becomes shorter and thicker and gradually changes to a pupa, which at first is whitish but soon becomes a very dark brown color.

The pupal stage lasts from ten to fifteen days, at the end of which time the adults emerge. The male is a gray moth with wings about three-quarters of an inch across, the fore-wings having a small white spot, (hence the name of the species) and with feathery antennae, (feelers). The female is wingless and on emerging she crawls out upon her cocoon and deposits her 200 to 500 eggs upon it. The eggs are laid in a mass and they



Fig. 1—Cocoon of Pimpla. Fig. 2—Pimpla Inquisitor, female.

are covered with a viscid, creamy-white substance which hardens on exposure to the air and which not only holds the eggs in place but protects them against the weather. After the eggs are laid the female falls to the ground and dies. The eggs hatch the following spring and the life-history is repeated.

In Canada there is but one brood of this species per year, though further south there are two or three broods.

There is only really one feasible way of combatting the Tussock Moth, and that is to remove and burn the egg-masses. This may be done any time from September to the end of May. They are very easily removed either by hand or with a scraper on the end of a pole.

There is, however, one very important point to bear in mind in removing these egg-masses and that is—*leave alone all cocoons which do not bear egg-masses.* The reason for this injunction is that the cocoons which do not bear egg-masses may contain the cocoons of a little Hymenopterous parasite of the Tussock caterpillar. Some of the cocoons without egg-masses are those from which males have emerged and can do no harm, but a good many will be found to contain packets of little cocoons such as the packet shown cut across in Fig. 1. These are the cocoons of the commonest parasite of the Tussock caterpillar, which is a little fly-like insect known as *Pimpla inquisitor*, one of the Ichneumonidae, the adult female of which is shown in Fig. 2.

It is really upon the activities of parasitic insects such as *Pimpla* that we depend for checking the inordinate increase in numbers of injurious insects. In this respect birds count for a good deal, spraying and other efforts of man count for a good deal, but both are really only adjuncts to the work of the parasites.

The life-history of *Pimpla* is as follows: The female on emerging from her cocoon seeks out a Tussock caterpillar, or the larva of some other moth, as *Pimpla* is also parasitic upon several other species. If the caterpillar is still crawling about she inserts her ovipositor, (the projection shown in the figure at the posterior end of her body) into the body of the caterpillar, and lays her eggs in the tissues of the host. These eggs hatch into little grub-like larvæ which feed on the juices of the caterpillar. If the caterpillar has spun its cocoon *Pimpla* thrusts her ovipositor through the cocoon and lays her eggs on the body of the caterpillar, and when they hatch, which they do in a few hours, the larvæ suck the juices of the caterpillar. The result is that the caterpillar dies, either before changing to a pupa or immediately afterwards. The larvæ of *Pimpla* then make their little cocoons within the cocoon of the Tussock.

**How Sandy Views Farming.**

BY SANDY FRASER.

I hae just been readin' a wee editorial in the last "Farmer's Advocate" on the subject o' "Making Capital to Farm". It mentions the fact that a great many men say, when the subject of farming comes up, "I intend to return to the farm when I hae made enough money to start on a good footing." And oor editor is wonderin' what can the matter be with the business when a man has to hae enough money to live on before he can afford the luxury o' warkin' sixteen hours a day on a farm, wi' no holidays and half-time on Sundays. It reminds me o' a chap I wis pretty weel acquainted wi' at one time in my life. He wis quite a talker and could tell ye something about everything. One day he says to me, says he, "Sandy, I'm gaein' to try the wheat-ramin' in the West. There's mair money to be made there in one year than can be made here in five and when I've made enough sae that I can work or not, juist

as I feel like it, I'll be comin' back East again an' settlin' doon on a farm here that I'll rin in a way that it ought to be run, for I'll hae the money to do it." I didna' try to change his mind, for I had an idea that experience would do it better than I could, so he went off tae Manitoba where he got some land for little or naething in a place where the railroad was sure to go through in a couple o' years at the outside. It's a guid many years noo since he left his home here but he's still in the "golden West", as he used to call it, and he's still about as far frae a railroad as his grandfather wis when he cam' oot to this country first. Frae what I hae heard the only "up to the average" crop he has had in that time has been the harvest o' knowledge an' experience he has reaped, but na doot that has paid him weel for the loss of his iither crops. However he hasn't come back yet to show us how to rin a farm in the way it can be done with money made in some iither place or in anither business. To my mind he is one mair proof o' the rule that success in the making o' money, or almaist anything else for the matter o' that, depends mair on the man than it does on the job. There's men who don't seem to hae the right material in them to push them ahead in ony line, and again there seems to be very few trades or professions or jobs o' ony kind that someone hasn't made money at, or at least got a guid comfortable living by them. And money can be made at farming by ony man wi' the average amount o' brains, if he's willing tae pay the price. And that price is his undivided time an attention given to his business. He's got to wark wi' his head as weel as his hands and wi' his hands as weel as his head. The city merchant or manufacturer has no advantage over us farmers in this respect. A wee bit o' carelessness or ignorance and they go under like onybody else. They say that ninety-five per cent. o' the business men of the towns and cities fail at some time or iither in their careers, so if that's the case there's still something to be said for the farm as a means o' support for a man an' his wife, wi' maybe a few boys an' girls thrown in as weel. I dinna think ninety-five per cent. o' the farmers o' this country hae failed, onyway. And if a considerable number o' them are able to make enough to put a little to the good every year, besides having lived comfortably all the time, isn't it pretty good proof that the rest o' us who hae the same opportunities can dae as weel? I ken farmers who hae come to this part o' Ontario from the Province o' Quebec, and these men haven't even the advantage o' bein' able to read, but juist the same they hae bought farms here on credit and in the course of a few years have not only paid for them but have bought and paid for farms for twa or three o' their sons. But they didn't dae it by spendin' their time lookin' for an easier job or one that had mair money in it. They had faith in the farm and they showed their faith by their works and the farm didn't go back on them. The trouble wi' a guid many o' us is that we hae the habit o' grumblin' an' findin' fault wi' this an' that an' pretty nearlly everything that comes to us, till we make ourselves believe that we're little short o' martyrs and that if we got what was comin' to us by rights we wouldn't hae to work for oor board an' clothes. I heard a chap say the iither day, when he wis tauld that the price o' cheese had been fixed at twenty-three cents, "Hoot", say he, "it ought to be twice that." An' if it wis raised tae twice that he wad still be dissatisfied and juist as poor in his ain mind as he is the noo. There seem to be twa classes o' farmers these days, when the price o' everything is on the jump. One class pays attention to the rise in price of what they sell, while the iither class look only at the rise in price of what they hae to buy. Since it dinna really mak' ony difference, sae far as the money goes, which side they look at, I'm thinkin' the first-mentioned chaps hae the best o' it. They're comparatively happy, onyway, and they say that happiness is what we're all in search of.

Sure thing, the farm will keep us in food an' clothes an' a little over, if we give it a chance, and what mair can ony iither job dae for us. But it seems tae be the fashion juist noo to be sayin' that farmin' does not pay and there's some sayin' it that never would hae thought o' it if it wisna for somebody else. It's a bad attitude o' mind tae get into and it hae the tendency to mak' us slacken up on oor work. In the lang run, what we are all the time expectin' will come to us, an' if we are continually thinkin' poverty it's poverty we're likely tae get. And while we're doing it the man who is thinkin' an' expectin' prosperity and daein' his wark wi' that end in view, is gettin' tae the top o' the pile while the rest o' us are wonderin' if it's goin' to pay us to mak' the attempt.

Let's quit this howlin' doon oor job. Onybody can dae that sort o' thing. And sae far as I hae heard it's never made a dollar yet for anybody that spent their time at it. They're askin' us what is wrang wi' the farm. There's naething wrang wi' it; but if they asked us what wis the matter wi' some farmers we would hae to gie it up, unless we wad call it mental dyspepsia and let it go at that. It's a disease that takes time to cure but we've found some that got over it a' right. They must hae found some medicine that took the twist oot o' their thinkin'-machine for they seem to be as weel and happy noo as they were miserable and discontented before. Na doot it wis some simple thing that helped them, such as the fresh air an' sunshine treatment, for instance.

Under date of May 2, J. McPherson & Sons, of Grey County, write as follows: "We hae done very little on the land as yet. The frost is not out in lots of places. We hae plowed a little and hae sown oats to-day for the first. Our fall wheat is winter-killed, except for a strip along the fence. There is very little heaving of the clover this spring, but there has been no rain to speak of since the snow went away."

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# THE HORSE.

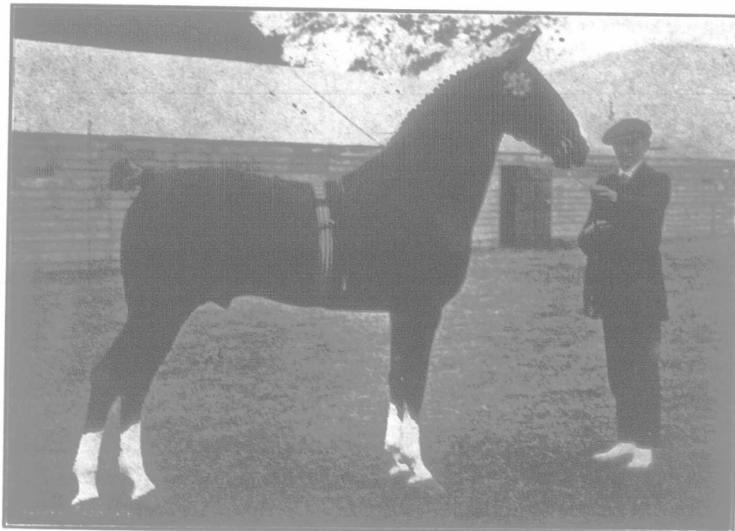
## Diseases Resulting From Wounds.

### Erysipelas.

Erysipelas occasionally occurs as a result or complication of wounds. It may be defined as an inflammation of the skin and underlying tissues, characterized by a diffused swelling of the parts involved, which has a remarkable tendency to spread, and is dependent upon some unascertained alteration in the blood.

**Symptoms.**—In an indefinite period, but usually about the third or fourth day after the infliction of an injury, the skin in the immediate vicinity of the wound is swollen, smooth, shining, hot, tender and painful. The swelling extends sometimes very quickly in all directions. If a limb be affected, its whole circumference becomes involved in the swelling in a few hours. The swollen surface pits on pressure (that is, when pressed it has a doughy feel, the finger sinks into the tissues and the indentation does not disappear quickly when pressure is relieved) where muscular tissue is present. Where the sub-cutaneous tissues are hard and firm, the pitting is not so well marked. In rare cases little vesicles are formed, which is followed by some amount of sloughing. This occurs more frequently at the flexures of the joint when a limb is affected. Besides local symptoms, we notice more or less constitutional disturbance; the pulse becomes frequent and strong, shivering fits are generally noticed, increase of temperature, loss of appetite more or less marked, lameness if a limb be the seat of trouble. The degree of constitutional disturbance is in proportion to the severity of the attack. The tendons and ligaments, the fibrous coverings of adjacent muscles, as well as the skin and subcutaneous tissues, become involved; the pain is usually excessive, the swelling hard and tense, and occupies a large extent of surface. In a variable period purulent collections form in the muscles, or more deeply between the tendons and ligaments, which on being lanced discharge a watery pus, which, in some cases, contains shreds or masses of gangrenous tissue. The systemic disturbance is severe, rigors are frequent, pain acute; the pulse, at first full and strong, becomes frequent, small and feeble; the respirations are hurried; the bowels generally constipated, and the feces covered with mucus; the urine is scanty and high-colored. The appetite is lost, but the thirst is usually excessive. Occasionally the inflammation extends to the articulations nearest the injury, and the case becomes complicated with open joint.

**Treatment.**—A brisk purgative of six to ten drams of aloes, according to the size and condition of the patient, with two drams ginger should be given. The swollen parts should be well bathed frequently with hot water, or, if practicable, hot poultices kept to the parts. After the purgative has operated, diuretics, as nitrate of potassium, in three to four-dram doses, should be given twice or three times daily, and tincture of iron should be given in six to eight-dram doses, in a pint of cold water as a drench, twice daily. The food should be of first-class quality, of the best kind, and given in liberal quantities. In the more severe cases treatment must be more energetic. A purgative must be given, and the excitement and fever combated with fifteen to eighteen-drop doses of Fleming's tincture of aconite in one-half pint of cold water, given as a drench, every three or four hours until the pulse loses its excessive force and frequency, after which it must on no account be continued. After the purgative has acted, the tincture of iron should be given in four to five-dram doses every three or four hours. Heat should be kept to the affected parts. If abscesses form, they must be opened, but it is advisable to abstain from the use of the knife unless pus be present, as the admission of air into the tissues is apt to cause sloughing. **WHIP.**



A Former Champion Hackney at the Highland.

the comb straightened out the snarls in the mane and tail. Then apply the curry-comb to disentangle the hair which has become matted with sweat and dirt and to remove splashes of mud. Follow this with the brush, which cleans out the hair and stimulates the skin cells. The flannel cloth should then be brought into service to remove dandruff and add that finish manifested in all well-groomed horses. The legs should be rubbed as well as cleaned for they undergo considerable strain. A thorough rubbing stimulates circulation and prevents stiffness and unsoundness. Do not neglect the leg of a horse; it is one of the vital parts, and one of the first to show signs of abuse.

In the morning it may be necessary to clean off the straw or bedding that adheres to the flanks or body of the horse, but no excessive amount of work is necessary. A few minutes with the brush and flannel cloth will put the team in excellent condition to go out feeling fresh and able to do a good day's work. Every minute spent in grooming will show results in the spirit and appearance of the horse.

## The Value and Art of Grooming.

It is fairly easy to mark a good horseman by the appearance of the team he leads out at 7 o'clock in the morning, or by the spirit of his driving horse. Many feed their horses with extravagant generosity, but neglect them otherwise to such an extent that the feed is partially wasted and the animals are sluggish, present an ill-kept appearance and generally give evidence of no skillful care. Feed is essential but efficient grooming is almost as necessary. The cleaning and rubbing of the skin stimulate the secretions and improve the system throughout. This decreases the requirements of the body in the way of feed and more is accomplished with the smaller ration than with a large one under careless

Do not neglect to trim up the feet of the colt before turning to pasture. Usually a good rasp will suffice. At this time of year it is not necessary to trim too closely for the wear on pasture will help to keep the hoof true. When the toes are kept short the quarters will usually look after themselves, but one should take notice occasionally and see that the frogs are prominent. When such is not the case ill effects are the result. While growth varies under different conditions the hoof will, on the average, grow one-third of an inch per month. The hind hoofs grow more quickly than the fore hoofs, and unshod faster than shod.

conditions. That gloss and finish evident in the show animal or the park horse is the result of careful and persistent grooming, for in the majority of cases they are not over-fed. The well-groomed farm or draft team can be easily distinguished, for with an unlimited supply of grain a feeder can make a horse fat, but he cannot bring out that gloss of coat or the fine fettle of a well-groomed drafter or driver. The horses on a farm, known to the writer, have always been well fed but previous to this spring they never had the spirit or the appearance that the amount of feed given should produce. Early this season a new teamster took charge and the horses were well curried and cleaned every evening. They have done more work than usual, but on account of the attention received they look fifty per cent. better, and are superior in every way to what they formerly were.

A practice altogether too common is to clean the team in the morning. This is better than not at all, but under this method the horse remains all night with dirt and mud on his legs and the hair full of sweat and dust. Between six and seven in the morning the team is cleaned and harnessed but inside of half an hour they are at work again and just as badly off in regard to dirt. The thirty to sixty minutes of cleanliness is not sufficient. The thorough cleaning and rubbing of the legs, stimulates the circulation, prevents stiffness and as a general result maintains the soundness of those parts which are subject to considerable strain.

To clean and groom a horse properly there are required a curry-comb, body-brush, mane-and-tail-comb, some flannel cloths, an old or partly worn-out broom for use on the legs, and a hoof-hook. This, at first sight, appears like a formidable requisition for supplies but one will find the majority of these in practically every stable. Some will use one or two of these tools but few use them all under ordinary farm conditions. They are all necessary, however, if the job is to be thoroughly executed. With the broom first sweep off the mud and dirt that collects on the hair of the leg and around the hoof. The bottom of the foot should be cleaned out with the hoof-hook or, any suitable tool, and all solid particles removed from around the shoe and frog. When the animal has got reasonably dry the body and legs should receive further attention. With

## LIVE STOCK.

Shear the flock before the hot weather sets in.

The herd bull requires exercise. If a paddock is not available give him the run of a large boxstall. He will be more prepotent than if kept in cramped quarters.

J. J. Merner, Seaforth, recently held a successful Shorthorn sale. Village Marquis, a son of Gainford Marquis, topped the sale at \$800. The top price on females was \$625.

Forty-eight Shorthorns, the property of T. Stanton, of Illinois, were recently sold by auction at an average of \$742. Lavender Wreath 6th was the highest priced animal of the sale, going under the hammer at \$1,400.

Breeding tells in the feed lot. The well-bred steers are better made individuals and make more rapid gains than do those of nondescript breeding. If raising steers for feeding it will pay to use a bull of desirable conformation that has type and breeding.

On April 23, G. J. Theis & Son, Iowa, disposed of 52 Shorthorn females at a very satisfactory average. The top price was \$1,900, which figure was paid for Proud Rose, a three-year-old roan heifer. Rosewood Maid, also a three-year-old, brought \$1,600, and \$1,400 was realized on several individuals.

A correspondent in Wellington County reports that the stock have come through the winter in fair condition, although not so much grain as usual was fed. There are more spring litters than usual in some sections, and many of the farmers are planning to run their shotes on pasture, in order to grow them on the minimum amount of grain.

We have heard of \$12.00 per hundred being paid for 800-pound stockers to go on grass this spring. Compared with the prices of a few years ago this seems like taking a big risk. However, those engaged in the grazing business are optimistic regarding the outlook for prices next fall and are purchasing all the stock their grass land will carry.

"The best investment I ever made was when I put practically my last dollar into a choice herd sire," was the way one subscriber spoke in commenting on the value of blood and individuality in the animal placed at the head of a herd. "It seemed a big price at the time, but I am able to sell his progeny for a much higher figure than I could secure for any of the get of previous bulls which I had owned. I have received big interest on my money," he said.

According to the assessors' figures the population of one of the smallest townships in Middlesex County has decreased by 380 in the last four years. At the present time there is less than one able-bodied man to every 300 acres of land. Under these circumstances the maximum production from the land is an impossibility. Instead of one man to 300 acres, two men could be profitably employed to each 100 acres if the soil is to yield of its best.

## Japanese Commissioner of Agriculture Visits Canada.

The Farmer's Advocate was favored recently with a visit by Issa Tanimura, D. C. L., Commissioner of Live Stock for the Japanese Government. This is Dr. Tanimura's fifth visit to the American continent, and second visit to Canada, Being a graduate of Yale University, and an Honorary Fellow in Agriculture of Cornell University, he is not at all unacquainted with American ways, or the customs of the Western world. While interested generally in live stock, Dr. Tanimura has been paying special attention to sheep. Japan annually imports \$20,000,000 worth of wool, and until recently this came largely from Australia. The British embargo on the Australian clip has caused the Japanese Government some concern and they are now moving to effect an establishment of a real sheep industry within their own Kingdom. Nothing is native to the Islands except a few beef cattle. Forty-five years ago an American shipper was engaged by the Government to superintend the beginning and establishment of sheep husbandry in Japan. He remained three years, but after his departure the industry went into decline. The policy is now to import good specimens of the different breeds and give them all a thorough and impartial trial. "We will let the sheep talk for themselves," said Dr. Tanimura. "Man must learn some things from the beast." From the North to the South of the Japanese Kingdom there is a great variation in climatic conditions and the belief exists that different breeds will popularize themselves in various sections of the country. Dr. Tanimura was the guest of Lieut.-Col. Robert McEwen, President of the Canadian Co-operative Wool Growers Ltd. In his travels throughout this country the Commissioner has endeavored to study all breeds impartially and he has been made an honorary member of several organizations allied to the sheep industry in Canada, and of eight breed associations in the United States.

For many years importations of the leading beef and dairy breeds of cattle have been made to Japan,

and that branch of animal husbandry is developing. No export business, however, in meat or meat products has yet been attempted, for in this regard the country is not yet self-sustaining. Nevertheless, Dr. Tanimura left the impression that their pure-breds were similar in type and conformation to the corresponding breeds in North America and that progress is being made.

Intensive farming is the rule and farms of ten to twenty-five acres are common. One-hundred-acre farms exist in plenty and many holdings include a thousand acres or more. Japan is a nation of farmers, he said. Even the merchants own farms and all are producers more or less. Every man, physically fit, during three years of his life is a soldier, and wars are conducted by the Government with a standing army without affecting industrial or national life to any great extent. In Japan it is an honor to be a soldier and the obligation is seldom evaded.

Cereal and forage crops in the Japanese Kingdom are similar to those produced here and the yields compare very favorably.

Dr. Tanimura spoke highly of Canadian institutions, and particularly so of the Ontario Agricultural College. He placed considerable emphasis on the practical in all educational training, and said there are men in his country who hold doctor's degrees, but are worthless, simply because they excel in the theoretical and scientific but are not practical.

When asked for any suggestion in regard to Canada, Dr. Tanimura said: "You have a great country here but you do not make it known abroad. We have been getting good flour from this continent but we have been led to believe that the wheat was grown in the United States, when in fact it was Canadian grown. So it is with your sheep. We have long thought that Canadian breeders got their good sheep from the United States, but I find the reverse is true." The Commissioner expressed the opinion that Canada would profit by making the quality of her live stock and farm products known in his country where a demand is sure to exist.

**Summer Meat Supply at Cost Price.**

Will you publish a chart showing how a carcass of beef is divided in a sixteen and twenty-share beef-ring and also state how a beef-ring is started Middlesex Co., Ont.

J. B.

Ans—In many rural districts an organization known as the beef-ring has helped to solve the summer meat supply problem. When a person is situated near a village or town it is quite easy to get a roast of beef occasionally, but it is an entirely different proposition when the farms are located a number of miles from a centre. True, before a beef-ring was thought of the farmer and his family had a regular supply of meat during the summer months, but it was largely meat which had been put in brine or pickle the previous winter. Once a beef-ring is started the members seldom drop out of the organization, as they realize it is one of the best means of securing fresh meat of high quality at cost price. The beef-ring is an association of farmers; there may be sixteen, twenty or twenty-four members. However twenty is the usual number. A twenty-share ring if started the last week in May, or first week in June, will run on fairly late in the fall and supply beef for threshing and silo-filling. With a sixteen-share ring, meat would be supplied for sixteen weeks, or through the months of June, July, August and September.

If it is thought advisable to organize a beef ring, it is necessary for someone to call a meeting to talk the matter over and to appoint officers. Besides a president, secretary-treasurer and directors, it is advisable to have an inspector whose duties it will be to inspect the live animal as well as the dressed carcass. It is usually possible to secure a competent person among the members to do the butchering and cut up the meat. A slaughter house will be needed and such equipment as windlass, ropes, scales, knives and saws is necessary. It is customary for the members to subscribe a certain sum to defray the expenses of purchasing the necessary equipment.

In many beef-rings the members agree to furnish a two-year-old animal that will dress about 400 pounds; in this way only choice beef is supplied the members. A certain day should be set for butchering and the animal for the week should be delivered at the slaughter house at least twenty-four hours before the time of slaughtering. The duty of the butcher is to dress the carcass, weigh it, cut it into the required number of pieces and keep the slaughter house in a sanitary condition. It is customary for each member to pay for having his animal killed.

With an animal dressing 400 pounds, each member should get twenty pounds of meat, but as the weights of the animals vary it is rather difficult to proportion out the meat exactly; consequently, some members may get a few pounds under and some a few pounds over the twenty pounds on certain occasions. However, it balances up fairly well by the end of the season.

The accompanying illustrations show fairly clearly how a carcass is divided for both a twenty and a sixteen-share ring. Each member is supposed to receive a different cut every week, so that by the end of the year he has received at least one piece of every part of the carcass. In Figure No. 1 the numbers one to ten, indicate roasts, while numbers 11, 13, 19, 16, 17, 18, 15, 12, 20 and 14 represent beef pieces. Each member will also receive a piece of steak. The illustration shows one side of the carcass, and the other side would be cut in a similar manner.

The carcass is divided about the same for a sixteen-share ring, as shown by Figure 2. For convenience in handling, divide the half carcass in the middle before letting it down, by cutting across at A, between rows 4 and 5 leaving two ribs on the hind quarter. The fore-quarter is then divided at line B. Numbers 1, 2 and 3 represent roasts, and three joints are left on each; number 4 is a roast with four joints; number 11 represents the front shank and number 14 is the second rib cut and is cut off leaving five ribs to it. Number 13 is the first rib cut, to which is left four ribs; Number 10 indicates the brisket. The hind quarter is divided at line D, and numbers 6, 7 and 8 represent sirloin; rump No. 2 and rump No. 1, respectively, and should be divided at as nearly the same

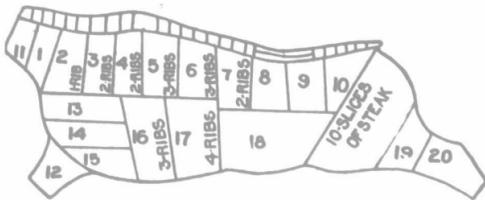


Fig. 1—Chart for 20-share beef ring.

weight as possible. Number 17 represents steak, which is generally cut into slices so that each member will secure a part. It may take a little time for a new butcher to get on to the way of dividing a carcass for the members, but with a little practice the average man would soon become quite proficient and would find that he could finish up the work easily in a forenoon.

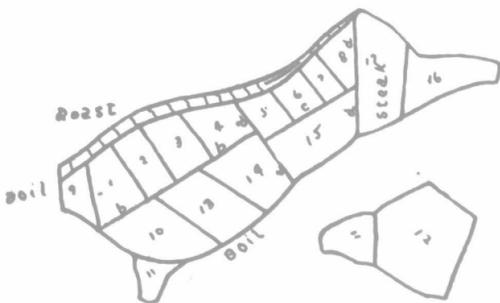
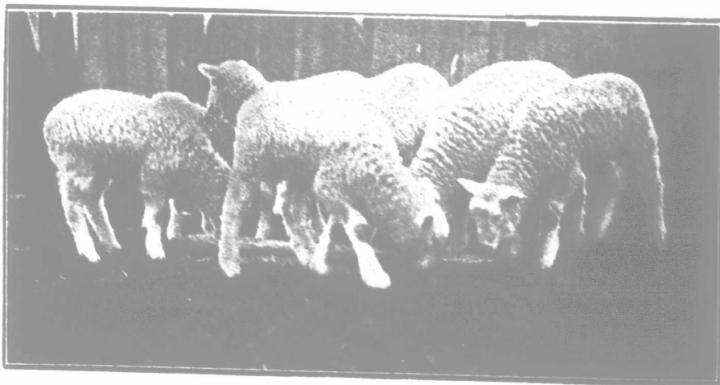


Fig. 2—Chart for 16-share beef ring.

There may be some who do not care to procure their meat through the beef-ring; however, it is doubtful if there is any more satisfactory method of securing a weekly supply of fresh meat, as it permits of each member getting meat of choice quality at cost price.

**Give the Lambs a Little Extra Feed.**

The present high prices for mutton and wool have had the effect of stimulating an interest in sheep raising. Those who always have kept a few head have increased their flocks, and many who never kept sheep have recently made a start in sheep raising. The double revenue and the small amount of labor required in looking after the flock for the greater portion of the year appeals to many. Then, too, there is urgent need for the products—wool and meat. While sheep will look after themselves pretty well, they require special attention at lambing time and when the lambs are developing. Good sheep can-



A Growthy Bunch of Lambs.

not be raised from lambs that become stunted from lack of care and feed. All dams do not supply sufficient milk to properly nourish their young, consequently the lambs suffer. The large flock owners usually construct a "creep" in the pen or field so that the lambs may be fed separately from the ewes. The lambs should be fed so that they will retain their baby fat as long as possible. It is an easy matter to separate off a corner of the pen and place such feeds as oats, bran, oil meal, or corn meal in a small trough that the lambs can reach. This should be done if there were only a dozen ewes with lambs in the flock. If the large flock owner finds this practice beneficial and profitable, it should bring results to the owner of a small flock. After the flock is turned on pasture it is a good practice to feed a little grain in order that the lambs may make the largest possible gains.

**Sheep Raising and its Place in Nova Scotia.**

EDITOR "THE FARMER'S ADVOCATE":

During these war times the price of beef, pork, mutton and poultry has risen to twice their normal price, and much has been said about the scarcity and high prices of wheat, potatoes and other eatables as well as feeds for all live stock.

In nearly every paper we read of the need of greater production of grain and meat. We have only to look up the figures indicating the decrease of all live stock throughout the world, since the beginning of the war, to show us that greater production is absolutely necessary. Between the years 1881 and 1901 the number of cattle, horses and swine increased in number 30 to 50 per cent. in Canada; but, during this time the number of sheep fell off from 3,048,678 head to 2,510,239 head. It was thought that after this the number of sheep would increase, but while statistics show an increase of 21 per cent. in the population, we find an actual decrease in the number of sheep. What is the reason of this great decrease? There are many reasons advanced by the farmer why he has not and will not go into the sheep-raising enterprise a little more fully. Some of these are: 1, Sheep are too difficult to fence; 2, they are hard on pasture; 3, other live stock is preferred; 4, the dog nuisance.

All these difficulties can be overcome by the ordinary farmer with reasonable care and work, except the dog nuisance; which has to be dealt with by those who have the power to make the laws of our country. The dog nuisance is the greatest menace to the sheep industry that exists, and is almost wholly the cause for the decreasing numbers. That there are large numbers of sheep killed every year in Nova Scotia every one knows. That many farmers have given up raising sheep and others have refused to go into the business cannot be denied. That there cannot be something done to protect the sheep industry and control the pestiferous cur is absurd.

There can be something done. The dog law which is in force at the present time serves only to get a man into trouble with his neighbors. When we think of the number of worthless dogs which are kept in the towns and country, one often wonders why there is not more damage done. One of the best things the Government of this province could do, would be to exact a straight tax of not less than \$4 from the owner of any male dog over six months old, and a tax of \$8 for every female over six months old. This would eradicate the majority of worthless curs that are kept for trivial purposes.

In the present law there is no way of getting at the owner of land adjoining your farm, or any person living on land or roads which run back from the main road and pass your farm. There should be an amendment which will give a person a lawful hold over these persons as well as over others.

When the Government puts the human race on rations, and talks of taking all the oats away from horses kept for pleasure; it is high time for them to spend a little more time and money in thinking out a plan to relieve the sheep farmer of the dog difficulty.

The food controllers have a good opportunity to do something in the way of conservation along this line. If the quantities of food daily consumed by dogs were used in the production of pork, the benefit thereby derived would greatly aid in meeting the demand for such production. It is a serious mistake to let any such thing as a worthless dog keep a farmer out of the profits which he so justly deserves. Not only that but, Nova Scotia having over a million acres of pasture, most of which is especially adapted to sheep raising, should greatly help the needs of our country both in producing food and wool. These rugged, rolling hills which are clothed with short, nutritious grass and white clover, with adjacent uplands ready to produce rape, turnips and hay for fall and winter feeding, make an ideal place for raising sheep.

When help is as scarce as it is now, farmers should be encouraged more and more to go into the sheep industry to a greater extent, because they return more money for capital invested and amount of care and labor expended than any other live stock on the farm.

Furthermore, by raising sheep, they will be helping to produce wool, of which so much is needed at the present time. But what encouragement is there for a farmer to raise sheep when there are so many dogs waiting for the profits? When the right kind of law is enforced I feel sure that many who are now on the fence, so to speak, concerning this question, will join heartily with those who are now struggling along and will help make Nova Scotia all that it should be in the way of a sheep-raising country.

Halifax Co., N. S. L. MCK. OGILVIE.

Don't use twine for tying up the fleeces. While it may be the handiest it is by no means the best material to use, and it tends to injure the value of the wool.

**Breedi**

On Ma dispersion choice offer mary, Miss Crimson F at foot, and Signet and While the p a number of individuality ideal day fo tendance. Village Man at \$800. H The average Vesey Choie was purcha consideration \$600 for C brought \$40 mals sold, to purchasers:

Winsome Co Bonnie Signe Vesey Choie Roan Signet, Lexith Gem, Gladys May Vesey Choie Vesey Choie Red Pearllet Carolina 2nd Belle, F. Cole Roan Girl, G Broadhook's Auburn Maic Lily, with cal Constance M Lady White, Bonnie Glad Collynie Jane Lady Lavend Jenet 7th and Princess of Bl Princess Roya Miss Lavende Corelli Bands Miss Corday, Corelli 4th, F Rosalie 3rd, J Miss Ramsden Corelli 3rd, D Collynie Rose Rosemary 122 Silver Creek E Moss Rose, J Vacuna's Prin Nonpareil Bell King's Lily, H Crimson Rose, Duchess of C Crediton. Red Duchess o bus..... Jilt's Delight, Jilt's Maid, D Princess Victo Vesey Viola, R Corelli Beauty Red Blossom, Lily Royal, A Princess Queen Rosalie 2nd, A

Knickerbocke Huron's Pride, Huron Delight, Regal Gem, A.



**Breeding Counts in the Sale-Ring.**

On May 1, J. J. Merner, M.P., of Zurich, held a dispersion sale of 70 head of Shorthorns. It was a choice offering, as it included such families as Rosemary, Miss Ramsden, Butterfly, Duchess of Gloster, Crimson Flower, etc. Many of the females had calves at foot, and others were bred to such sires as Meadow Signet and Village Marquis, son of Gainford Marquis. While the prices throughout were fairly good, there were a number of real bargains when the breeding and individuality of the animals were considered. It was an ideal day for a sale and naturally there was a good attendance. The stock was brought out in high fit. Village Marquis, the young herd sire, topped the sale at \$800. He went to the bid of S. M. Bird, of Elmira. The average for the 49 females disposed of was \$314.50. Vesey Choice Brand was the highest priced female. She was purchased by J. Langstaff, of Tupperville, for a consideration of \$625. J. Miller, of Claremont, paid \$600 for Crimson Rose. Thirteen of the females brought \$400 and over. Following is a list of the animals sold, together with the names and addresses of the purchasers:

Females.	
Winsome Corelli, H. P. File, Dashwood	\$200
Bonnie Signet, J. McKinley, Zurich	250
Vesey Choice Brand, J. Langstaff, Tupperville	625
Roan Signet, G. Hern, Seaforth	195
Lexith Gem, H. Heiser, Comber	275
Gladys May 2nd, E. Stoskopf, Zurich	150
Vesey Choice Signet, D. Johnston, Varna	400
Vesey Choice Signet 2nd, H. O. Bragg, St. Mary's	250
Red Pearllette Butterfly 7th, R. Allan, Zurich	300
Carolina 2nd, C. Dunkin, Varna	310
Belle, F. Coleman, Zurich	375
Roan Girl, G. A. Attridge, Muirkirk	250
Broadhook's Rose, H. Bragg, St. Mary's	310
Auburn Maid, G. Coleman, Zurich	245
Lily, with calf, W. Armstrong, Varna	375
Constance May, J. Luker, Centralia	310
Lady White, J. Gill, Grand Bend	310
Bonnie Gladys, J. Turner, Zurich	275
Collynie Jane, J. Stephen, Bornholm	300
Lady Lavender, J. Ortwein, Zurich	225
Jeet 7th and calf, D. S. Litt, Mitchell	265
Princess of Blyth, G. Nairn, St. Mary's	230
Princess Royal, Wm. McAllister, Auburn	225
Miss Lavender, E. J. Heiser, Comber	125
Corelli Bandsman, J. T. Gibson, Denfield	425
Miss Corday, J. Langstaff	475
Corelli 4th, F. W. Scott, Highgate	500
Rosalie 3rd, Jas. Hay, Kippen	150
Miss Ramsden 144th, D. Brien, Ridgetown	475
Corelli 3rd, D. Johnson	475
Collynie Rose, J. Barr, Blyth	400
Rosemary 122nd, J. T. Gibson	355
Silver Creek Belle, J. Eckstein, Zurich	310
Moss Rose, J. P. Ran, Zurich	235
Vacuna's Princess 8th, F. W. Scott, Seaforth	325
Nonpareil Belle, W. Dougall, Hensall	165
King's Lily, H. McMillan, Kippen	350
Crimson Rose, J. Miller, Claremont	600
Duchess of Gloster H. 2nd, Oestreicher Bros., Crediton	500
Red Duchess of Gloster 4th, A. J. Howden, Columbus	260
Jilt's Delight, L. Luker, Hensall	200
Jilt's Maid, D. S. Litt	225
Princess Victoria, D. McKay, Goderich	175
Vesey Viola, R. D. Hunter, Exeter	560
Corelli Beauty, Oestreicher Bros	450
Red Blossom, Ed. Boyce, Brucefield	225
Lily Royal, A. Hendrick, Dashwood	210
Princess Queen, J. Brewster, Seaforth	400
Rosalie 2nd, A. Wiltsie, Clinton	190
Males.	
Knickerbocker King, D. Calhoun, Mitchell	165
Huron's Pride, L. Petty, Hensall	165
Huron Delight, M. Murdie, Seaforth	125
Regal Gem, A. Neil, Clinton	105

Nonpareil Duke, J. Barr, Blyth	\$190
Ramsden King, J. Hey Jr., Zurich	100
Village Marquis, S. M. Bird, Elmira	800
No. 61, D. Hang, Dashwood	100

**THE FARM.**

**Our Scottish Letter.**

Writing on April 13th, one's thoughts naturally turn to France and Flanders and the terrible doings there since the 21st of March. The address of Sir Douglas Haig to the men of the British forces in France and Flanders is calculated to awaken very serious thoughts. At such a time it is appalling to find wranglings in Parliament of the Parish-pump order—Ireland is ever with us—and it is hard for Britishers to bear the ordeal through which all classes have passed during these past three years and not resent the situation in Ireland. It is spoken of as the land of plenty. While we are on rations here, friends who have crossed to Ireland write and tell us of the abundance to be found there. Irish farmers are selling their cattle at as much as 104 shillings per live cwt. (112 lbs.), whereas the outside price which a British farmer can charge for his choicest heaves is 76 shillings per cwt. The astounding revelation has been made that the difference between the 76 shillings and the 104 shillings is being made good to the dealer by the Ministry of Food. The flower of our youth have been drafted into the army under the Military Service Act. In many cases their places have been taken by Irishmen of military age. A person must be a resident in this country six months before he comes under the Military Service Act. These gentlemen come over from Ireland, take the places of our men who are shedding their blood to save them as well as us, remain for five months or thereabouts, return to Ireland, then come back and begin another period of service which is quite independent of the other. Can anyone wonder that every Scotsman and every Englishman thinks it about time that this differentiation in favor of Ireland should take end. The new Man-Power Bill ropes in Ireland and there is a deal of noise. There will also be plenty of trouble, yet at all costs the Commonwealth must be saved.

Whatever our straits, Providence has in this spring of 1918 been to us wondrous kind. It would be hard to conceive of a greater contrast than that between season 1917 and season 1918. At this date last year the outlook was gloomy indeed. One of the worst blizzards in living memory was experienced in the week beginning April 15. The death rate on the hills was appalling and flock-masters experienced difficulties unknown at least since 1860, which was also a disastrous year. The winter of 1917-18 has been almost an ideal one. Plowing and other winter work is well advanced. We had a snow storm and period of hard frost in January; February was open and wet, but the latter half of March was especially favorable and farm work of all kinds was pressed forward with great success. The prospects for the season of 1918 in an agricultural sense are certainly bright, and a greatly extended area is being cultivated. The acreage under wheat, oats and potatoes in the United Kingdom this year will exceed anything ever known, and naturally farmers are anxious about the effect of the new Man-Power Bill upon their labor supply. If existing resources are left untouched for another month or six weeks the pressure of spring work will be over and a breathing space will be granted, during which it may be possible to adjust the labor problem with the military authorities.

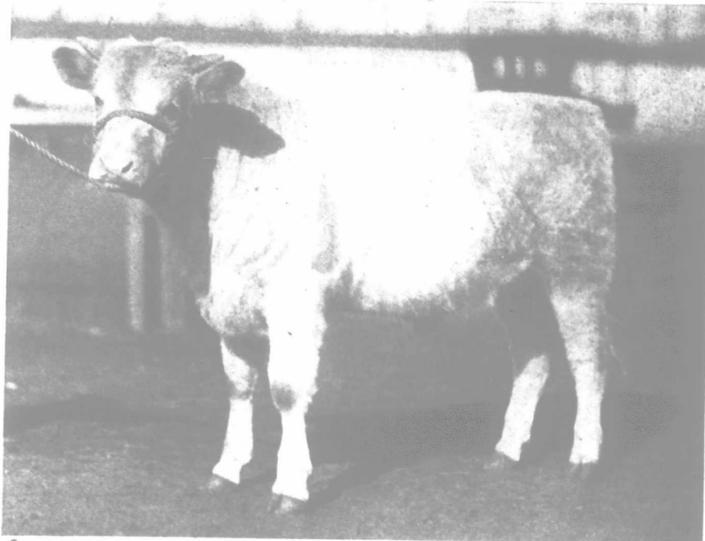
Food Control in many of its phases is greatly exercising producers. The Ministry of Food in this country seems to have an unwonted tenderness for middlemen. The milk distributor, during the two months of June and July, is to get as much per gallon for distributing milk as the farmer gets for producing it. No one will deny that the milk trade in any of its aspects is a laborious calling, yet there is something strangely incongruous in the idea that the distributor of milk should be allowed under control arrangements to take as much from the

consumer as the producer. The same tenderness for the middleman is shown in connection with potatoes. While there is still an abundance of potatoes of the 1917 crop in the country, and for months past farmers have had just cause for complaint that to some extent the guarantee of £6 per ton had not been made good to them, suddenly and without consultation with anyone the Ministry of Food have advanced the price by 10 shillings per ton as from April 15, with another advance of 10 shillings as from May 15, and yet another advance of 10 shillings to the man who has opened his pits or clamps, for the extraction of seed, and redressed and repitted the remainder. The meaning of this is that the farmer who placed his potatoes upon the market and took £6 per ton or less—and thus fed his fellow-countrymen—is put into an inferior position as compared with the grower or dealer who, on the 15th of April or May holds quantities of potatoes. The suspicion is that the major portion of what remains of the 1917 crop is now in the hands of middlemen who stand to make an enormous profit. No farmer ever said that £6 per ton was not quite a good price, and why the Ministry of Food should now make a present of 10 shillings or 20 shillings, or 30 shillings per ton to a limited number of potato holders demands a deal of explanation. Questions on the subject have been asked but answers have not been given.

The war directly and indirectly has levied a heavy toll upon men prominent in agriculture. Our greatest soldier from the agricultural ranks, Colonel William Gemmill, D. S. O., of Guendykes, Maemerry, East Lothian, fell on the fifth day of the great battle which began on March 21. Colonel Gemmill up to his death led almost a charmed life. He was the last of a family of ten, all or nearly all of whom died of tuberculosis. As one said of him, according to all actuarial calculations he had no business to be alive; and yet his venerable mother who bore the ten survives him. It would have appeared to men that for him there was mapped out the honorable but uneventful life of an East Lothian farmer. When the South African war was at its height he was one of those who volunteered. He went out and saw plenty of adventures on the Veldt. In the end he was taken prisoner by the Boers and ever spoke well of their kindness. When peace was declared he came home, as a Sergeant, and joined the local Territorial force. He speedily rose to the rank of Major. When Armageddon broke out, in August 1914, he again responded to the call and went out as second in command with the Lothian Horse. His chief, the late Colonel Brook, was killed during one of the earlier battles while he and Major Gemmill (as he then was) were studying a map in a shell hole. Command was then taken by Gemmill, and his forces were re-constituted as the 8th Royal Scots. He was the idol of his men and was twice mentioned in despatches for conspicuous bravery, and received the D. S. O. The great battle began on March 21, and for four days Gemmill and his men fought a great rearguard action. On the fifth day he had reconstituted a new line of defence and seemed likely to hold his position, when a bullet from a sniper peremptorily closed the career of this gallant officer, who up to the moment of his death had amid all his fightings escaped without a scratch. Colonel Gemmill, although farming in East Lothian, was of Ayrshire descent. His father belonged to a family long resident in Fenwick parish and his mother is a native of West Kilbride parish. On his father's side he was full cousin to two very well-known Scottish farmers, Sir Matthew G. Wallace, one of our greatest and most successful potato growers, and Matthew G. Hamilton of Woolford, one of our most successful breeders of Black-face sheep. The common grandfather of all three was the late Matthew Gemmill, a well-known Ayrshire farmer. Another great soldier died recently in General Lord Blythswood. His fighting days were over before the present great war broke out. He won distinction in the South African war, as General Barrington Campbell. He was the third brother who in succession bore the title of Lord Blythswood, and all three of whom died within a decade. Yet another prominent Renfrewshire man, Sir Charles Bene Renshaw, Bart., recently passed away. He was a Sussex man by birth but came to Scotland between forty and fifty



A Winning Hereford Calf at Calgary Sale.



Willow Ridge Marquis 2nd, First Prize Shorthorn Calf at Calgary Sale.

years ago and was closely identified with industrial developments in the West of Scotland. He took a deep interest in rural affairs, was for a lengthened period member of Parliament for Renfrewshire, and for nearly a decade Chairman of the Caledonian Railway Company.

A famous breeder of Black-Face sheep has passed away in T. W. Buchanan, Upper Wellwood, Muirkirk. This most estimable gentleman was a son of the late Robert Buchanan of Lettre Farm, Killearn, an eminent and highly successful breeder of Black-Faces. T. W. Buchanan was a man between fifty and sixty years of age, and one of the most upright and honorable men in Scottish agriculture. Yet another notable agriculturist has passed away in Alexander Dewar, a member of the Land Court, and one of the ablest members of that body. He was the son of an Aberdeenshire small farmer and farrier, and was at one time tenant of Bethlin Midmar, Aberdeenshire. He was later appointed factor on the estate of Fasque, Kincardineshire, by the late Sir John Gladstone, Bart., brother of the famous statesman W. E. Gladstone. When the Land Court was founded, following the passing of the Small Holdings Act, in 1911, Mr. Dewar was one of the discoverers of Lord Pentland. As a member of the Land Court he was in his right place. There was no more able man in Scotland for such work. An older brother is Professor I. R. V. Dewar, F.R.C.V.S., who was lately head of the Royal (Dick) Veterinary College, Edinburgh. They are a brainy crowd, these sons of Aberdeenshire small farmers, and few more so than the brothers Dewar. Alexander Dewar was about sixty years of age.

In connection with stock breeding, high prices are still the order of the day. Shorthorns maintain a strong lead. The high prices of 3,000 guineas at Perth and 3,200 guineas at Aberdeen were eclipsed by 3,700 guineas paid at Penrith by A. J. Marshall, Stranraer, for the Aberdeenshire-bred young bull (C. 1916) Everlasting. This bull was bred by A. Crombie, Woodend, Newmackan, Aberdeen. He was sold at the Aberdeen sale in the spring of 1917 for 42 guineas to J. Robinson, Townend, Skelton, Penrith, by whom he was sold at the Penrith bull sale on March 6 for the price named. The next highest price at Penrith was 1,800 guineas, the seller being the Duke of Northumberland, Alnwick Castle, and the buyer Mr. Casares, who like A. J. Marshall is in the South American export trade. Penrith is the centre of a great cattle-breeding area, and the sale there, under the leadership of John Thornbarrow, Auctioneer, has become one of the best in Great Britain. British-Friesian cattle, as the Dutch cattle bred in these islands are now to be named, have been selling at great prices. Yesterday at the Crewe sale of young bulls, held under the auspices of the Breed Society, a bull made 2,000 guineas, and some even higher prices have been reported privately. This breed has grown immensely in popular favor and bids fair to take first place as the source of the dual-purpose cow.

Horses are in great demand. Never was Clydesdale breeding so brisk. Geldings at Perth have more than once recently made £200. On the other hand, we are told that in New Zealand draft horses are almost unsalable. A first-class gelding can be bought for £35, and worn-out sorts can hardly be given away.

The Brydon Challenge Shield, presented by the late Robert Brydon for competition at the Glasgow Stallion Show in 1904, after being open for competition at fifteen shows has been won outright by James Kilpatrick, Craigie Mains, Kilmarnock, with his lovely young horse Craigie Litigant, 19071. It had to be won five times by an exhibitor, with a different animal each time, before it became his absolute property. Mr. Kilpatrick won it with Oyama 13118, Perfect Motion 13123, St. Clair 14347, Bonnie Buchlyvie 14032, and Craigie Litigant 19071. Three of these horses are sons of Baron of Buchlyvie 11263.

The Government have introduced an important Bill affecting horse breeding. Its object is to eliminate the unsound and unworthy travelling stallion, and it is made applicable to the three Kingdoms. The weak point in the Bill is, the power which it proposes to place in the hands of the veterinary advisers of the Departments of Agriculture. That these gentlemen should have the last word where questions affecting health and soundness are concerned is agreed, but most sensible people are opposed to them being constituted judges of merit in draft horses. It has been cynically observed that a veterinary surgeon is a man who knows something about the inside of a horse but very little about its outside. The breed societies are working hand in hand in this connection, and are claiming that a panel drawn from a list recommended by their councils should have the last word in questions affecting merit in horses. Certainly some eminent veterinary surgeons, whom we have known, were very unsafe judges of merit in cart horses.

SCOTLAND YET.

### An Old-Time Corn-Planting Custom.

EDITOR "THE FARMER'S ADVOCATE":

As I have been asked several times lately "when is the right time to plant corn", I think it might be well to tell my brother farmers how I decide the right time on my farm. I believe it is very important that corn should be planted at the right time, that is to say when the soil is warm enough to allow the seed to germinate. Several years ago I planted two acres with a hand planter, putting the rows 30 inches apart and the hills in the row about 14 inches, dropping about five grains in a hill. The first year plants in an acre that way in a day should feel secure that they are done enough for a day. But to get back to the importance of planting at the right

time. I allowed four days to lapse between planting the first acre and the second, and although it was all one field the last planted never seemed to catch the first, and was not as good a crop.

My grandfather used to say, "when the white oak leaves are the size of a mouse's ear is the time to plant corn," and I always stick to that, as I have yet to see the white oak leaves damaged by frost. I have seen beech cut black a number of times, but never the white oak.

As corn is perhaps the most important crop on the farm I think we should take care to have it treated just right. An extra day spent on the corn land to put it in the very best condition is never ill spent, but it should be done so as not to delay planting. See how the corn looks when put on a nice mellow, well-worked piece of land. It shows good dollars all over the field. If a man would put one fifth of his grain land in corn he would be able to feed more stock and feed them better; it may take more labor but it is worth it.

Muskoka, Ont.

A. H. B.

### Test the Seed Corn.

The time for planting corn is again at hand. While the outlook for securing seed was rather gloomy early in the season, it is believed that an adequate supply of seed corn which will grow has been secured from the Southern States. While this may not mature in Ontario, it will produce good fodder which may be ensiled. We understand that a considerable quantity of early corn has also been secured, and it is believed that it will ripen in this latitude; if so, it will be of considerable assistance to the hog and cattle feeders next winter. There should be no easing up on the amount of corn planted, if seed can be secured. It is doubtful if any other crop grown on the farm will give as large a yield of feed per acre with the same amount of labor. The cultivation of the corn crop can mostly be done by horse power, and the silo makes a very convenient place for storing the crop.

From whatever source the seed is secured, it is advisable to test the corn for germination so that the drill or planter may be set to plant a sufficient quantity of seed to give a good stand. If the corn only germinates seventy-five per cent., it is necessary to plant a quarter more than if it tested one hundred per cent. We have heard of some seed testing less than fifty per cent. Now, if the usual amount were planted not more than half a stand could be expected. Thus the necessity of knowing what the seed will germinate in order that the required amount be planted. If the corn is on the ear, it is a good plan to test about six kernels from each ear, two kernels being taken from each end and from the centre. By following this method, any ear of low germination can be discarded. While it is strongly advised that the corn be purchased on the ear, the bulk of this year's supply will be shelled. In this case it is necessary to take a few kernels from different parts of the bag. It is not a difficult matter to test the seed. It may be planted in a box of fine, loamy soil and kept in a warm place for a few days, when signs of life should appear if the corn is of good quality. A shallow box may be filled with sawdust and the kernels placed in it and then covered with a cloth. This should be kept moistened and if the temperature is high enough but a few days will be required for germination. The strength of growth, or the vitality, should be taken into consideration as well as the germination.

Corn is a hot weather plant and requires a fairly high temperature in order to give best results. For this reason it is well to delay planting until the soil has a chance to warm up. If the seed lies in the ground too long it very often rots, which results in a poor stand. The more cultivation that can be given the soil before planting the fewer weeds there will be to cultivate or hoe out later on.

There is a difference of opinion as to the quantity of seed to plant per acre for best results. There are stockmen who claim that the more ears they get on the corn, the better their stock will do. Consequently, they plant rather thinly in order to give the corn a chance to develop and mature. There are others, however, who favor a thick seeding, claiming that by so doing they get a heavier yield of fodder per acre and that their experience has been that silage made from matured corn without ears gives equal results to the silage containing a lot of grain. If planting in hills it is well to have about four kernels to a hill, but more must be planted in order to have a uniform stand. The rate of seeding varies from one peck to the acre up to forty and fifty pounds. This latter rate gives a particularly heavy stand, and the stalks will grow much finer than where seeding is not so heavy. However, it is possible for the stalks to mature even if they do not produce grain.

The corn planter, grain drill, or small hand planter may be used for putting the seed into the ground. Whichever method is used, care should be taken not to cover the seed too deeply. In some localities the crows are always on hand to dig up the young plants as soon as they show through the ground. Various methods of preventing this destruction have been tried with more or less success. Shooting a few birds and leaving them on the field sometimes has the desired effect of frightening away the entire flock. Soaking some corn in strychnine and scattering it over the field will undoubtedly kill many crows, but then many other birds are also caught. We have found that tarring the corn is a splendid method of keeping the crows from damaging the crop. The corn is placed in a large tub and then a stick is dipped in a tar tin and used to stir the corn. By this method a thin coating of tar is placed on each kernel without getting an over-supply on some. This does not

seem to hurt the germination of the corn. Test the seed, sow plenty to ensure a good stand and then aim at giving plenty of cultivation during the growing season as no crop responds to tillage like corn.

### The Sugar Beet Crop.

In some sections of Ontario a considerable acreage of sugar beets is grown each year. This has become a fairly profitable industry, but the production of the roots has been somewhat curtailed by the price not advancing in the same proportion as the price of sugar. The cost of growing an acre of beets has increased quite as much as the advance in the cost of manufacturing sugar. The shortage of help is also preventing many farmers from putting in a large acreage of beets. According to Bulletin No. 262, on "Sugar Beets," written by Dr. C. A. Zavitz, Professor of Field Husbandry, at Guelph, and A. W. Mason, Assistant Experimentalist, the sugar production of the world under normal conditions amounts to about 20,000,000 tons annually, and about one-half of this supply is made from beets, while the other half is made from cane. A large percentage of the world's total supply of sugar has formerly been produced in the European countries now at war. The estimated consumption of sugar per capita, per annum, in the United States for the five years previous to 1916 was 87.4 pounds, and this had slightly increased from August 1916 to August 1917. The consumption of sugar in Canada per unit of population is estimated to be fully as great as that of the United States. A considerable bulk of the sugar used in Canada must be imported. According to the Bulletin, the three sugar-beet factories operating in Canada can manufacture sugar from approximately 33,000 acres of sugar beets, and they are offering for 1918 an option of \$9 per ton for the beets, with an increase of one dollar per ton for each advance of one cent over eight cents in the wholesale price of sugar, or of \$8.75 per ton for beets analyzing twelve per cent. sugar, with an increase of thirty-three and one-third cents per ton for each advance of one per cent. of sugar. An average of close to ten tons per acre of sixteen and a half per cent. sugar has been grown in Ontario for the past few years. The percentage of sugar varies according to the variety of beets grown and also the method of cultivation.

For the best results, the sugar beet requires a warm, moist soil having open sub-soil. However, good crops have and can be grown on clay, loam or sandy soils, provided the sub-soil is not hard and there is good drainage. The cultural methods as outlined in the Bulletin are as follows: "It is a good plan to grow sugar beets after such crops as potatoes, corn or winter wheat, which had previously received a good application of farm-yard manure. Sugar beets can be followed to good advantage by spring wheat, spring rye, barley or oats; any one of which could be seeded with clover alone or with a mixture of clover and timothy. It will therefore be seen that this crop fits nicely in either a four or five-year rotation. If it is necessary to apply farm-yard manure immediately before the sugar beet crop, it is considered advisable to use well-rotted manure in the autumn and have it worked into the soil. The use of commercial fertilizers can best be determined by local experiments to ascertain the requirements of the soil. It is advisable to plow the land a good depth in the autumn and it is an excellent practice to manure and then make ridges about thirty inches apart with a double-mold-board plow. This conserves the fertility in the ridges and enables the frost and water to get into the sub-soil. Land treated in this way is in excellent condition for cultivation in the spring. Before the seed is sown the land should be thoroughly cultivated and rolled, so as to make the soil compact and firm. By means of a light harrow, a fine seed bed can then be formed. About fifteen pounds of seed per acre is usually sown, either with a beet drill or with an ordinary grain drill, leaving the rows about twenty-one inches apart."

According to experiments carried on at Guelph, it was found that the roots which were thinned when at a height of two inches surpassed those which were not thinned until they had made a growth of eight inches by an average of 1.3 tons per acre. In an average of five years sugar beets which were thinned when two inches in height produced the heaviest weight of roots compared with those thinned at other stages of growth. The distance at which the plants are left in the row also influences the yield. At two inches, the average weight per root was .39 and the average yield per acre 17.75 tons; leaving the plants six inches apart the weight per root increased to .83, but the yield per acre dropped to 15.74 tons; at ten inches the roots averaged 1.25 pounds, and the yield per acre 15.48 tons. Thus it will be seen that as the distance between the roots was increased there was an increase in size, but a decrease in the yield of roots per acre. While leaving the plants two inches apart may give the heaviest yield, from eight to ten inches is considered advisable owing to the greater ease in handling the crop. In regard to depth of planting, the best results were obtained when the seed was sown about one-half inch below the surface of the ground. To sow as shallow as this and have the seed properly covered would necessitate the land being in fine tilth.

A considerable acreage of land in Ontario is suitable for growing sugar beets, and as high testing beets can be produced here as anywhere else. With an adequate supply of labor and a price per ton for beets commensurate with the cost of growing and the price of the manufactured article, a much larger proportion of Canada's sugar requirements could be produced at home. While some have a preference for the cane sugar, the sugar made from beets is of high quality. Those who grow sugar beets must be prepared to give them attention at the right time.

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Prior to the war all the labor forces at to secure what is known to the directors in order to be tained.

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# Automobiles, Farm Machinery and Farm Motors.

## War Preparation.

When the terrible struggle in Europe started a great many failed to realize that those at home had as much real war work as those actually overseas. The man who is fighting in the trench, often hand-to-hand with the Hun, is, of course, carrying the greatest responsibility; but the man at home must so study and labor that he can release the highest percentage of man-power and material to aid the Allies in doing their work. He is thus not only going to render a service to Canada but is going to increase his own personal efficiency, and in every way will find himself better equipped, physically and mentally to carry on his life work.

Prior to the summer of 1914 automobile manufacturers and garages found no trouble at all procuring all the labor required, but the demands of the mechanical forces at the front are rendering it increasingly difficult to secure skilled help at home. This has resulted in what is known as the dilution of skilled labor, in other words it has become necessary to make the experts in all automobile business confine themselves to the direction of the work of others less competent in order that the largest possible out-put may be obtained.

You can help to release men of mechanical genius by taking upon yourself all the little jobs in connection with your car that you have been accustomed to pay the garage for. There is no reason why farmers should find it necessary to come to garages except in very few instances. If you can make up your mind to master the details of your automobile you will find that the knowledge attained in this effort will not only save you a great deal of money, but will also fit you to take care of all the other machinery in use upon the farm. It is safe to say that if the agriculturist of Canada would only help to perform the minor operations in the maintenance of automobiles that at least 25 per cent. of the men in the Canadian garages could be released for other work.

Should our appeal interest you, it will become necessary to provide some place on the farm where real mechanical work can be successfully carried on. You will first require a bench, so located that there is plenty of light thrown all over it, and a foundation strong enough to prevent vibration. There are no fixed rules for the building of a bench, for what would be comfortable for one would not suit another. The bench must be a little lower than the elbows of those who are going to use it, and there should be sufficient width to accommodate the largest part of your motor car. The length of the bench depends entirely upon the size of the jobs you anticipate carrying out. Do not use soft wood because it is liable to shrink. The legs should be well braced in order that any tugging or pulling can be safely done. You should see that the bench is absolutely level. Close to the windows at the side or in front it is well to have all your tools hanging up in clear view in order that the greatest amount of time may be saved in their selection and use. It is folly to keep them in a box or bag because they soon become damaged or lost. If you have a definite place they are certain to always be in order. The most important instrument at your work-bench will be the vise. See that you get a good one. The jaws should close uniformly and be about 3 or 3½ inches wide.

We have now told you how to make a start in assuming the mechanical responsibility of your car. When you

bought the machine you were supplied with elaborate instruction books. When any difficulty comes up go to work without delay at your bench, always remembering that every time you are successful you will save the time of the workmen at your nearest garage and thus add to the available mechanical resources for the fighting front. Furthermore you are being economical with your money which should be a matter of prime importance.

AUTO.

## Prefers Horse Power to Tractor.

EDITOR "THE FARMER'S ADVOCATE":

After reading the article on "War-time Importance of the Tractor on the Farm," it set me wondering if the writer were a farmer or a tractor agent. If he were a farmer and used a tractor, I venture to say he didn't farm in the general way, in this part of the Province. And, as regards an increase in food production, I fear the more tractors that were put into use the less, instead of more, would be the production, to say nothing of the financial burden it would place upon the farmer. If tractors are an essential for agriculture, why are they not proving their worth in the Western Provinces, where conditions are a hundred per cent. more favorable than here and where the main object is to sow the crop and take it off and haul it to elevators? It is true that there are quite a number of tractors in the West, but are they giving absolute satisfaction? If they are, how is it that so many horses are being shipped there for agricultural purposes? Is it because they cannot build tractors to supply the demand, or is it because the horse is a more reliable and satisfactory source of power than the tractor? I have had no experience with tractors, so I will leave that question to answer itself.

As it has been proven in the West, by giving the tractor a fair trial, that horses are indispensable to quite an extent at least, how can the farmer in the Eastern Provinces afford to spend \$2,000 on a tractor—this being just the purchase price—and buy gasoline at the prevailing prices when he has to keep one team of horses at least on every one hundred acres? Your correspondent says there are not enough horses to meet the power requirements. I would like to say that there are more horses in this part of the Dominion than there is work on the farms for them to do, as motor-trucks and auto deliveries have almost entirely taken the place of the horse in the towns and cities and the farmer has horses for which there is no market, and if he buys a tractor and figures on disposing of his surplus horses, what is he going to do with them? It would be a shame to turn them out to starve, or try to fatten them, as their meat is not desirable for human consumption.

The fact that the farmer can run the tractor day and night has been emphasized; he could, if he could get a man just in the rush season, but then the only time that would be any advantage would be in seeding time and plowing in the fall, for one cannot draw hay in at night, neither can grain be cut or hauled in when the dew is on. The farmer could put in a very large crop with his tractor, and he could also do a lot of plowing, but the average farmer is wise enough to sow only as much as he can profitably harvest. This also is one reason he does not require such a great acreage plowed. Besides, he would have to make a great many changes in his implements in order to attach them to his tractor, and if he wanted to hitch his team to

them he would only have them to change back again and this would entail a great deal of time that he had gained by the use of his tractor. If a break occurs with the tractor, which necessitates the sending away to the manufacturer for repairs, there is nothing to depend upon but the remaining horses to keep the ball rolling, regardless of how much work there is to do or how long it takes to make the repair, to say nothing about what a break in his machine might cost him. The tractor, like all other machines, is bound to have breaks sooner or later, and inexperienced operators do not make these occurrences any less.

On the other hand, we have the farmer who does not depend on motor power. He has horses to do his necessary work, he knows what they will do and he is taking no chances on any experiment. On most farms it requires one good team of horses for the heaviest of the work, and a certain amount of teaming which is necessary with farm work, and most people desire a driving horse or a general-purpose horse to do the driving. All that is needed now is another horse to make up two teams. This fourth horse might be a brood mare or a colt; either would do to make up the second team for the seeding or fall plowing for a farm of 100 to 150 acres, and farms under 100 acres do not require the second team unless there is an extra amount of the farm in crop. At this rate of figuring the tractor only reduces the number of horses required on the large farm and does not reduce on the smaller one. It might be true that a tractor would do more with just one man to operate it, but would it pay the farmer to make such a heavy investment which would make so little difference? I do not see how it would pay for any more than the gasoline it burned, let alone pay for itself, and, in regard to an increase in production, if the difference would ever be noticed at all it would not be a very large increase to say the most. As far as seeding and fall plowing are concerned, it is not that which is hampering production, as a boy can drive a team, or even a girl can handle a team that is not too spirited, and the farmer can get the crop in all right. The difficulty is to harvest the crops which take so much hard labor. And as far as belt power is concerned, threshing is done by large outfits which give best results, and grinding is a thing the farmer is not in the habit of doing himself. Anything lighter may be done by a small gasoline engine, which costs about one-tenth as much money and will give as satisfactory results.

After taking everything into consideration, and at a time when agricultural products are so badly needed it would be absolutely foolish to advocate the use of a tractor on every farm when they have not been in use in the past and the average farmer is not the least bit acquainted with their general results. It would mean a great change in the present method of farming.

Middlesex Co., Ontario.

A READER.

## Engine Knocks.

I have an eight horse-power engine, kerosene burner, which runs smooth on gas, but knocks on oil. What is the cause?

E. R. W.

Ans.—Your engine is running too cold or else the kerosene and air are not sufficiently heated before entering the engine. See article in "The Farmer's Advocate" of April 4th issue on "Adapting Gasoline Engines to Burn Kerosene."

W. H. D.

# Canada's Young Farmers and Future Leaders.

## Chronic Kickers.

Some folks are never satisfied; the weather doesn't suit, it is either too cold or too hot, too wet or too dry. The crops are not what they should be, or else they are so heavy that it is feared they will be hard on the land. The boys stay out too late at night, or they go to bed so early that they are dubbed "sleepy-heads." The sermons are too orthodox or the preacher has too many new-fangled ideas about religion. The teacher overworks the pupils, or else wastes their time with things which have no relation to the farm or life. Such a person is termed a "grouch", or a "chronic kicker", and is certainly not pleasant to meet or associate with. It is fortunate there are but comparatively few such people in the world. It is the booster who keeps things looking up and makes social, economic and religious matters run smoothly. He has the faculty of saying the right thing at the right time, and of advancing constructive instead of destructive ideas. His very expression is full of optimism. It seems to come natural to some people to look on the bright side of things, but with the most of us it requires training. If we only thought so, it is just as easy to look and be pleasant as it is to wear a long face and "grouch". These two characteristics grow on a person, and one should be careful in youth to get the right viewpoint. The fellow who is always finding fault sometimes does so unconsciously. By looking on the dark side for so long it has become a habit, and habit once formed cannot be easily broken. One must frequently check himself up when he feels things going a little wrong, and remember that "the man worth while is the man with a smile when everything goes dead wrong." Looking on the bright side may become a habit the same as looking on the dark side,

and it is certainly much the better habit to form. It will not only have a good effect on oneself but will tend to brighten everyone we meet. One cannot start too young to cultivate the habit of being pleasant and looking for the bright side of everything. It may not be easy at times to do this, but it should be remembered that "every cloud has a silver lining." When thoroughly discouraged, and everything is going wrong, try to think of how much worse it might have been and possibly you will find that you have many blessings. The chronic kicker does not become such in a day, nor in a month, but his unpleasant disposition is the result of having the wrong viewpoint of life over a number of years. If inclined to look on the dark side, check yourself before it becomes a habit.

## Pure-bred Stock.

There is something about pure-bred stock which induces a person to take a little more interest in the chores than if animals of nondescript breeding are kept. It is regrettable that more registered animals are not found on our farms. Some will say that it costs too much to get a start, or that they can make as much money out of the grades. Both of these suppositions may be true in some cases. We have seen stables filled with grades that were of more uniform conformation and of better type than some pure-bred herds. They are the exception, however, and were the result of grading up by the use of pure-bred sires. The registered animal does not require any more feed to bring it to maturity than does a grade, but the price which it will bring is much greater, as will be seen by following the auction sales. True, there are pure-bred animals which are scrubs so far as type and conformation are concerned,

showing that individuality of the animal must be taken into consideration as well as the breeding. There is a demand for good breeding stock and the prospects are that it will continue for some time. It is not necessary nor is it advisable, to purchase a whole herd of pure-breds. It is preferable to buy one or two choice females of fancy breeding and grow into the pure-bred stock business rather than go into it. With a young man starting for himself, we believe this to be a good policy for him to follow, and in ten or twelve years he will have a fair sized herd at but small expense. It is surprising how fast the herd multiplies. There is one mistake, however, and that is of securing a pure-bred animal without paying sufficient attention to its breeding and type. A person would be farther ahead in the end, by a good bit, to pay \$400 or \$500 or even more for a good female, than to pay half this price and get but a common one in both breeding and individuality. There are herds in this country where practically every animal traces to one or two foundation cows. Thus, in starting a herd one should be very careful about the quality of the animals secured.

Outside of the mercenary end of the business, there is a lot more satisfaction in working with animals which you know you need not be ashamed of in the showing than with those whose ancestors are not renowned, and whose progeny are not a credit to the farm. It does cost a good deal of money to secure animals which are bred in the purple, but in the end it usually pays. Aim at having all the stock on the place registered. It may take several years to accomplish this, but unless a person aims high or has a goal to reach, he does not succeed. When laying the foundation for a herd or flock, it will pay to secure the very best individuals which may be bought.

## THE DAIRY.

Skim-milk has high nutritive value, don't waste it.

Will the cream you are selling grade No. 1? If not, why not?

Cool the milk as soon as it is drawn, but be sure that the cooling process is carried on in a clean place that is free from objectionable odors.

Water henlock and wild parsnip found growing in some swamp or low-lying lands have been responsible for the loss of many head of stock.

High quality butter and cheese are made from first grade cream and milk. Are you looking after your cream and milk in the most approved manner?

Don't turn the milk cows into the woods if there is danger of them getting a feed of leeks. One lot of tainted milk may injure an entire vatful at the factory.

Don't be in a hurry to turn the cows on grass. The cream or milk cheque will be larger through the summer if the grass gets a good start than if it is kept cropped close.

M. D. Munn of St. Paul, Minn., was re-elected President of the American Jersey Cattle Club at the annual meeting of the Club. In 1917 44,887 Jerseys were registered and 35,884 transfers recorded. This is an increase of 24 per cent. in registrations over the preceding year.

Give the spring calf a chance and this means feeding whole milk for the first two or three weeks and then gradually weaning it on to skim-milk. You cannot sell all the whole milk and expect to raise as thrifty a calf as your neighbor who does not stint on the amount of milk fed the youngsters.

More dairy products might advisedly be used on many farms. Milk, butter and cheese are foods of the first order, but yet the first and last mentioned are sparingly used in too many homes. Use milk as a beverage and cheese as a substitute for meat. Compared with the price of most drinks and foods they are not expensive.

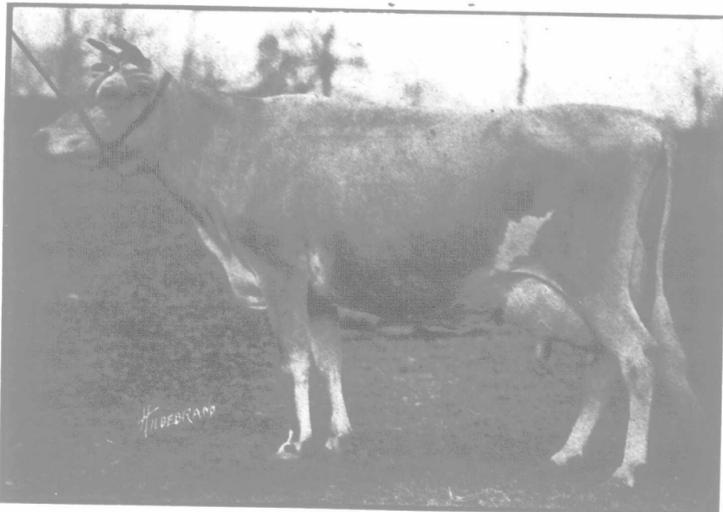
From March 20 to May 4, 18 Ayrshire cows and heifers qualified in the record of performance test. There were 7 mature cows qualifying. White Leg Kirsty was first 11,782 lbs. of milk and 424 lbs. of fat, in 304 days. She was closely followed by Flavia 3rd of Ottawa, with a record of 10,880 lbs. of milk and 408 lbs. of fat in 328 days. Hall Kate 4th headed the four-year-old class with 8,972 lbs. milk and 370 lbs. fat in 323 days. Her test was 4.12. Kathleen was first in the three-year-old class; she gave 7,886 lbs. of milk and 314 lbs. of fat in 327 days. The two-year-old class was headed by Amelea Denty Cora. This heifer gave 7,931 lbs. milk and 283 lbs. of fat in 304 days.

### Milk Fat Essential to Health.

A good deal of study has been put on the question of balanced rations and the nutritive value of feeds. Tests and experiments have been conducted in practically every country in order that it may be definitely ascertained what foods or combination of foods would be best for animals or for human beings. Dr. E. V. McCollum, of the John Hopkins University, has been carrying on a number of experiments along this line, and has proven that the fat of milk is essential to the proper development of the human being. It contains something which is only found in milk fat and in some leaves. In an address before the National Dairy Conference, recently held, Dr. McCollum outlined some of the results of his investigations. It was pointed out that we have had available for human nutrition plenty of cereal grains, such vegetables as beans and peas, products from the dairy industry and from the meat industry. With the plentiful supply of foodstuffs from different sources, the Doctor did not wonder that we had overlooked the fact that the protein content, the energy content and the digestibility was not the whole story in nutrition. Chance took care in a general way of all the errors into which we might have fallen had our diet been of a more restricted character. There are certain diseases peculiar to a faulty diet, one of which is known as beriberi, which has been common for centuries among rice-eating peoples. These people have never attained the size that has been attained in this country, and have not progressed in literature and science. To the Doctor's knowledge this trouble has never occurred in the northern part of the continent where there was a variety of diet. Another disease of dietary origin mentioned was scurvy, which used to be quite prevalent among sailors restricted to a diet of sea biscuit and salt pork for many weeks or months. Fresh vegetables or fruit juices soon brought about recovery. Another disease which is believed to be due to a faulty diet is that known as rickets. The Doctor mentioned certain districts in New York where practically one hundred per cent. of the children had crooked legs and backs, and grew up into deformed adults, or else died in infancy, largely as a result of faulty diet. These things are being studied and an effort is being made to discover the substance which is lacking. Experiments have been conducted with animals, feeding some entirely on the wheat plant, others on the

corn plant and others on the oat plant. Certain calves were selected and fed on these rations, in order to see what would happen. Those fed on the wheat plant as the sole source of nutriment did not look as well as the others, and an endeavor was made to find out what was wrong with the wheat ration. These calves grew up and their first progeny only weighed about half as much as they should. With the oat-fed animals there was a little better result. The calves were normal in weight but were either dead when born or died within twenty-four hours after birth. Those fed on the corn plant entirely were the best, and the calves were vigorous and quite strong. With this information on hand, the Doctor and others commenced making a study of the problems of nutrition in order to determine what was the most simple ration on which one could get animals to grow. Different quantities of starches, sugars, fats and inorganic salts were fed in different proportions. After five or six years of investigating, it has turned out that in addition to the recognized constituents of the diet starches, fats and protein there are two other things which are necessary and they have been designated as vitamins. One of these is most obtainable in the fat of milk and is found associated with other fats, as the egg yolk and the fats out the the glandular organs, such as liver and kidneys. These fats would permit of growth when put into a diet, provided the diet was right in every other respect. This substance is not obtainable in any vegetable fat.

After continued experiments with the wheat plant, the conclusion was arrived at that its inorganic content was unsatisfactory, that it lacked the unknown substance furnished by butter-fat, and that its protein was of poor quality. It has been found that the proteins in the vegetable world do not compare with those of the animal world. The Doctor continued: "There are three mineral elements which have to be added to any feed to make it complete, those are calcium—the principal element in lime, and the two elements which are present in table salt—sodium and chlorine. You must add all three of them; any pair will not do, and you must add the same three for any feed that we have studied. Every seed lacks a sufficient amount of that unknown sub-



Oxford's Briar Flower.

Purchased at the Butler sale for \$10,000 by Wm. Ross Procter. The highest price for Jersey cow in history.

stance in butter-fat to induce normal growth and prolong well being." When an animal is starved for one of these unknowns, he gets paralysis. When there is a lack in the diet the tissues surrounding the eyes swell up and the eyelids are badly inflamed. In the course of three or four weeks, if nothing is done, the animal will die, but if, within three or four days of death from a lack of this unknown substance that butter-fat is rich in, it will recover if an adequate amount of butter-fat is given. Thus the importance of butter-fat is clearly shown. The following paragraph from the Doctor's address also shows the importance of butter-fat for human beings: "A case was reported in 1906 by a Japanese physician named Mori when it was noted among a class of Japanese who were living on a diet of leaves, seeds, roots, tubers and meat. In other words, they did not have dairy products. There were approximately 400 cases of children who had eye trouble and the case was described exactly as we had found out experimentally, before we knew anything of his results. We had proved that the trouble resulted in an animal due to lack of the substance in butter-fat, so that we could cure an animal's eyes right up with butter-fat. The cure for the eye trouble in these children at that time was to give them chicken livers but we found that the fats out of the glandular organs of an animal will cure that eye trouble the same as butter-fat. But the vegetable fats will not cure the trouble no matter how much is used." The results of these experiments are a strong argument in favor of the use of butter. The substitutes which are made from vegetable oils or animal fats will not give the same results. Consequently, for growing children a liberal quantity of milk-fat should be given. The same holds good with adults, although they are in a position to use some of the substitutes to better advantage than the children.

### Oat and Pea Silage.

EDITOR "THE FARMER'S ADVOCATE":

It may be of interest to some of your readers to know what cattle will do on oat and pea silage, with no other roughage. In January last I had used up all my hay and was unable to procure any except timothy at \$30 per ton, which seemed to me to be throwing money away to feed to cows and young dairy heifers. I have, therefore, fed nothing since but silage (oats and peas) for nearly three months and my cattle lick it up cleaner now than they have done all winter. I have six milkers, four heifers nearly two years old, and twelve or fourteen from six months old up. The milkers received in addition four or five pounds of bran each daily. They had been in milk on an average of seven months, and averaged 23 pounds of milk daily. The bottom ten feet in the silo was fairly well matured and the grain was well filled, though the straw was not very yellow. I feed a limited quantity to my hogs and brood sows and they eat it with a relish. The oats and peas are soft enough for them to digest readily.

B. C.

T. K.

### Loafing Animals.

The term "loafer" applies usually to an idle person, or to one who would rather beg than work. In many herds there are animals which answer to this description; they do not do sufficient work to pay for the feed which they consume, and it is a case of the dairymen keeping the cow instead of the cow keeping him. If there were fewer loafers in the dairy herds of Ontario, the average production per cow would be greatly increased and the financial returns of the dairymen improved to that extent. No man can afford to keep a cow in his herd which does not produce sufficient milk and fat to pay for her feed, the labor involved in looking after her, and giving an allowance for interest on investment, etc.

Some dairymen have found on starting to keep records that about one-half their herd was keeping the other half; thus bringing the profits to a minimum. By beefing the slackers and giving a little extra feed to the best cows the labor income would be greatly increased. It is not the number in the herd that counts as much as the quality of the individuals in the herd. With feed and labor at the price they are at present, a cow must give a fairly good flow of milk in order to meet expenses with the prevailing prices of dairy products. There is too much guessing as to what an animal will produce, and as a result inferior cows from the production standpoint are retained in the herd. If daily records were kept the dairymen would know at a glance what every cow was doing. He would then be in a position to feed according to production and to cull out the members of the herd which did not come up to a certain standard. No dairy farmer can afford to have loafers in his herd.

### Jerseys Bring a Big Figure.

A new record for Jersey prices was made at the Edmond Butler sale at Mt. Kisco, N. Y., when 62 head brought \$60,115. As high as \$10,000 was paid for a single individual. This cow, Oxford Briar Flower, is a daughter of that famous bull, Oxford Majesty. Among some of the other high-priced animals were Oxford Gipsy Lad, which went under the hammer at \$2,700, and Greenfield Brand, at \$2,610. There were several Canadian breeders at the sale, who secured some of the choice individuals. The firm of B. H. Bull & Son purchased Les Prairies Bessie for Arthur T. Little of London at \$2,200, and secured two other cows for their own herd at \$875 and \$750 respectively. Eventide's Lassie went to the bid of John Pringle, of London, for \$1,750.

In Kansas, the Holstein breeders recently held their consignment sale and 83 head made an average of \$326.

The Ohio Holstein-Friesian Breeders' Association sold 123 animals at an average of \$252, at their spring sale. The top price was \$600 for the female, Oakdale Hengerveld Segis.

At the dispersal sale of Holsteins held by the Lawson-Holding Company, Poughkeepsie, N. Y., 97 animals made an average price of \$496. The highest was \$15,600 for a half interest in the bull King Segis Pontiac Alcatraz.

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## POULTRY.

### Packing Eggs.

Now while the hens are laying fairly well is a good time to pack a few eggs for next winter's use, or, in other words, to provide for the time when the majority of hens are off duty and eggs are high in price. There are different methods of handling the eggs so that they will be in good condition six or seven months hence. Hundreds of cases go into the cold storages every year and if it were not for these storage eggs we fear there would be an egg famine in many districts. Comparatively few people in the towns and cities put away sufficient eggs when they are plentiful to do them for the winter months. While a few are able to have their hens lay the year around, the habit has not become general with any breed of fowl. The price of eggs has kept up remarkably well this spring, as compared with what it was a few years ago and there is no likelihood of them becoming any cheaper, as at this season of the year many of the hens go broody and egg production falls off. Failure to give the birds the proper feed and attention when they are on free range also results in a decrease in the egg yield. It very often happens that when the crop comes and the hens have access to the ripening fields of grain, eggs become more plentiful. It is advisable to pack a few eggs now rather than wait until on in the fall.

The water glass solution for the preserving of eggs gives very satisfactory results and more of it is being used every year. The material is not expensive and the directions for use are on every tin. Infertile eggs are better for packing than the fertile ones, and they should be clean when put into the solution. If the eggs are dirty, moulds or bacteria develop and affect the contents of the egg through the pores of the shell. Some are able to keep eggs very successfully by merely greasing them and wrapping them in common paper, then standing them on end in a room where the temperature is moderate and free from dampness. Eggs will keep very well if packed in salt, also if packed in oats. Place a layer of oats in the bottom of the box, then a layer of eggs and another layer of oats, until the box is filled. A lid can then be put on and the box turned upside down frequently, as the eggs keep better if turned. These preservatives close the pores of the eggs and prevent the evaporation of the contents.

A supply of eggs for winter use might well be put away in every household and this is the time of year to do it. If the hens do lay in the winter, there is always a demand for new-laid eggs at a high figure, which is due largely to the shortage of supply. The poultryman who has a flock laying a high percentage of eggs during December and January is fortunate indeed. These two months are the off season for hens. There are a few birds in many flocks that do lay occasionally during the cold weather. By having the pullets hatch early, feeding them properly and giving them suitable accommodation, a much larger number of winter eggs might be produced.

### Raising Turkeys.

What are some of the essential points to consider in feeding and caring for young turkeys? A. S.

Ans.—Turkeys are of a roving nature. It seems almost impossible for them to get away from the habits of their wild ancestors. The birds ever appear to be suspicious of man. Instead of remaining around the building, as does the domesticated hen, they prefer to roam the fields and woods, consequently it is very difficult to keep track of them. During the laying season, it is necessary to confine the turkey hen in order to prevent her from stealing her nest. The favorite nesting place of the turkey is in the woods, or in a clump of shrubs or weeds along a fence. It is not uncommon to find the nest a mile or more from the buildings. As a rule the best hatch is secured when the bird is allowed to roam at will, provided the nest does not become destroyed by rodents. The mortality from disease in the flocks of birds hatched and raised in the open is usually less than when the birds are confined in small quarters. However, it too often happens that small animals of the woods prey on the young turkeys. For this reason it is advisable to keep an eye on the flock until they are about half grown, and even then it is well not to lose sight of them.

The poults are rather delicate for the first week or two, or until such time as the quill feathers get well started, and unless great care is exercised there is likely to be a number sicken and die. Warmth and freedom from drafts and dampness are essential the first few weeks, and sudden changes must be avoided. Hard-boiled eggs and bread crumbs, with plenty of fresh water to drink, makes a very good ration for the first two or three weeks. Some feed cornmeal bread, and others make a loaf of a mixture of two quarts of shorts, one quart flour, one-half quart bran, and a teaspoonful of soda; mixed with sour milk and baked. This loaf is soaked in water before feeding. For the first couple of weeks, five feeds a day should be given, but after that they may be reduced to three. Green feed, such as chopped onion tops or dandelion leaves, should be added to the ration as it is claimed that they are essential to health. Under no consideration should the feed be put on the ground. It may be fed in a clean trough or on a shingle, but feeding out of the hand is preferable. Do not confine the young flock to the same ground for more than two or three days. Have a pen and coop which can be moved easily. At the end of four or five weeks the hen may be released from the coop and per-

mitted to lead the flock out on to free range. Care must be taken, however, that they be given shelter from the dew at night and also from showers. A close watch should be kept for lice. Drooping wings and dullness are indication that these enemies of fowl are preying on the lives of the young birds. A little lard rubbed on the head and under the wings of each poult will root these parasites.

Turkeys will travel over a considerable area in search of insects and grubs, and it is surprising how little they will destroy as they wend their way through the growing crop. By their feeding on insects, grubs, grasshoppers, etc., they no doubt do more good than harm to crops. Very little grain is required once they go on free range. However, if a little is fed every evening it may induce them to return home. It too often happens that the flock prefers to roost in a neighbor's apple tree rather than to journey homeward.

Colds and blackhead are two diseases which take a heavy toll, and it is very discouraging to see the flock dwindle through the season, until by fall only a few remain. The symptoms of cold are sneezing and a watery discharge from the nostrils. Placing a little coal oil in the drinking water and rubbing carbolized oil around the eyes is recommended. Blackhead is quite prevalent. It is a contagious disease of the liver and intestines, and may occur anytime after the poults are a couple of weeks old. Sometimes the birds die soon after infection, or they may linger on and be carriers of the disease. Affected birds first appear dull and listless with loss of appetite; diarrhoea usually sets in, the wings and tail droop, and there is a peculiar discoloration about the head. This is considered to be practically an incurable disease. However, preventive measures may be taken to guard the flock against contracting it. The germs of the disease live in the ground; consequently putting the young birds on new feeding ground each year is one step toward warding off this fatal trouble. Even on the fresh ground it is advisable to feed the birds from the hand. If any show symptoms they should be immediately isolated from the flock and it may be wise to destroy them. The drinking fountains, buildings and roosts should frequently be disinfected. It is unfortunate that this disease has become so prevalent and is so difficult to treat. Care should be taken when purchasing breeding stock to secure them from flocks that are free from disease. If the disease can be prevented until the young birds go on free range, they are not so liable to become infected until placed in the fattening yards in the fall.

### The Egg-Eating Habit.

Some birds contract the habit of eating their eggs. Once this habit is formed it is rather a difficult matter to break them of it. It is very often started as the result of improper feeding. Some essential nutrient left out of the ration, such as mineral matter or meat, is often the direct cause of this trouble. If the birds lay in open nests they may eat practically all the eggs laid. We have seen one hen leave the nest and another one immediately jump in and eat the egg. Some have stopped the habit by filling an egg shell with red pepper. Another very good way is to darken the nests. This can be done by building a sort of run-way along the front with an entrance from each end. As the eggs are not in full view from the pen, there is not the temptation for the birds to eat them.

## HORTICULTURE.

Cut black-knot from plum and cherry trees as soon as it appears. Delay may jeopardize the life of the tree.

Plant lettuce, radish, peas, corn, etc., at intervals of ten days or two weeks so as to prolong the season for using these vegetables.

The orchard soil requires feeding if maximum crops of fruit are to be expected. Trees will not do any better on poor soil than will oats or corn.

Strips of paper or pieces of tin wrapped around such plants as tomato, cabbage, cauliflower, etc., when set out will be a protection against attacks of the cut worm.

Set out more tomato plants than usual this spring. The ripened fruit is relished in the fall and will aid in conserving meat. Home-canned tomatoes will help reduce the expense of providing the table.

Inspect the gooseberry and currant bushes and if worms are devouring the leaves apply a poison. Two pounds of arsenate of lead to forty gallons of water may be applied just after the fruit is set but use hellebore if worms are attacking at the time the fruit is nearly ready for use.

If you have an orchard you can scarcely afford not to give it at least one coating of some spray mixture. Bordeaux or Lime Sulphur will control apple scab and the addition of arsenate of lead to the mixture will destroy such destructive pests as bud moth and tent caterpillar thus protecting the foliage. If the tree is denuded of its foliage it cannot prepare for the production of a crop of fruit.

### Continuity of Bloom in the Flower Garden.

Every experienced gardener starts his flower garden in the autumn. By so doing he can be sure of a continuous display of bloom from the time that the snow disappears until it covers the ground again in the autumn.

The very first flower of the year is the Christmas rose. This frequently forms under the snow and is always in bloom by the time the snow disappears from the border. The crocuses and the squills follow. The really worth-while flowers of early spring, however, are the tulips and narcissi. The tulips are the "radiant" flowers of spring which come to us with the first songs of the birds. With the tulips come also the more delicate creamy white and golden narcissi or daffodils. The beautiful and stately Darwin tulips carry the blooming season well on into iris time.

The irises with their many rainbow colors belong to the "ardent" group of flowers. In gorgeousness of color they are, perhaps, without rival. The Dutch, English, Spanish and Siberian iris lengthen out the season well on into peony time and peony time lasts for several weeks and carries the flowering season into rose time.

From the time when the early bulbs begin to fade until past rose time there is a continuous succession and variety of many of the gorgeous spring flowers. The dazzling and magnificent oriental poppies and the tall spire-like foxtail lilies, recently introduced into Canada, add peculiar charm to the borders.

The flowering shrubs are very beautiful. They are easy to grow and perhaps more graceful even than some of the flowers. First of all the snow garland and sweet-scented currant bloom, and these are quickly followed by the lilacs and the Siberian pea trees. A little later comes the graceful Van Houtte's Spiraea. Others are the mock oranges, Japanese roses, rose acacia, summer flowering hydrangea and the smoke bush. The autumn flowering hydrangea carries the season well on into September when the berried shrubs complete the season's record.

Returning to the perennial flowers, the next great group is that known as the "showy" group and includes the phloxes, shasta daisies, blanket flower, etc. These are the flowers of July and August.

The annual flowers are at their very best in late July, August and September. They are easily raised from seed sown about the middle of April. Many of them continue in bloom until the killing frosts of October. Sweet peas must not be forgotten and they augment the flowers of July and August.

The flowers of late autumn constitute the "prevailing" group, which includes the golden sunflowers, the Japanese anemones and the fall or perennial asters. The China aster and the wonderful modern gladiolus and the Japanese lilies should also have a place in every garden.—Experimental Farms Note.

### Insidious Enemies of Garden and Field Crops.

There are several insects and grubs which exact a heavy toll from farmers, fruit growers and gardeners. It is believed that the annual loss due to such pests amounts to millions of dollars. Some of these can be controlled by the application of poisonous material. However, there are others that are very hard to combat; among these are the cutworm, white grub and wireworm. These larvae live in the ground and are very destructive to certain crops. It is very discouraging to see a field of oats, or corn, thinned out or the plants sickened and die, due to the work of these pests. No less damaging is the work of the cutworm on garden stuff.

The white grubs feed naturally on the roots of grasses; consequently, when the sod land is plowed and they are deprived of their usual food, they readily attack corn, potatoes, strawberries, etc. The species which are most injurious require three years to complete their life cycles, or a period of three years elapses from the time the eggs are laid until the mature beetles appear. According to Leaflet No. 5, issued by the Entomologist Branch, Department of Agriculture, the beetles were very abundant in certain districts of Eastern Canada in 1917. The grubs hatching from these eggs will undoubtedly cause injury to crops this year, and also in the spring of 1919. It is the second year that it is the most destructive. The methods of control outlined in the Leaflet are as follows:

Under garden conditions, grubs are often turned up when the land is being dug or plowed. As many of these as is possible should be removed by hand and destroyed. Under acre conditions there are unfortunately no practical measures known to destroy the grubs when they are known to be present in the land, and destroying crops. Late summer plowing, which brings many grubs to the surface, crushing numbers of them and exposing others to adverse weather conditions, is useful, particularly in years when the grubs are changing to beetles.

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

Limited areas may be practically freed of white grubs by turning in hogs, either in spring after the first of May, by which time the grubs will have come near to the surface, or in late summer when the crop has

been removed. These animals are very fond of white grubs, and will root them out and devour them."

The method of controlling cutworms given in Leaflet No. 3, of the Entomological Branch, is to the effect that clean cultivation will go a long way in preventing these worms from multiplying. The eggs of most of the cutworm moths are deposited soon after the adult insect appears in early or late summer, and are laid on weeds or nearby succulent vegetation. Consequently, it is advisable to plow deeply in the early fall all fields where cutworms have been troublesome. Wrapping a piece of paper or a band of tin around such garden plants as cabbage, cauliflower, tomatoes, etc., is advocated as protection against the cutworms' attack. To protect fruit and other trees from the climbing cutworm, a band of cotton batting fastened tightly around the tree, near the bottom, will prove effective.

Remedial measures advocated in the Leaflet are as follows:

The poisoned-bran remedy is the one which is now used most extensively for the destruction of cutworms generally. This is made as follows: Bran, 20 pounds; molasses, 1 quart; Paris green, or white arsenic, 1/2 pound; water, 2 or 2 1/2 gallons.

Mix the bran and Paris green (or white arsenic) thoroughly in a wash tub, while dry. Dissolve the molasses in the water and wet the bran and poison with the same, stirring well so as to dampen the bran thoroughly. Shorts or middlings in place of bran are also useful for cutworm control.

A simple formula for small gardens is one quart of bran, one teaspoonful of Paris green, and one tablespoonful of molasses, with sufficient water to moisten the bran.

The mixture should be applied thinly as soon as cutworm injury is noticed. It is important, too, that the mixture be scattered after sundown, so that it will be in the very best condition when the cutworms come out to feed at night. This material is very attractive to them, and when they crawl about in search of food they will eat it in preference to the growing vegetation. If the mixture is put out during a warm day, it soon becomes dry, and is not, of course, as attractive to the cutworms. In treating fields of hoed crops, such as beets, turnips, etc., a simple method is to have a sack filled with the bran hung around the neck, and by walking between two rows, and using both hands, the mixture may be scattered along the row on either side. When cutworms are so numerous as to assume the walking habit, the poisoned bran may be spread just ahead of their line of march. In gardens, where vegetables or flowering plants are to be protected, a small quantity of the material may be put around, but not touching, each plant. Fruit trees may be protected from climbing cutworms in the same way, but the mixture should, of course, not be thrown in quantity against the base of the tree, otherwise injury may result from the possible burning effect of the Paris green.

Under field conditions, 20 pounds of poisoned bran is sufficient to treat about 3 acres. Scattering the mixture thinly places it where it will reach the greatest number of cutworms, and when thus spread there is no danger of birds, poultry or live stock being poisoned.

Observations have shown that the cutworm moths very often lay their eggs on weeds, etc., on the higher elevations in fields, and that the young cutworms migrate therefrom to other parts. If such places are watched from time to time in spring, it may frequently be possible to control the outbreak by scattering the poisoned bait chiefly within such areas.

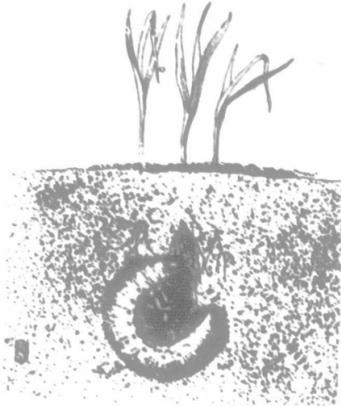
Fresh bundles of any succulent weed, grass, clover, or other tender vegetation, which have been dipped into a strong solution of Paris green (one ounce of Paris green to a pail of water), may be placed at short distances apart in an infested field, or between rows of vegetables, or roots, and will attract many cutworms and protect the crops from further injury. In Alberta the common weed known as Stinkweed has been successfully used. The bundles, also, should be put out after sundown, so that the plants will not be too withered before the cutworms find them. As in the case of the poisoned bran, they should be applied just as soon as the presence of cutworms is detected.

The above poisoned baits have given excellent results for surface-feeding cutworms, such as the Red-backed cutworm, the Striped cutworm, etc. For those kinds, however, as the Glassy cutworm, which feed almost entirely underground, these baits are, of course, of little value. For such cutworms it is important to keep the land to be used for grain crops the following year as free as possible from long grass and weeds. If this is done, there will be no tall vegetation to attract the female moths for the purpose of egg-laying.

As a rule, when cutworms assume the marching habit, they are nearly full-grown and, of course, are very ravenous. In such instances, applications of poisoned bran have been extremely useful in stopping the attack. Severe outbreaks may also be largely controlled by ploughing deep furrows in advance of the line of march of the cutworms. The progress of the caterpillars is thus stopped, and when a furrow is entered by them, a log drawn by a horse may be dragged

through it and the cutworms in this way will be crushed and killed. If a series of post holes about a foot deep and about 15 feet apart are dug in the furrow, hundreds of the cutworms will fall into them, and they can then be easily killed by crushing them with the blunt end of a post, or a piece of fence rail.

In small gardens, as soon as injury is noticed, the cutworms can, as a rule, be easily located in the soil, about an inch or so beneath the surface, and within a radius of a few inches of the plant, and destroyed by hand.

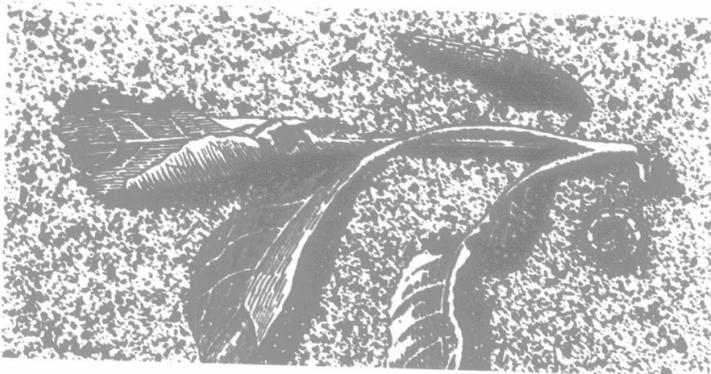


White Grub Feeding on Roots of Grasses.

## FARM BULLETIN.

### Anxiety in the Country.

During the last few weeks there has been anxiety, uncertainty, and a large amount of indignation evident throughout the rural districts of Eastern Canada, and as we go to press a large concourse of delegates are on their way to Ottawa to interview the Government concerning matters which affect production. Election pledges, that farmers coming under the Military Service Act would be exempted, and the continued appeal for greater and still greater production, have prompted renewed efforts and enlarged plans which render necessary all the skilled farm labor it is possible to obtain. The early and favorable spring brought about an increased acreage which will require more hands for harvest than were available last year. When exemptions were cancelled farmers became alarmed, and were seeding was not completed there was a sudden slackening of operations pending some advice as to how the crops would be cared for and harvested. Numerous meetings were called and largely attended. The sentiment expressed at these gatherings was that the Government had broken faith with farmers, and their endeavors to increase production must be more or less abortive if a greater draft was made on the man-power of the farm. Statements made by the British Ministry of Food, our own Food Control Board, and the Premier himself, were advanced as evidence that the importance of food production could not be overestimated. Since Canada



Young Plant Showing Characteristic Cutting Habit of Cut Worms.

has risen to third place as a wheat-producing nation, and as we lead the world in production per capita, it was considered inconsistent to further impair our effective machinery for feeding the Allies, who must naturally look to Canada for sustenance. All these matters have been agitating the minds of agriculturists, particularly when four-horse teams were turned to pasture in order that the farmers might report, when thousands in the towns and cities of the same draft had not yet been called up. The promise was made that farmers of the non-exempt class would be left with the seeding till those engaged in less essential industries had come forward, but it was not fulfilled, it was claimed.

After a long and sustained campaign for greater production, farmers cannot understand why the promise of an increase is to be blighted by the action taken and they are, at time of writing, en route to Ottawa to interview the Government and place their views before them. If conditions are such that food is now a secondary consideration and men for the army are of paramount

importance, then rural Canada will continue, as in the past, to rise to the occasion. No vague statements or "pleasing generalities" will satisfy this, one of the strongest delegations that any Canadian Government has ever been called upon to face.

### Good Roads Conference.

At the Good Roads Conference, held in Hamilton the latter part of last week, the fact was emphasized that roads in the future must be built to stand the traffic conditions imposed by heavy and numerous trucks. When our roads were first constructed it was not expected that three and four-ton trucks would be passing over them at a rapid rate. Consequently, we find that many of the roads which were well constructed to stand ordinary traffic with horse-drawn vehicles, are breaking down under the pressure of the heavy loads and the suction of the rapidly-moving vehicles. As time goes on transportation by auto truck will undoubtedly become more popular. In the building of roads to-day mistakes of the past should be avoided. The main arteries of traffic should be built for the requirements of the next fifty or sixty years, was the advice given by Mr. Howland. This speaker outlined certain legislation which should be enforced for the governing of traffic on the road. Some of the points mentioned were, that all vehicles should carry lights; pedestrians should be required to carry a lamp; thirty miles an hour should be the maximum speed of any vehicle over an ordinary road, and that speed should be reduced according to the tonnage of the wheel base and ratio to the width of the tire. A number of delegates were present from the United States and they outlined methods of construction which were being employed in their country, and forcibly impressed upon the meeting the importance of considering the traffic of the future when building roads to-day. An address delivered by J. H. McDonald, on "Road Drainage", was listened to with a good deal of interest. H. Bertram, Vinemount, gave a paper entitled, "Who Should Pay for the Roads?" in which a number of methods of taxation for road building and road maintenance were outlined.

### The Construction and Care of Outlets.

EDITOR "THE FARMER'S ADVOCATE":

The efficiency of the drainage systems in our province will depend more upon the condition of the outlets perhaps than upon any other single factor. The best outlet I have seen in operation was a corrugated metal one. Instead of bringing the tile to the end of the drain, a galvanized metal pipe, six or eight feet long of the same size as the tile, is inserted at the outlet. Across the mouth of this metal outlet, 1/4-inch bars of iron were fastened in order to prevent animals, such as muskrats and rabbits, from entering and clogging the drain. This type of outlet is absolutely frost proof, non-corrosive and, under ordinary conditions, indestructible. More than that, on account of its length and the firmness with which it can be laid, it is not likely to get out of place.

The first requisite of a good tile drainage system is a first-class outlet. Its construction and care are of first importance as no part of the system, after installation, is likely to give more trouble. Evidences of neglect in giving the outlets proper care are everywhere seen and more attention to this point will increase the efficiency of our drainage systems to a surprising extent.

An excellent outlet may also be made by using a cement tile or vitrified sewer crock at the end in preference to the clay. Due to their porosity and hence their high content of water, clay tile when frozen will flake and crumble and soon allow the earth to fall in and obstruct the drain.

Where neither a corrugated metal pipe nor sewer tile can be procured a wooden box at the outlet is to be preferred to exposing the tile at this, the most vulnerable point in the system. Cedar is preferable to use and the box should be made from six to eight feet long and large enough in cross section to admit the tile at the upper end. Care should be taken to place it firmly and permanently in position. This latter type of outlet is very efficient for a few years, but requires to be renewed as soon as the bottom board decays.

The condition of the ditch or channel into which the tile empties is also of fundamental importance and demands our careful attention. The two essential points in connection with this channel are first, that it should be of sufficient size that it will not run full for more than one day and, secondly, that the general plane of the tile drains emptying into it should be above its average surface line. Submergence of the outlet is to be avoided wherever possible as great danger of filling with silt or sand is incurred when this takes place. This condition also prevents the drainage of the lower lands. Where the tile empty at or near the bottom of a ditch and the water often rises over the top of them the outlet should be constantly watched and frequently cleaned out.

An excellent method to follow in maintaining the outlets is to examine them twice a year and repair any faulty condition found in them. The tile drainage system will be called upon to do the greatest amount of work during the spring season and if the outlets are cleared before the snow goes off their efficiency will be correspondingly enhanced. If the outlet is of a durable nature and has a good clearance it will not require any attention during the summer. They should be visited, however, late in the fall and any accumulation of dead leaves or other foreign matter removed before the snow covers it up. It will be a simple matter then to open them in the spring in preparation for the freshet season. Thunder Bay, Ont. "SURVEYOR".

Cattle received were totalling over 1000. Among the dealers, prices satisfactory to the market were made at values prevailing at 100 and almost \$3 the ruling price was little changed to day, cattle market of the prevailing day, four the head were worth of the market during the cattle brought idea of the price the live stock can be obtained loads of heavy the top price load was \$15.50 averaging four at \$16.25 per hundred pound good sales for hundred. Of hundred to two load of twenty eleven hundred per hundred, to figure, eighteen eighty pounds hundred head the week from and heifers weigh to ten hundred eight head of selling at \$14.20 twenty-eight at \$14.35, twenty numerous sales to \$14.25. Cow in keeping with other grades of of fourteen hundred \$14.00 per hundred pounds at \$12.50 realized \$12.00; \$10.00 to \$11.00 from \$8 to \$9.50 \$12.50 in a few a number of sales \$12; cows of good \$10.75, common \$9 to \$9.75, and per hundred. market was above prices of the previous moved to the numbers; choice per hundred, and \$11.75. With two on sale, prices were choice veal calves per hundred, good \$15.00, and comm

Lambs and she and sold at uncha

About nine thou On Monday the while several deck sales were made but on Wednesday marked up to \$21

# Toronto, Montreal, Buffalo, and Other Leading Markets

Week Ending May 9.

## Receipts and Market Tops.

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

	CATTLE						CALVES					
	Receipts		Top Price Good Steers (1,000-1,200)				Receipts		Top Price Good Calves			
	Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Week Ending	Week Ending	Same Week	Week Ending	Week Ending	
Toronto (Union Stock Yards)	6,591	4,584	6,057	\$15 00	1917	1917	2,684	1,185	2,171	\$16 00	\$13 50	\$16 00
Montreal (Pt. St. Charles)	825	652	488	14 50	1917	1917	2,431	2,431	3,176	16 00	12 00	12 25
Montreal (East End)	782	565	330	14 50	1917	1917	3,160	1,518	1,892	16 00	12 00	12 25
Winnipeg	2,550	2,405	2,076	15 50	1917	1917	146	145	109	17 00	12 50	16 00
Calgary	1,970	882	1,531	14 50	1917	1917						
Edmonton		211	530	10 00	1917	1917						

	HOGS						SHEEP					
	Receipts		Top Price Selects				Receipts		Top Price Good Lambs			
	Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Week Ending	Week Ending	Same Week	Week Ending	Week Ending	
Toronto (Union Stock Yards)	9,219	8,866	7,346	\$21 25	1917	1917	182	178	125	\$22 00	\$16 50	\$22 00
Montreal (Pt. St. Charles)	1,249	1,546	1,137	21 90	1917	1917	72	92	38	16 00	15 50	
Montreal (East End)	928	696	548	21 90	1917	1917	104	50	41	16 00	15 50	
Winnipeg	5,653	4,881	5,118	19 75	1917	1917	22	3		18 00		
Calgary	2,349	2,201	2,389	19 30	1917	1917	251	175	54		13 50	
Edmonton		603	880	15 85	1917	1917						

### Market Comments.

#### Toronto (Union Stock Yards).

Cattle receipts at the Yards during the week were the heaviest for some months, totalling over sixty-five hundred head. Among the daily runs were many choice killers. Prices, on the whole, were very satisfactory to the drovers, sales being made at values fully as high as those prevailing at the close of the former week, and almost \$3.00 per hundred higher than the ruling price one month ago. There was little change in the market from day to day, cattle selling steady on the closing market of the week, at the quotations prevailing on Monday. On the latter day, four thousand head were offered for sale, and all but about one hundred head were weighed up before the close of the market. When it is realized that during the week, numerous loads of cattle brought from \$4,000 to \$4,500, an idea of the present enormous value of the live stock industry to the country can be obtained. There were a number of loads of heavy cattle on sale, for which the top price reported for a straight load was \$15.50 per hundred. Two steers averaging fourteen hundred pounds sold at \$16.25 per hundred, six head of thirteen hundred pounds for \$14.50, and other good sales from \$14.50 to \$15.25 per hundred. Of steers weighing from ten hundred to twelve hundred pounds, one load of twenty three head averaging eleven hundred pounds sold at \$15.00 per hundred, twenty-six head at a similar figure, eighteen head of ten hundred and eighty pounds at \$15.15, while several hundred head were weighed up during the week from \$14.00 to \$15.00. Steers and heifers weighing from seven hundred to ten hundred pounds sold well, twenty-eight head of one thousand pounds selling at \$14.50 per hundred, another twenty-eight at \$14.40, twenty-five at \$14.35, twenty-three at \$14.25, while numerous sales were made from \$13.50 to \$14.25. Cows and bulls sold at prices in keeping with those prevailing for other grades of cattle. One choice bull of fourteen hundred pounds sold at \$14.00 per hundred, one of ten hundred pounds at \$12.50, while quite a number realized \$12.00; medium bulls sold from \$10.00 to \$11.00, and common bulls from \$8 to \$9.50. Choice cows sold up to \$12.50 in a few instances, while quite a number of sales were made from \$11 to \$12; cows of good quality sold from \$10 to \$10.75, common and grass cows from \$9 to \$9.75, and canners from \$7 to \$7.50 per hundred. The stocker and feeder market was about steady at the closing prices of the previous week, and stock moved to the country in fairly liberal numbers; choice feeders sold up to \$12.75 per hundred, and choice stockers up to \$11.75. With twenty-four hundred calves on sale, prices were about steady. Really choice veal calves sold from \$15 to \$16 per hundred, good calves from \$13.50 to \$15.00, and common from \$9 to \$11. Lambs and sheep were few in number and sold at unchanged quotations. About nine thousand hogs were on sale. On Monday the ruling price was \$20.75, while several decks realized \$20.85. Few sales were made on the following day, but on Wednesday, quotations were marked up to \$21.00, notwithstanding an

CLASSIFICATION	No.	TORONTO (Union Stock Yards)			MONTREAL (Pt. St. Charles)			
		Avg. Price	Price Range Bulk Sales	Top Price	No.	Avg. Price	Price Range Bulk Sales	Top Price
STEERS								
heavy finished	430	\$14 98	\$14 25-\$15 25	\$15 50				
STEERS good	970	14 45	13 75- 15 00	15 00	72	\$14 00	\$13 75-\$14 50	\$14 50
1,000-1,200 common	63	12 97	12 00- 13 50	13 50				
STEERS good	1,198	13 76	13 00- 14 50	14 50	105	13 75	13 00- 14 40	14 40
700-1,000 common	441	11 99	11 50- 12 50	12 75	96	11 75	10 50- 12 25	12 25
HEIFERS good	344	14 24	13 50- 14 75	15 00	20	13 75	12 00- 14 40	14 40
fair	373	12 37	11 75- 12 75	12 75	12	12 10	10 75- 12 25	12 25
common	39	11 00	10 50- 11 50	11 50	21	10 25	9 00- 10 50	10 50
COWS good	488	11 14	10 50- 12 00	12 50	38	11 25	11 00- 12 00	12 00
common	628	9 50	8 50- 10 00	10 25	192	9 70	9 00- 10 50	10 75
BULLS good	164	11 26	10 50- 12 00	12 50	16	11 25	11 00- 12 00	13 00
common	75	9 80	9 00- 10 50	11 00	146	9 25	9 00- 10 50	10 50
CANNERS & CUTTERS	264	7 10	6 75- 7 50	7 50	26	7 00	6 00- 7 25	7 25
OXEN					8			
CALVES veal	2,679	13 00	12 00- 14 50	16 00	3,213	12 00	10 50- 12 50	16 00
grass	5	8 00	7 00- 9 00	9 00				
STOCKERS good	309	11 35	10 75- 12 00	12 00				
450-800 fair	187	10 34	9 75- 11 00	11 25				
FEEDERS good	438	12 27	12 00- 12 75	12 75				
800-1,000 fair	180	11 75	11 50- 12 00	12 00				
HOGS selects	8,681	20 93	20 75- 21 25	21 25	1,132	21 75	21 75-	21 90
heavy	84	20 86	20 75- 21 25	21 25				
lights	203	20 04	18 75- 21 00	21 25	63	21 25	21 25-	21 25
(fed and watered) sows	247	19 45	18 75- 21 00	21 00	47	19 75	19 75-	19 75
stags	4	16 69		18 00	7	17 25	16 00- 17 50	17 50
LAMBS good	103	21 00	20 00- 22 00	22 00	22		*11 00- 12 00	12 00
common	4	17 00		18 00				
SHEEP heavy	38	12 74	12 00- 14 00	14 00				
light	23	15 00	14 00- 16 00	16 00	35	13 50	13 00- 14 00	14 00
common	14	8 29	7 00- 10 00	10 00	15			

endeavor on the part of the buyers to lower prices. On Thursday, commission houses held out for a further advance and a number of sales were made at \$21.15 per hundred. Of the disposition for the week ending May 2, Canadian packing houses bought 998 calves, 99 bulls, 115 heavy steers, 4,830 butcher cattle and 41 sheep. Local butchers purchased 1,131 calves, 342 butcher cattle, 356 hogs and 82 sheep. Canadian shipments consisted of 57 calves, 46 milch cows, 357 butcher cattle and 134 feeders. United States shipments were made up of 108 calves. The total receipts from January 1 to May 2, inclusive, were: 84,634 cattle, 20,288 calves, 134,125 hogs and 10,599 sheep; compared to 76,460 cattle, 18,605 calves, 182,721 hogs and 11,496 sheep, received during the corresponding period of 1917. Montreal. - Receipts showed an increase over those of the previous week of one thousand head of cattle, fourteen hundred calves, one hundred sheep, and five hundred and fifty hogs. All offerings were readily bought up at prices higher than any before paid at the Montreal Yards. Fully

thirty-five per cent. of the steers offered were not finished, having evidently been wintered for grass finish but were marketed without grass through the influence of the present exceptional prices; steers of this quality sold up to \$12.50 per hundred. Steers of good quality weighing from one thousand to twelve hundred pounds sold from \$13.75 to \$14.50. The majority of the good steers, however, weighed around one thousand pounds and for these, prices were as high as for steers of the heavier weights. One lot of twenty head averaging nine hundred and ninety-five pounds, sold for \$14.40 per hundred, twenty-one averaging ten hundred and twenty-five, were weighed up at \$13.75, three head weighing ten hundred and forty sold for \$14.50, and eleven head of heavier weight, brought a similar price. Over fifty per cent. of the steers of good quality offered, sold at \$13.75 and up. While most of the heifers on hand were fat, with few exceptions they were small, and of mixed breeding; these were weighed up with the lighter weights of steers. Grass cows of good quality sold from \$11 to \$12, and common cows up to \$10.75. Calves sold well, a premium being paid for those of the best quality. Prices ranged from \$10.50 to \$12.50 for

most of the sales. A few extra quality calves sold from \$14.50 to \$16. Sheep and lambs sold more freely than did those on hand last week. Lambs realized from \$11 to \$12 each, and sheep up to \$14. The market for hogs was steady on the week's trading. Receipts showed a considerable improvement in quality and weight, over the offerings of the previous few weeks. Most of the selects sold at \$22 per hundred, weighed off cars, while one sale was made at the close of the market at \$22.15 for one hundred head. Pt. St. Charles. - Of the disposition for the week ending May 2, Canadian packers bought 3,173 calves, 17 canners and cutters, 88 bulls, 368 butcher cattle, 1,137 hogs and 38 lambs. Canadian shipments consisted of 3 calves and 15 butcher cattle. The total receipts from January 1 to May 2, inclusive, were: 10,980 cattle, 19,216 calves, 22,092 hogs and 5,146 sheep, compared to 12,613 cattle, 21,645 calves, 32,864 hogs and 4,768 sheep, received during the corresponding period of 1917. EAST END. - Of the disposition for the week ending May 2, Canadian packers bought 1,639 calves, 197 butcher cattle

### Farmers— Bank Here By Mail

Just mail your cheques to us—we deposit them to your credit and send you a prompt acknowledgment.

If you need cash we cash your cheques by mail, too, sending you the money in a registered letter.

We understand the farmer's problems and gladly assist him in every way possible.

We will welcome your account.

Paid-up Capital \$ 6,500,000  
Reserve Fund 12,000,000  
Resources 130,000,000

### THE BANK OF NOVA SCOTIA

We invite your account. Special facilities for banking by mail. One hundred and ninety branches.



Every farmer who desires to do business with

### The Molsons Bank

is always assured of a courteous reception by local managers. And their object is to assist the farmer in a legitimate way, to make his land and stock more productive.

533 hogs and 40 lambs. Canadian shipments were made up of 253 calves, 23 butcher cattle, 15 hogs and 1 lamb.

The total receipts from January 1 to May 2, inclusive, were: 9,657 cattle, 16,832 calves, 12,880 hogs, and 4,918 sheep; compared to 13,536 cattle, 18,021 calves, 17,461 hogs and 6,193 sheep, received during the corresponding period of 1917.

#### Winnipeg.

Twenty-seven hundred cattle were on sale, an increase of six hundred head over the receipts of the previous week. This increase was attributed to the influence of the recent high markets. The quality of the stock continues fair to medium, as the weights of the cattle that have been on grass are not up to expectations, and a large proportion of the receipts still consist of stocker cattle. Very few sheep are being received. The market is firm. Lambs sold during the week, from \$15.00 to \$18.00 per hundred, and sheep from \$15.00 to \$15.50.

Fifty-one hundred hogs were on sale, an increase of five hundred compared with the offerings of the previous week.

The quality of the run showed much improvement over these recently received. Selects sold on Friday at \$19.50, per hundred, fed and watered. On Wednesday, the market advanced 15 cents per hundred, and closed on Thursday 25 cents above the opening price of the week, selects being weighed up at \$19.25. The demand for light hogs continues strong at \$19 per hundred.

Of the disposition for the week ending May 2, Canadian packers bought 47 calves, 719 butcher cattle and 4,730 hogs. Local butchers purchased 67 calves, 303 butcher cattle, 155 stockers, 226 hogs and 2 sheep. Canadian shipments were made up of 2 calves, 2 bulls, 357 stockers, 16 feeders and 59 hogs. Shipments to the United States consisted of 67 butcher cattle.

#### Toronto Produce.

Live stock receipts at Union Stock Yards, West Toronto, Monday, May 13, consisted of 243 cars, 4,631 cattle, 706 calves, 1,897 hogs, 72 sheep and lambs. Slow, uneven market. Butchers' steers and heifers steady to 25 cents lower; cows, bulls, stockers and feeders steady; milkers and springers slow, ten dollars lower. Sheep, calves and lambs steady. Hogs, \$21, fed and watered.

#### Breadstuffs.

Wheat.—Ontario (basis in store Montreal). No. 2 winter, per car lot, \$2.22. Manitoba wheat (in store, Fort William, including 2½% tax)—No. 1 northern, \$2.23½; No. 2 northern, \$2.20½; No. 3 northern, \$2.17½; No. 4 wheat, \$2.10½. Oats.—Manitoba (in store, Fort William) No. 2 C. W., \$1.5½; No. 3 C. W., 78½¢; extra No. 1 feed, 78½¢; No. 1 feed 75½¢.

Oats.—Ontario, No. 2 white, 86¢, to 87¢, nominal; No. 3 white, 85¢, to 86¢, nominal (according to freights outside).

Peas (according to freights outside)—No. 2, nominal.

Barley (according to freights outside)—malting, \$1.54 to \$1.55.

Buckwheat (according to freights outside)—\$1.84 to \$1.86.

Rye (according to freights outside)—No. 2, \$2.45.

American corn (track, Toronto)—No. 3 yellow, kiln dried, nominal; No. 4 yellow, kiln dried, nominal.

Flour.—Ontario (Montreal prompt shipment, new bags). War quality, \$10.65, Montreal; \$10.65, Toronto. Manitoba flour, (Toronto, new bags) war quality, \$10.95.

#### Hay and Millfeed.

Hay.—No. 1, per ton, car lots, \$16 to \$17, mixed, \$14 to \$15.

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

Bran.—Per ton, \$35.40; shorts, per ton, \$40.40.

#### Hides and Wool.

Prices delivered, Toronto:  
City Hides.—City butcher hides, green, flat, 13½¢; calf skins, green, flat, 30¢; veal kip, 22¢; horse hides, city take off, \$6 to \$7; sheep, \$3.50 to \$5.50.

Country Markets.—Beef hides, flat, cured, 15¢ to 17¢; green 12¢ to 13¢; deacon or bob calf, \$2.25 to \$2.75; horse hides, country take off, No. 1, \$6 to \$7; No. 2, \$5 to \$6; No. 1 sheep skins, \$2.50 to \$5. Horse hair, farmers' stock, \$25.

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

Wool.—Unwashed fleece wool, as to quality, fine, 60¢, to 65¢; washed wool, fine, 80¢, to 90¢.

#### Country Produce.

Butter.—The butter market has been very unsettled the past week, weakening decidedly, owing to increased receipts; Creamery, fresh-made pound squares, 15¢, to 18¢, per lb.; creamery solids, 42¢, to 44¢, per lb.; dairy, 38¢, to 40¢, per lb. Okomangrine, 32¢, to 33¢, per lb.

Eggs.—New laid eggs kept stationary in price, selling as follows, wholesale: new-laid No. 1, 40¢, to 41¢, per dozen; selects, 43¢, to 44¢, per dozen.

Cheese.—Old, 25¢, per lb.; new, 23¢, to 24¢, per lb.

Poultry.—Receipts kept exceptionally light, and prices firm during the past week. Chickens, milk-fed, 30¢, per lb.; chickens, ordinary fed, 25¢, per lb.; fowl, 3½ lbs. and under, 25¢, per lb.; owl 3½ lbs. to 5 lbs., 30¢, per lb.; fowl, 5 lbs. and over, 32¢, per lb.; ducklings, 30¢, per lb.; turkeys, young, 30¢, per lb.; turkeys, old,

## Prompt Returns From Shipments

When you ship Live Stock, Grain, Butter, Cheese or Fruit, put through The Merchants Bank a Draft on the buyer. This is the business way of securing prompt and satisfactory settlement.



13

It saves time and possible loss.

## THE MERCHANTS BANK

Head Office: Montreal OF CANADA Established 1864.  
with its 102 Branches in Ontario, 32 Branches in Quebec, 19 Branches in Manitoba, 21 Branches in Saskatchewan, 33 Branches in Alberta, and 8 Branches in British Columbia serves Rural Canada most effectively.  
WRITE OR CALL AT NEAREST BRANCH.

25¢, per lb. (These are the live-weight prices now being paid to the producer.)

Potatoes.—Owing to seeding operations preventing them coming in potatoes still show a firming tendency; Ontarios selling at \$1.75 to \$1.80 per bag, and N. B. Delawares, at \$1.90 to \$2 per bag. Cobbler and Green Mountain seed potatoes selling at \$2.25 per bag.

New Floridas selling at \$5.50 to \$6 per bbl.

#### Montreal.

Horses.—Dealers report very light offerings of horses from different points. This scarcity in supply, however, is not particularly regretted, as the offerings were quite equal to the demand. The market was very dull during last week. Heavy draft horses, weighing 1,500 to 1,700 lbs., were still quoted at \$250 to \$300 each; light draft, weighing 1,400 to 1,500 lbs., \$200 to \$250 each; light horses, \$125 to \$175 each; culls \$50 to \$75 each; fine saddle and carriage horses, \$175 to \$250 each.

Dressed Hogs.—The market for dressed hogs was quite firm last week, and there was a good demand for everything offered. The price ranged from 29½¢ to 30¢, per lb.

Potatoes.—Nothing new developed in the potato market during the past week. The tone of the market was moderately firm and supplies were not very liberal. Car lots of Green Mountains were quoted at \$1.45 per 90 lbs., on track, here, and red potatoes at the same figures with McIntyres at \$1.35. In a smaller way, 25¢, was added to these prices in bags, ex-store.

Honey and Maple Syrup.—A fair demand continued for maple syrup and sales in bulk in wood were quoted at \$1.75 per gallon, while 5-gallon tins were \$1.80, and 1-gallon tins \$1.90 to \$2. Small tins were \$1.40 each. Sugar sold at 21¢, to 22¢, and was in fair demand.

Eggs.—There was no evidence of easiness in the market for eggs, and the outlook is for very high prices next winter. Wholesalers were selling to retailers at 43¢, per doz. for selected stock, while No. 1 candled, brought 41¢, and No. 2 candled, 37¢, per doz. Some were asking 1¢, more than these figures.

Poultry.—Cold storage stock was in moderate demand, but almost the only poultry being purchased now in the country consists of hens for the coming Jewish feast, and it is said that 28¢, was been paid to farmers for these.

Butter.—The price of butter tended downwards, during the early part of the week, and upwards during the later part. Choicest creamery was quoted at 42½¢, to 43¢, per lb., with fine at ½¢, less; but holders were asking more and it looked as though they might obtain it. Dairies ranged from 37¢, to 40¢.

Cheese.—Official prices were 23¢, for No. 1; 22½¢, for No. 2; and 22¢, for No. 3.

Grain.—No. 2 Canadian Western oats were quoted at 96¢; No. 3 Canadian Western and extra No. 1 feed, 92¢; No. 1 feed, 89¢; No. 2 feed, 86¢; No. 3 white Ontario, 92¢, ex-store.

Flour.—Prices were steady at \$10.95 for Government standard spring wheat, per barrel, in bags, 40 lb. cars, and \$11.05 delivered. Ontario winter wheat flour was \$11.10 to \$11.50 per barrel, in bags, and rye flour was lower, at \$15.50

per barrel, in bags, to arrive. Corn flour, \$13 per barrel, and graham flour, \$11.20.

Millfeed.—Bran was firm at \$35.40; shorts, \$40.40; pure grain mouille, \$75 per ton, including bags.

Baled Hay.—The market for baled hay was steady, with cars of No. 2 at \$17 per ton; No. 3, \$15.50; and clover mixed, \$8 to \$10.

Hay Seed.—Timothy seed was 9¢, to 14¢, per lb.; red clover, 35¢, to 38¢, per lb.; alsike, 23¢, to 26¢; f. o. b., cars, Montreal.

Hides.—Cows and bulls were firmer at 17¢, and 16¢, respectively, per lb. Steers steady at 21¢, (flat); 19¢, 18¢, and 17¢, per lb., Montreal inspection. Calf skins, 48¢, per lb.; spring lambs were up to 60¢, and 75¢, each; sheep skins, \$4.50 to \$4.75; horse hides, \$5 to \$6.50; Tallow, 3½¢, per lb. for scrap fat; 8¢, for abattoir fat, and 16¢, to 16½¢, for rendered.

#### Chicago.

Cattle.—Beef, \$10 to \$17.50; stockers and feeders, \$8.90 to \$12.75; cows and heifers, \$6.80 to \$14.10; calves, \$8 to \$14.

Hogs.—Light, \$17.35 to \$17.95; mixed, \$17.25 to \$17.90; heavy, \$16.40 to \$17.80; rough, \$16.40 to \$16.75; pigs, \$14.25 to \$17.30.

Sheep.—Native, \$12.50 to \$16.60; lambs, native, \$15.50 to \$20.80.

#### Cheese Markets.

St. Hyacinthe, Que., 22½¢; London, bids 21½¢, to 22¢—no sales; Belleville, 22 7/16¢; Montreal, finest westerns, 23½¢; finest easterns, 22¢; New York, specials, 24½¢, to 26¢; average run, 23½¢, to 25¢; fresh specials, 3¢, to 23½¢; do. average run, 22¢, to 22½¢; Watertown, N. Y., 20½¢.

#### Why He Objected.

A ship had fouled a floating mine in the dark, with disastrous results.

Boats were promptly lowered, and crew and passengers proceeded quietly to their appointed stations.

Meanwhile the captain on the bridge was sending up rockets and burning blue lights, in order to attract the attention of any vessels that might chance to be in the vicinity.

Suddenly he caught sight of a tall, thin and austere passenger standing at the top of the stair leading to the bridge.

"What are you doing here?" said the captain angrily. "Your place is in the boats, and if you do not go immediately they will not wait for you."

The passenger gazed at the captain solemnly.

"I have come," he said, "to protest against this unseemly conduct on your part. We are now facing death. Is this the time to rejoice? Is this the occasion to ignite fireworks?"

#### Deadly Camouflage.

"Talking about camouflage, I heard a good camouflage story the other day." A colonel said to one of his men on the west front:

"Griffiths, have you had my dugout camouflaged?"

"Yes, sir," said Griffiths, "I saw to it myself, sir. We've made it look exactly like a concealed six-inch gun!"

#### Along

(By Maizi)

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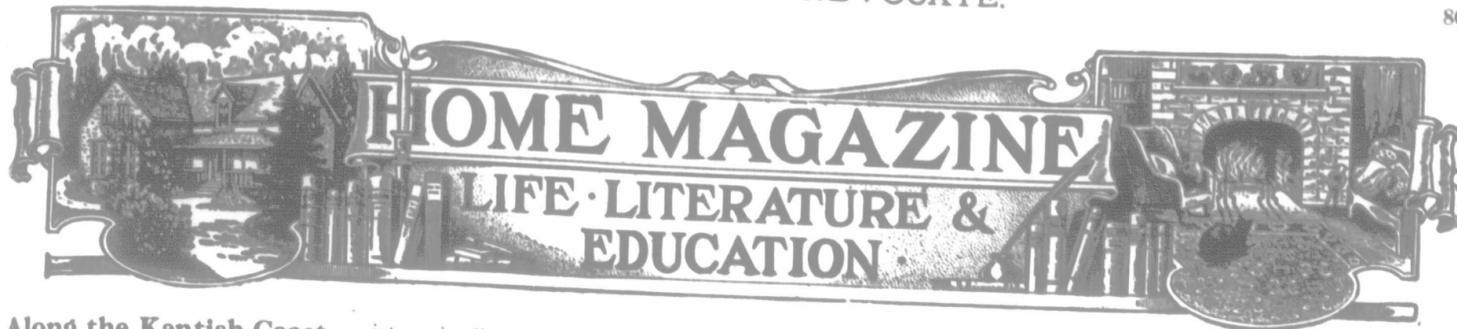
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Along the Kentish Coast.

(By Maizie Munro, in the "Tribune," New York.)

Along the Kentish coast the guns are heard all night.—News Item.

Along the Kentish coast the little children hear

The cannon boom and do not think it queer;

They think our earth was always fevered so.

With fire and water deaths—they were not born to know

Of peaceful worktime calm on house and hill,

Of life, the safe, the beautiful, the still, Along the Kentish coast.

Along the Kentish coast the little children dig

Toy trenches, playing hard that they are big.

"Shall I be grown next week, or Mother, when?

I want to go where Father is—with all the men.

It's good to be a man and fight all day"—

What do the children know of children's play

Along the Kentish coast?

The Republic of Common-sense.

BY THEODORE GERALD SOARES, PROFESSOR OF PRACTICAL THEOLOGY IN THE UNIVERSITY OF CHICAGO.

We say, "my home," "my town," "my country," but we never say "my world." Social organization has not extended beyond the nation; the term humanity represents a fine idealism but not a specific loyalty.

There have been mighty attempts to push forward to a super-nationalism, but so far all of these have been imperialistic. Yet there has not been wanting in them a certain ideal quality. Under the ambitious aggression of Alexander was the hope of imparting the Greek culture to the European world. Rome was no mere vulgar conqueror but believed that the pax romana would give to mankind a universal justice which it had never known. Napoleon, imperial egotist that he was, had a great vision of a new Europe rising from the old feudalism and in the Code Napoleon endeavored to achieve some unity of civilization. Even the frightful military aggression which menaces the world to-day is not without its idealistic quality, for the German genuinely believes that the world needs his organizing power.

All the imperialistic endeavors to unify men were wrecked upon the rock of a passionate affirmation of nationalism. And the last will be wrecked there likewise. If it could be possible that we shall fall under the German might then our children would fight to be free; and if they should fail then their children would take up the struggle. The submission of the world to the conqueror will never succeed.

Yet stark nationalism is not satisfactory. Indeed the world had inevitably built up an internationalism of a certain kind. There were not wanting those who believed in that internationalism as really effective even to the ending of war. One element in this was the internationalism of diplomacy. Ambassadors interpreted the nations to one another, harmonized differences, concluded agreements. Formal treaties bound the nations to mutual action. Specific conventions produced the Red Cross pledges and sought to safeguard the interests of neutrals and non-belligerents in war time. Indeed most international agreements were for war time, a kind of Marquis of Queensberry rules, yet such a great

internationalism as the postal and telegraph service must not be overlooked.

There was the internationalism of trade. A marvelous, intricate fabric of world credit had been organized. One could buy in New York a draft payable in the remotest part of the globe. One could order goods from the far interior of Africa or of China. Business agents were sent to any spot on earth where trade could be carried on. It was thought that the world commerce was so complex that no nation would dare to disturb it by a war.

There was the internationalism of science. We used the world phrase, "The Republic of Letters." Did any one write a good book, did any one discover a new truth, did any one bring forth an invention?—these were the common property of all mankind. We said that the world of thinking men had become unified.

There was the internationalism of labor. The extreme labor sentiment insisted that the worker in any land was a brother and the capitalist in any land was an enemy. Socialists declared that at the first hint of war the workers in every country would organize a general strike and make war impossible. The very word L'Internationale was a proclamation that patriotism was outgrown; indeed the I. W. W. in America consistently refuses to vote, repudiating country in the interests of mankind.

So had grown up that large body of practice and sentiment that may well be called the old internationalism. All this came down with a crash in the summer of 1914. The Kaiser spoke the simple truth when he told our Ambassador that international law was no longer operative. The pirate is on the sea or beneath it; the Red Cross has ceased to be a pledge and has become a target; treaties are scraps of paper.

The internationalism of science disappeared when the German Govern-

ment showed that it could mobilize its scholars as easily as its soldiers. A quick telegram of command brought the signatures of the Ninety-three intellectuals to that document which will be an eternal disgrace to German scholarship.

Trade shuddered and shook itself, then adjusted itself to the new order of things and found it nearly possible to do "business as usual." Socialism for one brief hour uttered its brave protest in Berlin against the iniquity of the Austrian note, then felt the iron grip upon its throat and fell silent.

The old internationalism is dead. We look to the future and wonder what shall protect us from the terrible dangers that the mere national organization of society involves. We are led to re-examine the value of the nation. Is it so supremely good that we may pay this awful price for it? Surely it is very good.

The nation is a great area of peace. It is marvelous to think of the vast stretch of country over which Americans may travel, finding everywhere our common tongue, our common laws, our own ways of thinking and of doing things, in a word, our own folk. It is no small thing that the world has got so far along that a hundred millions of people may dwell together unarmed, peacefully pursuing their own ways, settling any differences in the courts of law. It means so much that we rejoice in patriotism and look with just suspicion on any man who undervalues it.

But it is well to remember that, as the world is organized, patriotism is the privilege of the few. It is denied to the many or granted to them only upon sufferance. Patriotism is to-day a crime punishable by fine, imprisonment or death in Belgium, in Alsace-Lorraine, in Poland, in Bohemia, in Croatia, in Armenia, in Syria. If patriotism is permitted in the Scandinavian lands, in Holland, in Switzerland, in the Baltic

provinces, it is because the high command at Berlin is not yet ready to order otherwise.

Patriotism is the privilege of the Great State. The Germans are at least consistent in their theory of government. They do not speak of the nation but of the state. They expect to include in the Greater Germanic state many subject nations to whom patriotism shall be denied. When they declare that the small state has no right of existence they are true to the present world order. Mere unlimited nationalism offers no guarantee of continued nationalism. We have a situation which makes nationalism impossible except to the few nations strong enough to secure it, and to the weaker nations only pending the time when they may be included in some imperial scheme.

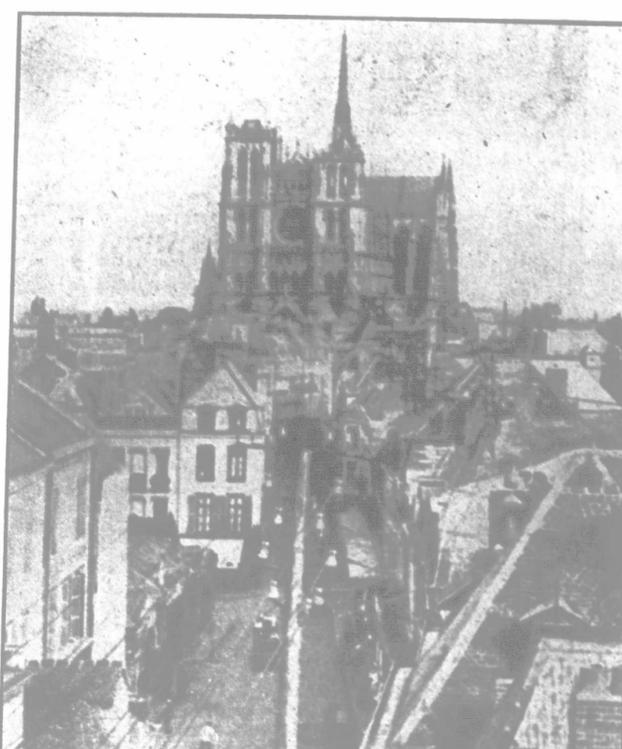
We need a new internationalism in order to save nationalism itself. Fortunately, there are already indications of the direction in which that supernational organization will be found. See it in that wide area of peace, the Britannic League of Free Nations, as the British Empire is more rightly called. Canada is a nation, Australia, New Zealand, South Africa are nations. They choose to yield their separate power of making war and to belong to the great league. The United States and Canada have a league of peace symbolized in that marvelous five thousand miles of unprotected frontier where nation keeps faith with nation and has kept it for one hundred years. There is something of hope in the coming league of American republics. There are wonderful possibilities in the grand alliance of the free democracies now united in the fraternity of war. We may hope forever to be joined in the great fraternity of peace.

The deliberate judgment of mankind outside the Germanic peoples, and we may well believe it will be reinforced by millions among them, is that war—stupid, wicked, barbarous war—must cease. There must be a world order which will make war as impossible among the nations as it is now among the states of the American Republic. The world court and the world police must be established.

It used to be the theologians who traduced human nature; it is now the editorial writers. Human nature will not be changed, of that we may be very sure. Original human nature probably has not been changed in these last five thousand years. We are not born with any more civilization than was David, who massacred his prisoners, but at least some people do not massacre prisoners to-day. Human sentiment has changed. The situations in which human nature operate have changed. The old human nature has learned some deficiencies and it can learn some more.

The new internationalism will not be the millennium. There will be quite enough wickedness in the next chapter of human evolution to satisfy the most exacting requirements of a sceptic of human nature. But a great common-sense will triumph. Nationalism with all its values will be preserved and it will have the wisdom to secure a certain well defined super-nationalism, which may preserve the nations in their peaceful life and strike a deadly blow at any criminal among the peoples who would disturb that peace. —The Independent.

Flying from the barn of David Hampden, in the Malibu section, is a service banner on which there are three red stars. Hampden, who is a widower seventy years of age, has no sons in the army or navy, but a short time ago he shipped three well-bred horses to his nephew in Kansas City, and in a letter Hampden was told the horses had been sold to the government for cavalry service. That is why the banner with the red stars on it is flying from the barn in which the horses were born.—Los Angeles Examiner.



Amiens.

Amiens is now within range of the enemy, and several shells have fallen upon the cathedral, which is one of the most beautiful in the world. It was built in the thirteenth century. 68 years being required for its construction.

### Government Food Notice.

The following order has been issued by the Canada Food Board.

1. No person shall make in Canada for private consumption, French pastries, iced cakes, or biscuits or cakes with icing of cane sugar between the layers, or added to the exterior; and no person shall use in Canada cane sugar for making, for private consumption, what is commonly called candy.

2. Any person violating any of the provisions of this Order shall be liable to the penalties enacted in the Order of His Excellency, the Governor General in Council, dated the twelfth day of March, 1918, P. C. 596, in which penalties are provided by the following clauses:

(a) Any person violating any of the provisions of these regulations, or any Order made thereunder, or obstructing or impeding any officer or person enforcing or carrying out any Order made thereunder, is guilty of an offence, and shall be liable on summary conviction before a Police Magistrate or two Justices of the Peace to a penalty not exceeding one thousand dollars, and not less than one hundred dollars; or to imprisonment for a period not exceeding three months; or to both fine and imprisonment.

(b) Where the proceedings in any case in which a fine is imposed under the authority of these regulations are instituted at the instance of any municipality, or by any officer of a municipality, the fine shall be paid to the treasurer of such municipality, to be disposed of as the municipality may direct from time to time. And where such proceedings are instituted at the instance of, or by any provincial officer, such fine shall be paid to the provincial treasurer, to be disposed of as such treasurer may direct from time to time.

### Hope's Quiet Hour.

#### The Victory of Faith.

By faith the walls of Jericho fell down, after they were compassed about seven days.—Heb. XI, 30.

And this is the task before us,  
A task we may never shirk;  
In the gay time and the sorrowful time,  
We must work, and do our work.  
We must march when the music cheers us,  
March when the strains are dumb,  
Plucky and valiant, forward march!  
And smile whatever may come,  
For whether life is hard or easy,  
The strong man keeps the pace,  
For the desolate march, and the silent,  
The strong soul finds the grace.

M. E. SANGSTER.

There is something fascinating about that mysterious siege of Jericho, as conducted by Joshua under the direction of the mysterious Captain of the host of the Lord. The people of Jericho were hiding behind their strong walls and barred gates. No one went in or out, for the fear of Israel and Israel's God made them tremble. Let us stand with the defenders and watch the movements of Joshua's army.

It is early in the morning and the host of Israel is astir. Will the city be attacked to-day? It looks like it, for a long procession is streaming out of the camp and marching round the walled city. Not a word is spoken during that strange march. The men of Jericho gaze in astonishment and fear. Is this a magical spell, or has the army of Israel gone mad?

After encircling the city once the procession quietly returns to camp. Day after day this apparently purposeless parade is repeated. The people of Jericho grow used to it, and their fears vanish as they see that no attempt is made to attack them.

But on the seventh day there is a change in the programme; for the procession starts unusually early and goes round the city seven times. Silently the men of war continue their weary and monotonous round. They are obeying orders—as soldiers are bound to do—though it seems a useless expenditure of time and energy. But it is not their business to question the orders of their general.

Then comes the command: "Shout, for the Lord hath given you the city!" The trumpets ring out and a great shout of triumph suddenly breaks the ominous silence. Instantly the massive walls, which the long march had failed to shake,

fell down like a house of cards, and the city was easily taken.

This mysterious march, with its marvelous result, is one of God's great object lessons for His people in all ages. The lesson is one we all need to learn.

We, like the Israelites, are given a daily task to do for God. We are His soldiers, and our work is to fight for Him against evil and extend His kingdom; yet the work most of us find to do every day seems to have no bearing on the extension of Christ's kingdom. Every day our hands are full of commonplace duties, which have to be done all over again tomorrow. We seem to make no progress. Those we are trying to win for God are shut behind massive walls of reserve which we cannot break down. We are dumb on the subjects we care for most; or, if we do speak, the words seem to "go in at one ear and out at the other," leaving no impression on the soul we wish to influence.

Let us take courage. God means to win the world for righteousness through His faithful soldiers, and He can do it any way or by any means. Every-day work, faithfully and cheerily done because He has commanded it, makes more impression on the hearts of men than preaching from the pulpit. When God does give the order to speak, the words will come with tremendous force from those who have been doing their everyday work steadily and uncomplainingly.



German Youngsters Captured by the French in Trenches on the West Front. Underwood & Underwood.

The Gospels—which simply tell the story of a Life of beautiful service—win more souls to Christ than the Epistles.

How tired of their monotonous marching the people of Israel must have been. After they had walked round Jericho thirteen times in one week the walls were as strong as ever. They had apparently accomplished nothing. Then—all in a moment—the obstacle to their progress vanished and they went up, every man straight before him, and they took the city. Though the tedious marching seemed to have no object and no result, the shout of triumph would not have shaken down the walls unless the tedious march had preceded it.

We hear much of the monotony of life in the trenches. For months at a time the men live in holes in the ground and seem to make no progress. Then they push forward a short distance and perhaps are forced back again. After all these years of war we seem scarcely any nearer victory. Yet we are really nearly four years nearer victory. The wearisome drill, the dreariness of life in the trenches, the willing sacrifice of so many splendid young lives cannot possibly be wasted.

When the Duke of Wellington was asked whether the British soldier was braver than other soldiers, he answered that the British soldier was not braver than other men, but he could be depended on to be brave "if there was anything to be done."

other soldiers. Our text tells us that the battering-ram which knocked down the walls of Jericho was "FAITH." Are we using that mighty power?

Many are called to meet together and pray for the soldiers. Let us not be discouraged because we have to pray and go on praying, without seeing the results of our prayers. If we only believe in prayer when we can see visible results we are not exercising faith at all. Faith is not yet swallowed up in sight; it means trusting God in the dark.

If I pray that my will may be done, it is not faith. Our business is to pray that God's Will may be done; that Right may triumph over physical force, that Peace may conquer war, that Love may prove mightier than hate. Then, having placed ourselves and our cause in God's hands, we can march steadily on—even though we may seem to be making no real headway. We can follow the example of our soldiers, and

"March when the music cheers us,  
March when the strains are dumb,  
Plucky and valiant, forward march!  
And smile whatever may come."

You mothers, who have prayed for years that your sons may find God, pray on unwaveringly. Perhaps the physical danger, which you dread for those sons, may be the means God is using to answer your prayers. One young soldier said: "I grew too old for Sunday School and I

### 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.]

#### Clothes Buying—a Fine Art.

A long time ago people used to buy wall-paper without the slightest regard to anything else that was in the room,—rugs in the same way,—and upholstered furniture. As a result the wall-paper swore at the rugs (or carpet, for rugs were not fashionable in those days); the carpet swore at the upholstery, and the upholstery at both, so that dwelling-houses were very distracting spots for artistic souls.

Now all that is changed. Every article and item of house-furnishing has become a matter of serious attention, and so it has become quite common to go into houses and rooms that are dreams of harmony and restfulness realized.

The history of clothes has been just the same, even within the memory of most of us. Time was when a hat was bought without any thought about the rest of the outfit it was to be worn with,—and so on through all the other articles of apparel. Even yet, it must be confessed, there are sinners in this respect abroad in the land.—But never, never is one of them the woman who always looks "nice," or "smart," or "stylish".

Clothes-buying, in short, has become a matter of study also—a fine art—and, really, it is a subject quite worth a little thought and care. It is something for a woman always to look "nice". Besides, the women of best taste are often the most economical buyers. They never buy at haphazard. They make every cent count.—In another class altogether is the woman who is recklessly extravagant, and the one who thinks so much about clothes that there is little else in her head—or reflected in her face either. Such an one never looks really "nice". She has let herself become a sort of clothes-horse. When one sees her one notices the clothes and forgets the woman—Which is quite as it should not be.

For clothes should be an expression of the woman, not a mere decoration of her. After all, it is personality that counts, not clothes. When personality is the thing that impresses, the clothes being wholly harmonious with it and with artistic standards, then is the miracle of good dressing accomplished.

There is a woman under the sun (perhaps you know some like her) in whom this happy blending has been achieved. But it is with her clothes that we are to-day concerned, not with her personality.

She knows how to dress to look her best—and economically, too. She "makes every cent count."

Analyze her and you notice these things about her: She is always trim and neat—"well put together"—from head to foot. She is always gowned suitably to the occasion. She wears only those colors that are becoming to her. She has that indescribable quality that is known as "good style." She wears quiet hues in daytime, venturing on the brighter ones only for evening wear or for festive afternoon occasions.

Now analyze her methods and you will find this,—or perhaps she will tell you—as follows.

"I find it most economical, and most effective, too, to keep to one color for general day wear—or, at most, two with which the same things can be worn. For instance, at present I have a navy blue suit, a navy blue long coat, and a navy blue silk dress. My one navy hat and a pair of gray silk gloves, also gray "fibre" stockings, go with all three. My hat is of good straw, so next spring I shall color it black and it will have a new lease of life; black, too, goes with everything. I find it pays always, to buy a hat of a shape that will bear re-blocking. Between that and coloring it is good for several reincarnations.

"My gloves are always gray or champagne, or white, (sometimes black, in winter), because they fit in everywhere. For summer I've given up kid gloves

entirely. Silk ones look for best—go and keep a knocking about. "I confess well-shaped. Being well-hatted means to your extra dressing.

"No,—I styles. They afford them those that time, or the fashion. Plain safe. So Shirts waists plain skirts. When I've choose a style "Trimmin' them. They seldom make ful. It's little good la little vests y On dark du hand embroi color may l braiding an and panels for me!

"Collars? collars. Th dress very good pattern of wash ma better. But shrunken bef

"Jewelry?—that. With fi of it—a chair perhaps, and sleeves are s or amber, or any of them. a necessity, prefer none a color is nec Such beautif adays, and, real jewelry, ordinary hom

"Yes, I ma time. Somet tired of them!

Yet everyo well-dressed w

#### The U

Dear Junia: the Nook, rega It is, no doub and have the we are hearti differ.

We agree s and may say know what w farmer's daug of the work. that bloomers handier than belle says wh for Aprons" h wearing a bun asking why she a table fork, y step too far, y ridiculous? D ment? We driven the ho in the mow, many times an and managed well, I venture hers.

Now regardi she mentions. confess, she mu donned her blo out of place. she didn't, we t most girls. We are immodest, a sometimes this coming from th road meet ma feel, to say the to say, in the ever dreamed o men did their exceeded the an to-day, and ne bloomers.

We are not ve 2 inches and 5 f thought before cannot see why

entirely. They're clammy and expensive Silk ones look just as well, so I wear them for best—good ones with double tips—and keep a pair of chamoisette ones for knocking about.

"I confess to a weakness for fine, well-shaped shoes and pretty stockings. Being well-shod, well-gloved, and well-hatted means half the battle. 'Always look to your extremities' is a good rule in dressing.

"No,—I never venture on extreme styles. They go out so quickly I can't afford them. I keep rather closely to those that are likely to stay in a long time, or that are seldom much out of fashion. Plain, semi-fitted suits are fairly safe. So are long, semi-fitted coats. Shirtwaists are always 'in', and so are plain skirts and skirts with long tunics. When I venture on a fancy gown I choose a style that will bear making over.

"Trimmings?—I don't use many of them. They are an added expense and seldom make anything look more beautiful. It's *lines* that count. I like a little good lace on fine white waists. The little vests worn this season are 'good'. On dark dresses the merest touch of hand embroidery in self-colored silk or color may be effective.—But elaborate braiding and beading, and silk banding and panels and all the rest of it—not for me!

"Collars? Yes, I'm partial to pretty collars. They can make the plainest dress very attractive. It pays to get good patterns and make them at home, of wash material; they wear so much better. But the material should be well shrunken before cutting out.

"Jewelry?—Well I'm rather wary about that. With fine dresses I like just a touch of it—a chain of fine gold with a pendant, perhaps, and a little gold bracelet if the sleeves are short. Or a string of coral, or amber, or amethyst, or jet, if one has any of them. A pretty pin, too, is often a necessity. But for ordinary wear I prefer none at all, or, if a touch of bright color is necessary, a string of beads. Such beautiful beads may be bought nowadays, and, being less expensive than real jewelry, are more in keeping for ordinary home or business wear.

"Yes, I make my things last a long time. Sometimes, in fact, I am quite tired of them before they are worn out."

Yet everyone says she is always a well-dressed woman.

JUNIA.

**The Uniform Question.**

Dear Junia.—Just another letter for the Nook, regarding the Uniform question. It is, no doubt, hard for all to see alike and have the same opinion, and indeed we are heartily glad that opinions do differ.

We agree with "Yours for Aprons" and may say to Rosabelle that we also know what we are talking about, being farmer's daughters and doing our share of the work. We are quite ready to say that bloomers, are, without a doubt, handier than skirts, but when Rosabelle says when she read that "Yours for Aprons" had forked 75 tons of hay wearing a bungalow apron she felt like asking why she did not fork the hay with a table fork, we think she is going one step too far. Could any idea be more ridiculous? Does she doubt the statement? We have forked hay, raked, driven the horses, thrown back grain in the mow, milked cows, etc., many many times and have *always* worn skirts, and managed to do our work, just as well, I venture to say, as Rosabelle does hers.

Now regarding the "false modesty" she mentions. Now, I think if she will confess, she must say that when she first donned her bloomers, she felt a little bit out of place. If she can truthfully say she didn't, we think she is different from most girls. We do not insist that bloomers are immodest; and perhaps will wear them sometimes this summer, but if we, in coming from the fields, along the public road meet many travellers, we shall feel, to say the least, awkward. I venture to say, in the "good old days" no one ever dreamed of such a garb. The women did their share and that usually exceeded the amount done by women of to-day, and never thought of wearing bloomers.

We are not very big either (only 5 feet 2 inches and 5 feet 2½ inches). We have thought before we have spoken and cannot see why forking hay with a table

fork is as sensible as forking hay in a bungalow apron. Perhaps we have not as clear a mental understanding as Rosabelle has but in closing would say that it is an excellent motto to "Think before you speak" and as an uncle always told us as children "Live and let live." Lanark Co. "FARMER'S TWINS".

**Hard Soap.**

Two quarts of soft water. Heat until blood warm and into it stir one can Gillett's Lye. Melt four pounds tallow and stir the Lye and tallow together till it thickens a little, then cover and leave till next day. Cut it up and into it put four quarts of soft water and boil until all the grease is dissolved and put in a tub or box, leave until next day. Cut in pieces set on a board to dry, turn occasionally. Three tablespoons ammonia and one and a half of borax added improves the soap.

I have made this soap several times and like it better than some I buy. Have your tub wet before putting in the soap and it will come out easier.

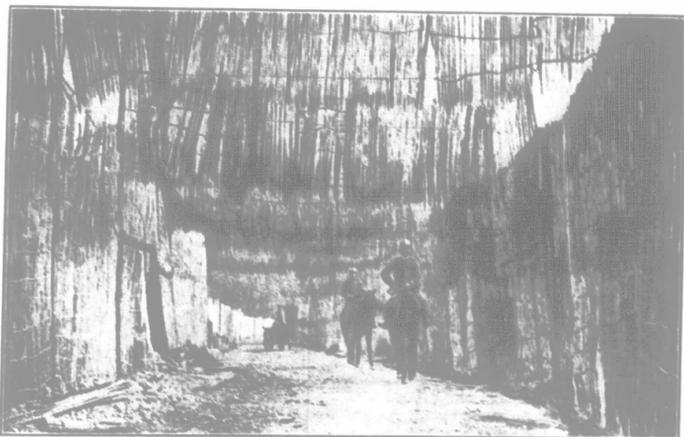
(Kindly sent some time ago by a subscriber.) C. P. A.

**Potatoes as Wheat-Sparers**

**Potato War Bread.**

Two-thirds cup sweet milk, 1 cup potato, 1 cup flour, 1 cup any substitute flour *except cornmeal*, 1 teaspoon salt, 1 teaspoon sugar, ½ yeast cake.

These measurements make one loaf. Increase ingredients according to number of loaves you wish to make. One yeast cake will make 3 or 4 loaves.



**Camouflage on an Italian Roadway.**

This roof, made of screens of matting, perfectly camouflages a road along which Italian troops pass.

Heat milk to boiling point, then cool to luke-warm. Bake or boil potatoes, then mash or put through ricer. Dissolve yeast cake in the milk. Make a sponge as follows: mix milk, yeast cake, salt, sugar, all the mashed or riced potatoes and one-third of the flour. Beat well, let stand over night to rise. In the morning add balance of flour—let rise again until double in bulk, then mold into a loaf; let rise again to double in bulk, then bake 40 minutes in a moderate oven. A little more flour will be required if potatoes are not mealy.

Rice, oatmeal, rolled oats, barley, Graham, buckwheat, milo or kafir flour, peanut meal, etc., any substitute flour or grain, except cornmeal may be used with one-third potato and one-third white flour, and will produce very palatable bread.

Bread made of one-third potato, one-third corn meal, and one-third white flour, sours before it gets light.

**Potato Biscuits.**

One cup potato, 1 cup substitute, 1 cup white flour, 3 teaspoons baking-powder, 1 scant teaspoon salt, 1 tablespoon butter or lard, 1 teaspoon sugar.

Sweet milk to make a dough which can be rolled for biscuit.

Sift flour, baking-powder, salt and sugar together. Work butter or lard into flour, add potatoes which should be boiled and put through ricer, then add milk to make a dough which can be easily handled on board. Roll out about ¼ inch thick, cut with biscuit cutter and bake 15 minutes in a quick oven.

**Potato Doughnuts.**

One cup sugar, ½ teaspoon shortening, 1 egg, ½ cup sweet milk, ¼ teaspoon cinnamon, ¼ teaspoon nutmeg, 2 teaspoons baking-powder, 1 cup riced potatoes, 2 cups flour, ½ teaspoon salt.

Mix sugar, spices, salt and shortening. Add well-beaten egg and milk. Beat well and add flour and baking-powder which have been sifted together. Mold on board and roll to ½ inch thick, cut with doughnut cutter and fry in deep fat.

**War Johnny Cake.**

Corn meal 1 cup, boiling water 4 cups, salt 1 teaspoon. Will make three cakes pie-tin size.

No milk, no eggs, no baking-powder, no soda, no shortening.

Pour the boiling water on the cornmeal, about one cupful at a time, stir briskly to keep from forming lumps. Pour this batter into well-buttered, hot pie tins. Spread evenly over the tins, then take a tablespoon of cream and smooth over the top, which makes a brown crust when baked.

Bake in a hot oven about 40 minutes.—Agl. Ext. Dept., International Harvester Co.

**Hominy.**

In these days of wheat substitution hominy deserves especial mention. It has long been a favorite in the United States, but is not as well known in Canada as it should be, its food value almost equalling that of the whole corn, while its flavor, when properly cooked, is especially agreeable.

**Hominy Porridge.**—Perhaps it is when cooked as porridge that hominy most recommends itself. To make it

put 1 cup hominy and a teaspoonful of salt in the upper part of the double-boiler. Add 3 cups boiling water, set on the stove and cook rapidly 8 or 10 minutes, stirring frequently to prevent lumping. Next place over the hot water and cook about an hour longer. Serve with cream and sugar. As hominy requires longer boiling than most cereals, it may be prepared at any time when the fire is on and reheated for using; or it may be left in the fireless cooker over night. When done the grains should be thoroughly cooked, but distinct, not run into a gluey mass.

With the cooked hominy many other dishes may be prepared.

**Hominy Pudding.**—To cooked hominy add raisins, a little syrup, milk and beaten egg. Bake in the oven until the raisins are cooked, and serve with cream. Instead of the raisins chopped dates or figs may be used, or a little jam.

**Hominy for Luncheon.**—To cooked hominy add chopped veal, chicken or lean beef, also seasonings to taste and meat stock. Cover with buttered crumbs and bake.

**When Rhubarb is in.**

**Canning Rhubarb.**—Rhubarb may be canned either hot or cold. Method 1. Cut the rhubarb in small pieces. Unless the skin is tough the stalks need not be peeled. Pack the pieces as tightly as possible into sterilized jars and fill to overflowing with a hot, thick syrup made with twice as much sugar as water and

cooked together until the syrup forms a thread when dropped from a spoon. Adjust the rubber and lid, but do not seal down. Put the jars on a rack in the boiler, with warm water to within an inch of the top of the jars, and boil for 15 minutes after it comes to the boil. Seal the jars, invert on a cloth and when cool store in a cool, dark place. Method 2. Sterilize the jars and let cool. Pack the rhubarb in and plunge into a pan of water in which the water comes over the top of the jar. Seal under water, and store in a cool, dark place. The rhubarb is sweetened when the jar is opened for use. The jars must not be moved or disturbed in any way until time for using.

**Rhubarb Marmalade.**—Five lbs. rhubarb, 5 lbs. sugar, 5 lemons, 1 lb. chopped nuts or raisins, 2 teaspoons extract of Jamaica ginger. Cook all the ingredients (using both juice and chopped rind of the lemons) except the nuts and ginger for 3 or 4 hours, cooking very slowly and stirring often. Ten minutes before removing from the fire add the ginger and nuts. Seal in tumblers, putting melted paraffine over the top when the marmalade cools.

**Rhubarb Mould.**—One lb. rhubarb, ½ cup water, ¾ cup sugar, 1 teaspoon ginger extract, ½ tablespoon gelatine to each cupful of liquid. Use the red rhubarb, and cut it, without peeling, into a saucepan. Add water and sugar and cook slowly until reduced to a pulp, then put through a granite colander—tin would spoil the flavor. Measure, and add the gelatine. Stir over the fire until the gelatine is dissolved, but no longer. Add the extract. Pour into a wet mould and set aside to cool. Serve with rich cream or custard sauce.

**Baked Rhubarb.**—Cut the stalks into pieces and put in an earthen or granite baking dish. Cover with sugar, then put on the lid and bake in a slow oven until done.

**Rhubarb and Fig Jam.**—Three lbs. rhubarb cut in bits, ½ lb. chopped figs, ½ lb. chopped orange peel, 2½ lbs. sugar, grated rind of a lemon, and the juice. Cook slowly for about an hour.

**Rhubarb and Orange Marmalade.**—Chopped oranges and rhubarb mixed together make a splendid marmalade. Add sugar and cook slowly, as usual.

**The Scrap Bag.**

**Softening Shoes.**

To soften shoes which have become stiffened after being wet, clean them thoroughly, then warm them and rub with castor oil until they soften.

**Bleaching Old Cottons.**

Old cotton dresses which have become badly faded may be bleached white by soaking them in a pail of warm water in which a little chloride of lime has been dissolved, ½ lb. lime to 2 gals. water. Leave half an hour, then rinse well through several waters and put out to bleach in the sun. Keep it wet while bleaching. Do not mix the bleach in metal. Stir with a stick, and strain before using.

**Old Potatoes.**

To prevent old potatoes from darkening when cooked, let them stand in cold water before peeling, then put them on in cold water to cook.

**Preserving Screens and Clothes Lines.**

Give your screen doors and windows a good coating of green paint (green being most invisible from the inside) and your wire clothes line a good coating of white paint. They will last twice as long since the paint prevents rust.

**Cleaning Screens.**

Brush the window and door screens well with an old whisk broom, then rub well with a cloth moistened with turpentine. They will look like new.

**Trouble With Soda Biscuit.**

Some people cannot get soda biscuits to come out light. Mix with a knife, handling as little as possible, and making the dough just as soft as it can be made to roll. Never knead the dough even a little, and when the dough is on the board pat it very lightly with the pin and roll as little as possible. Or make the dough into small balls with the hands and press each down a little with

the bottom of a cup. Always use pastry flour for such biscuits if it can be got, and be sure to have the oven quick. Remove the very minute they have finished baking.

**To Keep Syrup From Sugaring.**

A teaspoonful of cream of tartar added to the syrup and brought to a boil will prevent it from sugaring.

**Staking Raspberries.**

If your raspberries are not already staked do this at once to allow clean cultivation.

**Strawberries.**

When the strawberry blossoms appear stop cultivation and spread straw about the plants. This will keep the fruit clean and conserve the moisture. Runners may be taken out carefully, potted, and transplanted in August to form new plants for next year.

**Flowering Shrubs.**

Cut the flower clusters off all flowering shrubs when the bloom begins to fade. This will conserve the strength of the shrubs and help to ensure bloom next year.

**The Beaver Circle**

**Our Senior Beavers.**

**The Brown Thrasher.**

(*Toxostoma rufum*).

BY ALFRED KUMMER.

When Morning breaks  
My sleep he takes,  
Throned on the highest tree;  
I listen long to his sweet song,  
Adream with rhapsody.

His dress is brown,  
His true renown  
Comes from his minstrelsy;  
The mocking-bird  
Alone is heard  
With greater ecstasy,

When twilight gloams  
Again he comes  
And sings for waning light;  
His songs so rare  
The nights prepare  
For Heaven's visions bright.

O, Thrasher brown,  
In country, town,  
What liquid tones are thine!  
A golden lyre,  
With heart of fire,  
Thy mission is divine.

**Little Bits of Fun.**

Jimmy giggled when the teacher read the story of the Roman who swam across the Tiber three times before breakfast.

"You do not doubt that a trained swimmer could do that, do you, Jimmy?" the teacher demanded.

"No, ma'am," answered Jimmy. "But I wondered why he didn't make it four times and get back to the side his clothes were on."

A Lesson in Grammar.—Grace's uncle met her on the street one spring day and asked her whether she was going out with a picnic party from her school.

"No," replied his eight-year-old niece, "I ain't going."

"My dear," said the uncle, "you must not say, 'I ain't going.' You must say, 'I am not going.'" And he proceeded to give her a little lesson in grammar: "You are not going. He is not going. We are not going. You are not going. They are not going." Now, can you say all that?"

"Sure I can," responded Grace quite heartily. "There ain't nobody going."—Harper's Magazine.

**"The Ten Fairies."**

There was once a little girl named Elsie; her mother and father would not let her work; she played all day.

She grew up a beautiful girl but she could not bake, sew or sweep. But anyway she had many lovers and she married one who loved her very much.

When she got into a house of her own she could not even sweep the floor. She had one maid; when this maid saw Elsie sitting down she sat down too.

Elsie's husband was getting cross because he did not like to have to eat half-cooked food and having all the house upset. He scolded Elsie and she cried bitterly. As she was crying a man in a gray cloak stood before her, Elsie told him all her trouble and that she wanted ten fairies. At once he gave her ten fairies and he said, "I will tell you a place where you can hide them; in your fingers."

He said, "Let me see your fingers", and he named them. He went away and Elsie's fingers began to move and she felt like working and she went to work.

Elsie baked the bread, dusted the room, and everything went fine.

Her husband saw the house so clean and good bread so he started telling his friends about the fine wife he had.

He used to say, "My grandmother was a good housekeeper, but they don't hold a candle to my wife!"

Elsie's husband used to say to her, "You'd think you had as many maids as you have fingers." But Elsie would only laugh.

AGNES GIBBONS, (Age 14.)

S. S. No. 8, East Wawanosh.

I suppose you have summoned all the ten fairies to help you with wargarden work this summer, Agnes?

Puck.

**"Dick.**

(A TRUE STORY).

"Dick" was a duck, and was hatched out early in July with some chickens. A hawk took the chickens, but Dick escaped.

The old hen, after the chickens had been taken, took care of Dick. She wouldn't let him go near the water, and when it rained he would stay under the hen's wing, and she would get soaked. When he grew up, he would run to shelter every time it rained. He also would stand by the pond, and watch the other ducks swimming.

When I called him he would come, and then I would give him a piece, and if I would sit down, he would run into my lap. He also would follow papa around the fields where he was plowing, and he would get all the worms. But he got too bold with me, and when I would go to feed the chickens, he would knock the dish out of my hand, and eat it all himself.

One day a neighbor's geese came up, and he tried to chase them away. He wanted to be boss of everything.

When mother would be feeding the hens, he would stand outside bobbing his head, and seeming to say, "Just wait till she goes away from there, then I'll go in and get a feed." And, sure enough, soon as mother was out of sight, he would go in, chase the hens away from the trough, and eat it all himself.

I think Dick was a clever duck, don't you?

Your Beaver,

JEAN GILCHRIST, (Age 11),  
Shanty Bay, Ont.

**Letter From Northern Ontario.**

Dear Puck and Beavers.—This is my first letter to your Circle. I thought I would like to be a little beaver too. My father has a timbering farm, 17 miles south of Cochrane. Our farm is 1 mile from the T. and N. O. railway.

The Abitibi River is about three miles from where we live. One Sunday in March we all went back to see the river. It had frozen several nights before and there was a good hard crust on the snow, which made the walking delightful. It was delightful walking through the bush and taking in the fresh air, and enjoying the odors from the Spruce, Balsam and Balm-of-Gilead trees. We came upon the tracks of several moose that had been yarding up somewhere nearby, and papa got a tuft of hair off a tree that a moose had been rubbing on.

The river ran very quietly. It was the largest river I ever saw. It must have been very deep because there was very little motion on the water. We could hardly tell what way it was running, but since we are up beyond the height of land it was running North.

There is no church nearby so we have Sunday School at home.

Well as my letter is getting long I will close. Hoping that the w. p. l. is not by when this arrives.

I remain,

Potter, Ont. ONLY F. BROWN,  
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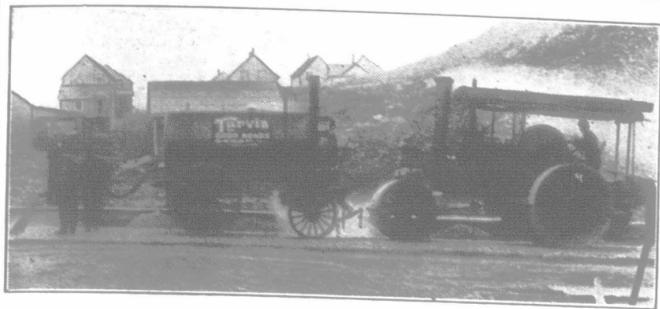
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would be nice for you all to write letters to Oneta, addressing them directly to her at "Potter, Northern Ontario." You see she has so few playmates. Then she can answer you all at once by writing a letter to you through the Beaver Circle. —PUCK.

Honor Roll.—Bessie Thomson, Kenneth Rath, Leila Kottmeier, Dollie Ard, Amy Edwards.

### Beaver Circle Notes.

In reply to Leila Kottmeier: The little stories written by Beavers are not paid for except by prizes in the competitions.

If "Miss McAuley", Lemieux, Ont., had finished her story about Androcles and the Lion it would have been published. It is better to write original stories, about occurrences near home, than to re-tell stories already published.

In reply to Dollie Ard: The Beaver Circle is for the children of subscribers to The Farmer's Advocate and Home Magazine. It costs nothing to join it.

### Our Junior Beavers.

#### The Jumping Mouse.

One fall when my father was digging at his water pipes, we found two little mice. Father caught them and gave them to me. I was afraid because I thought they might bite me, but they did not. When I was running away from a milk snake one of them got away and went down a stump, I brought the other up to the house and we put him under a glass lid and gave him rolled oats to eat.

Quite a while after we were asked to go to a wedding. We thought he might be cold, so we put an old mitt in and quite a bit of rolled oats and went away.

When we came back we found the mitt all chopped up and made into a ball and inside the ball was the mouse.

We used to let him out to play and one day Muriel, my sister, tried to catch him and he bit her.

He had a grey coat and long black legs and he had a white breast and a very long tail. Soon after we took and let him go, so we had no more mouse to look at.

IRWIN SWITZER, (Age 10).  
R. R. 1, St. George, Ont.

Irwin's letter, which was over-looked when the list was published, won a prize in the last competition.

### The Windrow

Nine rest clubs for British nurses in France have been established by the Princess Victoria.

In the effort to solve the problem of providing adequate employment to returned soldiers in England and Scotland, looms are provided for the weaving of what are known as "Blighty Tweeds". Every piece of cloth bears the name of the man who wove it. French soldiers who are being cared for in the American hospital at Neuilly, France, are taught bead-work, and are making beautiful necklaces for sale, all returns going directly to them.

Paris designers are planning that the next fashion for woollen suits and dresses shall be made of 2½ yards of 40-inch goods—which means the straight silhouette, really more trim and smart than the full styles which have been in vogue for the past three years. The real reason at the back of the change, however, is the shortage of wool, so that more may be spared for the khaki suits for the soldiers.

A humane officer with an automobile has been appointed to go through the State of Massachusetts to look after the work of prevention of cruelty to animals.

"A mule", said Uncle Eben, "should be a warnin' against kickin'. De better he does it de more unpopular he gets."

The Hostess—"Are you a musician, Mr. Jones?"  
Jones (dying to exhibit his powers)—"Well—er—yes; I think I might claim to be one."

The Hostess—"Delighted. My daughter is going to play. It would be so kind if you would turn over the music for her."—Sketch.

## Serial Story.

### An Alabaster Box.

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

#### Chapter XXVII.

History is said to repeat itself, as if indeed the world were a vast pendulum, swinging between events now inconceivably remote, and again menacing and near. And if in things great and heroic, so also in the less significant aspects of life.

Mrs. Henry Daggett stood, weary but triumphant, amid the nearly completed preparations for a reception in the new church parlors, her broad, rosy face wearing a smile of satisfaction.

"Don't it look nice?" she said, by way of expressing her overflowing contentment.

Mrs. Maria Dodge, evergreen wreaths looped over one arm, nodded.

"It certainly does look fine, Abby," said she. "And I guess nobody but you would have thought of having it."

Mrs. Daggett beamed. "I thought of it the minute I heard about that city church that done it. I call it a real tasty way to treat a minister as nice as ours."

"So 'tis," agreed Mrs. Dodge with the air of complacent satisfaction she had acquired since Fanny's marriage to the minister. "And I think Wesley'll appreciate it."

Mrs. Daggett's face grew serious. Then her soft bosom heaved with mirth.

"Tain't everybody that's lucky enough to have a minister right in the family," said she briskly. "Mebbe if I was to hear a sermon preached every day in the week I'd get some piouiser myself. I've been comparing this with the fair we had last summer. It ain't so grand, but it's newer. A fair's like a work of nature, Maria; sun and rain and dew, and the scrapings from the henyard, all mixed with garden ground to fetch out cabbages, potatoes or roses. God gives the increase."

Mrs. Dodge stared at her friend in amazement.

"That sounds real beautiful, Abby," she said. "You must have thought it all out."

"That's just what I done," confirmed Mrs. Daggett happily. "I'm always meditating about something, whilst I'm working 'round th' thouse. And it's amazing what thoughts'll come to a body from somewheres. . . . What you going to do with them wreaths, Maria?"

"Why, I was thinking of putting 'em right up here," said Mrs. Dodge, pointing.

"A good place," said Mrs. Daggett. "Remember Fanny peeking through them wreaths last summer? Pretty as a pink! An' now she's Mis' Reveren' Elliot. I seen him looking at her that night. . . . My! My! What lots of things have took place in our midst since then."

Mrs. Dodge, from the lofty elevation of a stepladder, looked across the room.

"Here comes Ann Whittle with two baskets," she said, "and Mrs. Solomon Black carrying a big cake, and a whole crowd of ladies just behind 'em."

"Glad they ain't going to be late like they was last year," said Mrs. Daggett. "My sakes! I hadn't thought so much about that fair till to-day; the scent of the evergreens brings it all back. We was wondering who'd buy the things; remember, Maria?"

"I should say I did," assented Mrs. Dodge, hopping nimbly down from the ladder. "There, that looks even nicer than it did at the fair; don't you think so, Abby?"

"It looks perfectly lovely, Maria."

"Well, here we are at last," announced Mrs. Whittle as she entered. "I had to wait till the frosting stiffened up on my cake."

She bustled over to a table and began to take the things out of her baskets.

Mrs. Daggett hurried forward to meet Mrs. Solomon Black, who was advancing with slow majesty, bearing a huge disk covered with tissue paper.

Mrs. Black was not the only woman in the town of Brookville who could now boast sleeves made in the latest Parisian style. Her quick black eyes had already observed the crisp blue taffeta, in which Mrs. Whittle was attired, and the fresh muslin gowns decked with increased ribbons worn by Mrs. Daggett and her friend, Maria Dodge.

Mrs. Solomon Black's water-waves were crisp and

precise, as of yore, and her hard, red cheeks glowed like apples above the elaborate embroidery of her dress.

"Here, Mis' Black, let me take your cake!" offered Abby Daggett. "I sh'd think your arm would be most broke carryin' it all the way from your house."

"Thank you, Abby; but I wouldn't das' t' resk changin' it; I'll set it right down where it's t' go."

The brisk chatter and laughter, which by now had pervaded the big place, ceased as by a preconcerted signal, and a dozen women gathered about the table toward which Mrs. Solomon Black was moving like the central figure in some stately pageant.

"Fer pity sake!" whispered Mrs. Mixer, "what d' you s'pose she's got under all that tissue paper?"

Mrs. Solomon Black set the great cake, still veiled, in the middle of the table; then she straightened herself and looked from one to the other of the eager, curious faces gathered around.

"There!" she said. "I feel now 's 'o' I could dror m' breath once more. I ain't joggled it once, so's t' hurt, since I started from home."

Then slowly she withdrew the shrouding tissue paper from the creation she had thus triumphantly borne to its place of honor, and stood off, a little to one side, her face one broad smile of satisfaction.

"Fer goodness' sake!"

"Did you ev—er!"

"Why, Mis' Black!"

"Ain't that just—"

"You never done that all yourself?"

Mrs. Black nodded slowly, almost solemnly. The huge cake which was built up in successive steps, like a pyramid, was crowned on its topmost disk by a bridal scene, a tiny man holding his tiny veiled bride by the hand in the midst of an expanse of pink frosting. About the side of the great cake, in brightly colored "mites", was inscribed "Greetings to our Pastor and his Bride."

"I thought 'twould be kind of nice, seeing our minister was just married, and so, in a way, this is a wedding reception. I don't know what the rest of you ladies'll think."

Abby Daggett stood with clasped hands, her big soft bosom rising and falling in a sort of ecstasy.

"Why, Phoebe," she said, "it's a real poem! It couldn't be no han'somer if it had been done right up in heaven!"

She put her arms about Mrs. Solomon Black and kissed her.

"And this ain't all," said Mrs. Black. "Lois Daggett is going to fetch over a chocolate cake and a batch of crullers for me when she comes."

Applause greeted this statement.

"Time was," went on Mrs. Black, "and not so long ago, neither, when I was afraid to spend a cent, for fear of a rainy day that's been long coming. 'Tain't got here yet; but I can tell you ladies, I got a lesson from her in generosity I don't mean to forget. 'Spend and be spent' is my motto from now on; so I didn't grudge the new-laid eggs I put in that cake, nor yet the sugar, spice nor raisins. There's three cakes in one—in token of the trinity (I do hope th' won't nobody think it's wicked t' mention r'ligion in connection with a cake); the bottom cake was baked in a milkpan, an' it's a bride's cake, being made with the whites of fourteen perfectly fresh eggs; the next layer is fruit and spice, as rich as wedding cake ought to be; the top cake is best of all; and can be lifted right off and given to Rever'nd an' Mrs. Wesley Elliott. . . . I guess they'll like to keep the wedding couple for a souvenir."

A vigorous clapping of hands burst forth. Mrs. Solomon Black waited modestly till this gratifying demonstration had subsided, then she went on:

"I guess most of you ladies'll r'member how one short year ago Miss Lyddy Orr Bolton came a-walkin' int' our midst, lookin' sweet an' modest, like she was; and how down-in-th'-mouth we was all a-feelin', 'count o' havin' no money t' buy th' things we'd worked s' hard t' make. Some of us hadn't no more grit an' gumption 'n Ananias an' S'phira, t' say nothin' o' Jonah an' others. I c'd name. In she came, an' ev'rythin' was changed from that minute! . . . Now, I want we sh'd cut up that cake—after everybody's had a chance t' see it good—all but th' top layer, same's I said—an' all of us have a piece, out o' compliment t' our pastor an' his wife, an' in memory o' her, who's gone from us."

"But Lyddy Orr ain't dead, Mis' Black," protested Mrs. Daggett warmly.

"She might 's well be, 's fur 's our seein' her's concerned," replied Mrs. Black. "She's gone t' Boston t' stay f'r good, b'cause she couldn't stan' it no-how here in Brookville, after her pa was found dead. The' was plenty o' hard talk, b'fore an' after; an' when it come t' breakin' her windows with stones an' hittin' her in th' head, so she was 'bleeged t' have three stitches took, all I c'n say is I don't wonder she went t' Boston. . . . Anyway, that's my wish an' d'sire 'bout that cake."

The arrival of Mr. and Mrs. Wesley Elliott offered a welcome interruption to a scene which was becoming uncomfortably tense. Whatever prickings of conscience there might have been under the gay muslin and silks of her little audience, each woman privately resented the superior attitude assumed by Mrs. Solomon Black.

"Easy f'r her t' talk," murmured Mrs. Fulsom, from between puckered lips; "she didn't lose no money off Andrew Bolton."

"An' she didn't get none, neither, when it come t' dividin' up," Mrs. Mixer reminded her.

"That's so," assented Mrs. Fulsom, as she followed in pretty Mrs. Mixer's wake to greet the newly-married pair.

"My! ain't you proud o' her," whispered Abby Daggett to Maria Dodge. "She's a perfec' pictur' o' joy, if ever I laid my eyes on one!"

Fanny stood beside her tall husband, her pretty face irradiating happiness. She felt a sincere pity welling up in her heart for Ellen Dix and Joyce Fulsom and the other girls. Compared with her own transcendent experiences, their lives seemed cold and bleak to Fanny. And all the while she was talking to the women who crowded about her.

"Yes; we are getting nicely settled, thank you, Mrs. Fulsom—all but the attic. Oh, how'd you do, Judge Fulsom?"

The big man wiped the perspiration from his bald forehead.

"Just been fetchin' in th' ice cream freezers," he said, with his booming chuckle. "I guess I'm 's well 's c'n be expected, under th' circumstances, ma'am."

An' that r'minds me, parson, a little matter was s'ggested t' me. In fact, I'd thought of it, some time ago. No more 'n right, in view o' th' facts. If you don't mind, I'll outline th' idee t' you, parson, an' see if you approve."

Fanny, striving to focus attention on the pointed remarks Miss Lois Daggett was making, caught occasional snatches of their conversation. Fanny had never liked Lois Daggett; but in her new rôle of minister's wife, it was her foreordained duty to love everybody and to condole and sympathize with the parish at large. One could easily sympathize with Lois Daggett, she was thinking; what would it be like to be obliged daily to face the reflection o' that mottled complexion, that long, pointed nose, with its rasped tip, that drab lifeless hair with its sharp hairpin crimp, and those small greenish eyes with no perceptible fringe of lashes? Fanny looked down from her lovely height into Miss Daggett's upturned face and pitied her from the bottom of her heart.

"I hear your brother Jim has gone t' Boston," Miss Daggett was saying with a simper.

From the rear Fanny heard Judge Fulsom's rumbling monotone, earnestly addressed to her husband.



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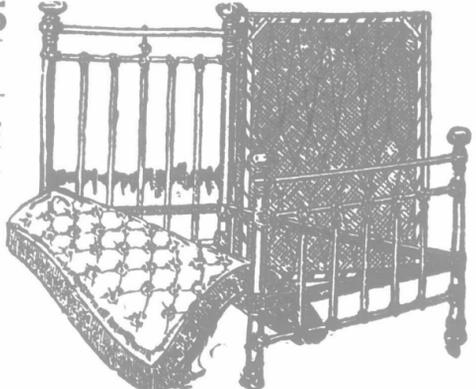
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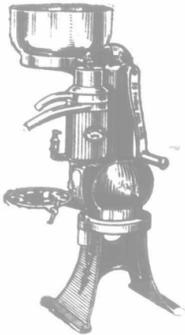
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"Not that Boston ain't a nice town t' live in; but we'll have t' enter a demurrer against her staying there fr' good. Y' see—"

"Yes," said Fanny, smiling at Miss Daggett. "He went several days ago."

"H'm-m", murmured Miss Daggett. "She's livin' there, an't she?"

"You mean Miss Orr?"

"I mean Miss Lyddy Bolton. I guess Bolton's a good 'nough name for her."

From the Judge, in a somewhat louder tone.

"That's th' way it looks t' me, dominie; an' if all th' leadin' citizens of Brookville'll put their name to it—an' I'm of th' opinion they will, when I make my charge t' th' jury—"

"Certainly," murmured Fanny absently, as she gazed at her husband and the judge.

She couldn't help wondering why her Wesley was speaking so earnestly to the Judge, yet in such a provokingly low tone of voice.

"I had become so accustomed to thinking of her as Lydia Orr," she finished hastily.

"Well, I don't b'lieve in givin' out a name 'at ain't yourn," said Lois Daggett, sharply. "She'd ought t' 'a' told right out who she was, an' what she come t' Brookville for."

Judge Fulsom and the minister had moved still further away. Fanny, with some alarm, felt herself alone.

"I don't think Miss Orr meant to be deceitful," she said nervously.

"Well, o' course, if she's a-goin' t' be in th' family, it's natural you sh'd think so," said Lois Daggett, sniffing loudly.

Fanny did not answer.

"I sh'd hope she an' Jim was engaged," proclaimed Miss Daggett. "If they ain't, they'd ought t' be."

"Why should you say that, Miss Lois?" asked Fanny hurriedly. "They are very good friends."

Miss Daggett bent forward, lowering her voice.

"The's one thing I'd like t' know fr' certain," she said: "Did Jim Dodge find that body?"

Fanny stared at her inquisitor resentfully.

"There were a good many persons searching," she said coldly.

Miss Daggett wagged her head in an irritated fashion.

"Of course I know that," she snapped. "What I want t' know is whether Jim Dodge—"

"I never asked my brother," interrupted Fanny. "It all happened so long ago, why not—"

"It was th' first o' November. 'N' I've got a mighty good reason reason fr' askin'."

"You have?" murmured Fanny, flashing a glance of entreaty at her husband.

"Some of us ladies was talkin' it over," pursued the spinster relentlessly, "an' I says t' Mis' Deacon Whittle: 'Who counted th' money 'at was found on Andrew Bolton's body?' I says, 'W'y, s' she, 'th' ones 'at found him out in th' woods where he got lost I s'p'ce'. But come t' sift it right down t' facts, not one o' them ladies c'd tell fr' certain who 't was 'at found that body. The' was such an' excitement 'n' hullabaloo, nobody 'd thought t' ask. It wa'n't Deacon Whittle; n'r it wa'n't th' party from th' Brookville House; ner Hank Simonson, ner any o' the boys. It was Jim Dodge, an' she was with him!'"

"Well," said Fanny faintly.

She looked up to meet the minister's eyes, with a sense of strong relief. Wesley would know just what to say to this prying woman.

"What are you and Miss Daggett talking about so earnestly?" asked the minister.

When informed of the question under discussion, he frowned thoughtfully.

"My dear Miss Daggett," he said, "if you will fetch me the dinner bell from Mrs. Whittle's kitchen, I shall be happy to answer your question and others like it which have reached me from time to time concerning this unhappy affair."

"Mis' Deacon Whittle's dinner bell?" gasped Lois Daggett. "What's that got t' do with—"

"Bring it to me, and you'll see," smiled the minister imperturbably.

"What are you going to do, Wesley?" whispered Fanny.

He gazed gravely down into her lovely eyes.

"Dearest," he whispered back, "trust me! It is time we laid this uneasy ghost; don't you think so?"

By now the large room was well filled

with men, women and children. The ice cream was being passed around when suddenly the clanging sound of a dinner bell, vigorously operated by Joe Whittle, arrested attention.

"The minister's got something to say! The minister's got something to say!" shouted the boy.

Wesley Elliot, standing apart, lifted his hand in token of silence, then he spoke:

"I have taken this somewhat unusual method of asking your attention to a matter which has for many years past enlisted your sympathies," he began: "I refer to the Bolton affair."

The sound of breath sharply indrawn and the stir of many feet died into profound silence as the minister went on, slowly and with frequent pauses:

"Most of you are already familiar with the sordid details. It is not necessary for me to go back to the day, now nearly nineteen years ago, when many of you found yourselves unexpectedly impoverished because the man you trusted had defaulted. There was much suffering in Brookville that winter, and since. When I came to this parish I found it—sick. Because of the crime of Andrew Bolton. No, I repeat the word with emphasis: *No!* Brookville was sick, despondent, dull, gloomy and impoverished—not because of Andrew Bolton's crime; but because Brookville had never forgiven Andrew Bolton. Hate is the one destructive element in the universe; did you know that, friends? It is impossible for a man or woman who hates another to prosper. And I'll tell you why this is—why it must be true: God is love—the opposite of hate. Hence All Power is enlisted on the side of *love*. Think this over, and you'll know it is true. Now the Bolton mystery: A year ago we were holding a fair in this village, which was sick and impoverished because it had never forgiven the man who stole its money. You all remember that occasion. There were things to sell; but nobody had money to buy them. It wasn't a pleasant occasion. Nobody was enjoying it, least of all your minister. But a miracle took place—There are miracles in the world to-day, as there always have been, thank God! There came into Brookville that day a person who was moved by love. Every impulse of her heart; everything she did was inspired by that mightiest force of the universe. She called herself Lydia Orr. She had been called Lydia Orr, as far back as she could remember; so she did no wrong to anyone by retaining that name. But she had another name, which she quickly found was a byword and a hissing in Brookville. Was it strange that she shrank from telling it? She believed in the forgiveness of sins; and she had come to right a great wrong. She did what she could, as it is written of another woman, who poured out a fragrant offering of love unappreciated save by One. There quickly followed the last chapter in the tragedy—for it was all a tragedy, friends, as I look at it: the theft; the pitiful attempt to restore fourfold all that had been taken; the return of that ruined man, Andrew Bolton, after his heavy punishment; and his tragic death. Some of you may not know all that happened that night. You do know of the cowardly attack made upon the helpless girl. You know of the flight of the terrified man, of how he was found dead two days later three miles from the village, in a lonely spot where he had perished from hunger and exposure. The body was discovered by James Dodge, with the aid of his dog. With him on that occasion was a detective from Boston, employed by Miss Bolton, and myself. There was a sum of money found on the body amounting to something over five thousand dollars. It had been secreted beneath the floor of Andrew Bolton's chamber, before his arrest and imprisonment. It is probable that he intended to make good his escape, but failed, owing to the illness of his wife. This is terrible story, friends, and it has a sad ending. Brookville had never learned to forgive. It had long ago formed the terrible habits of hate suspicion, envy, sharp-tongued censure and the rest. Lydia Bolton could not remain here, though it was her birth-place and her home. She longed for friendship! She asked for bread and you gave her—a stone!"

The profound silence was broken by a sob from a distant corner. The strained

listeners turned with a sharp movement of relief.

"Fer pity sake!" faltered Abby Daggett, her beautiful, rosy face all quivering with grief. "Can't nobody do nothing?"

"Yes, ma'am!" shouted the big voice of Judge Fulsom. "We can all do something. I ain't going to sum up the case against Brookville; the parson's done it already; if there's any rebuttal coming from the defendant, now's the time to bring it before the court. Nothing to say—eh? Well, I thought so! We're guilty of the charges preferred, and I'm going to pass sentence."

But before I do that, there's one thing the parson didn't mention, that in my opinion should be told, to wit: Miss Lydia Bolton's money—all that she had—came to her from her uncle, an honest hardworkin' citizen of Boston. He made every penny of it as a soap-boiler. So you see 'twas clean money; and he left it to his niece, Lydia Bolton. What did she do with it? You know! She poured it out, right here in Brookville—pretty nigh all there was of it. She's got her place here; but mighty little besides. I'm her trustee, and I know. The five thousand dollars found on the dead body of Andrew Bolton, has been made a trust fund for the poor and discouraged of this community, under conditions anybody that'll take the trouble to step in to my office can find out.

The Judge paused to clear his throat, while he produced from his pocket, with a vast deal of ceremony, a legal looking document dangling lengths of red ribbon and sealing wax.

"This Bond of Indemnity, which I'm going to ask every man, woman and child of fifteen years an up'ards, of the village of Brookville, hereinafter known of the First Part, to sign, reads as follows: Know all men by these presents that we, citizens of the village of Brookville, hereinafter known as the Party of the First Part, are held and firmly bound unto Miss Lydia Orr Bolton, hereinafter known as the Party of the Second Part.

Whereas the above-named Party of the Second Part (don't frget that means Miss Lydia Bolton) did in behalf of her father—one Andrew Bolton, deceased—pay, compensate, satisfy, restore, remunerate, recompense and requite all legal indebtedness incurred by said Andrew Bolton to, for, and in behalf of the aforesaid Party of the First Part.

"You git me? If you don't, just come to my office and I'll explain in detail any of the legal terms not understood, comprehended and known by the feeble-minded of Brookville. Form in line at nine o'clock. First come, first served."

"We, the Party of the First Part, bind ourselves, and each of our heirs, executors, administrators and assigns, jointly and severally, firmly by these presents, and at all times hereafter to save, defend, keep harmless and indemnify the aforesaid Party of the Second Part (Miss Lydia Bolton) of, from and against all further costs, damages, expense, disparagements (that means spiteful gossip, ladies!) molestations, slander, vituperations, etc. (I could say more, but we've got something to do that'll take time.) And whereas, the said Party of the Second Part has been actually drove to Boston to live by the aforesaid slander, calumniations, aspersions and libels—which we, the said Party of the First Part do hereby acknowledge to be false and untrue (yes, and doggone mean, as I look at it)—we, the said Party of the First Part do firmly bind ourselves, our heirs, executors, administrators an' assigns to quit all such illegalities from this day forth, and forever more."

"You want to get out of the habit of talking mean about Andrew Bolton, for one thing. It's been as catching as measles in this town since I can remember. Andrew Bolton's dead and buried in our cemetery, beside his wife. We'll be there ourselves, some day; in the meanwhile we want to reform our tongues. You get me? All right!"

"And whereas, we, the Party of the First Part, otherwise known as the village of Brookville, do ask, beg, entreat, supplicate and plead the forgiveness of the Party of the Second Part, otherwise known as Miss Lydia Orr Bolton. And we also hereby request, petition, implore an' importune Miss Lydia Orr Bolton, otherwise known as the Party of the Second Part, to return to Brookville and make it her permanent place of residence, promising on our part, at all times hereafter, to save, defend, keep harmless and indemnify her against all unfriendliness, of

whatever sort; and pledging ourselves to be good neighbors and loving friends from the date of this document, which, when signed by th' Party of the First Part, shall be of full force and virtue. Sealed with our seals. Dated this seventh day of June, in the year of our Lord, nineteen hundred—"

A loud uproar of applause broke loose in the pause that followed; then the minister's clear voice called for silence once more.

"The Judge has his big fountain pen filled to its capacity," he said. "Come forward and sign this—the most remarkable document on record, I am not afraid to say. Its signing will mean the wiping out of an old bitterness and the dawning of a new and better day for Brookville!"

The Reverend Wesley Elliot had mixed his metaphors sadly; but no one minded that, least of all the minister himself, as he signed his name in bold, black characters to the wondrous screed, over which Judge Fulsom had literally as well as metaphorically burned the midnight oil. Deacon and Mrs. Whittle signed; Postmaster and Mrs. Daggett signed, the latter with copious tears flowing over her smooth, rosy cheeks. Miss Lois Daggett was next:

"I guess I ought to be written down near the front," said she, "seeing I'm full as much to blame, and like that, as most anybody."

"Come on you, Lute Parsons!" roared the Judge, while a group of matrons meekly subscribed their signatures. "We want some live men-folks on this document. Aw, never mind, if you did! We all know you wa'n't yourself that night, Lucius. That's right; come right forward! We want the signature of every man that went out there that night, full of cussedness and bad whiskey. That's the ticket! Come on, everybody! Get busy!"

Nobody had attended the door for the last hour, Joe Whittle being a spellbound witness of the proceedings; and so it chanced that nobody saw two persons, a man and a woman who entered quietly—one might almost have said timidly, as if doubtful of a welcome in the crowded place. It was Abby Daggett who caught sight of the girl's face, shining against the soft dark of the summer night like a pale star.

"Why, my sakes alive!" she cried, "if there ain't Lyddy Bolton and Jim Dodge now! Did you ever!"

As she folded the girl's slight figure to her capacious breast, Mrs. Daggett summed up in a single pithy sentence all the legal phraseology of the Document, which by now had been signed by everybody old enough to write their names:

"Well! we certainly are glad you've come home, Lyddy; an' we hope you'll never leave us no more!"

To be continued.

### Current Events

Men of 19 in Canada, who have been required to register by June 1st will not be called out before July 1st.

McGill University, Montreal, has decided to admit women students to the faculties of medicine and dentistry.

A German agent landed in Ireland by a German submarine has been arrested and is now in the Tower of London awaiting trial by Court-martial.

It has been officially announced that over 500,000 United States soldiers are now in France and some more on the Italian front. The administration intends at once to prepare an army of 3,000,000 men, and will send them over at the rate of 100,000 a month.

Laval University students (Quebec City) are forming an infantry company 250 strong.

The Lloyd-George Ministry won a notable victory in the British House of Commons, when, on May 9th, by a vote of 293 to 106 the House voted down a motion by former Premier Asquith providing for the appointment of a special committee of the House to investigate the charges made recently by Maj.-Gen. Maurice. It will be remembered that Maurice, in a letter published recently in The Chronicle, charged Premier Lloyd-George and Bonar

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Don't Neglect Your Order

The time is getting short and the stock of good seeds is going down, if you have not already sent in your order, do so at once, and avoid the possibility of disappointment at the last minute.

TO-DAY IS THE DAY TO ORDER. WE PAY RAILWAY FREIGHT TO ALL POINTS IN ONTARIO AND QUEBEC ON ORDERS OF \$25.00, OR MORE.

<b>CORN</b>		Silverhull Buckwheat..... \$ 2.40
White Cap Yellow Dent ON, COB		Rye Buckwheat..... 2.60
70 lbs. to bushel..... \$6.00		
We hear that this car of Corn has passed the Border, and is nearing Toronto. It was grown on Long Island, New York, and, we are informed, is in excellent condition.		
<b>EARLY PRINCE CHARLES</b>		
(Would do as a substitute for Wisconsin No. 7.)		
Guaranteed 90% Germination. \$4.60 Shelled		
<b>EARLY IMPROVED LEAMING</b>		
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<b>CLOVER</b>		
Alfalfa, Ontario Variegated, almost No. 1 for purity..... \$25.00		
Sweet Clover, White Blossom..... 16.00		
O.A.C. 21 Barley..... 2.40		
O.A.C. Barley (Registered)..... 2.85		
Bags for Clover, 45c. extra. Bags for Grain free.		
<b>MILLETS</b>		
Siberian..... \$ 3.50		
Hungarian..... 4.00		
Golden..... 3.00		
Common..... 2.75		
Amber Sugar Cane..... lb.		
Kentucky Blue Grass..... .11		
Dwarf Essex Rape..... .15		
<b>GARDEN CORN</b>		
Kendall's Early Giant..... \$0.30		
Stowell's Evergreen..... .40		
Japanese Barnyard..... .07		
Sweet Turnips..... 1.50		
<b>POTATOES</b>		
	Per Bag	
Early Eureka.....	\$ 3.00	
Irish Cobblers.....	3.00	
Delaware.....	2.75	
Green Mountain.....	2.75	
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Asbestoslate Shingles offer so many advantages over all other kinds of roofing materials for farm buildings, that the small additional first cost is not an expense, but a real investment.

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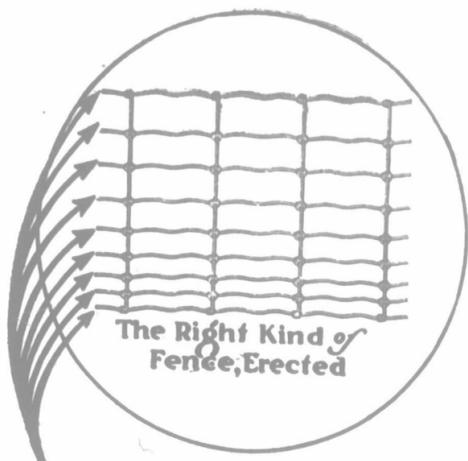
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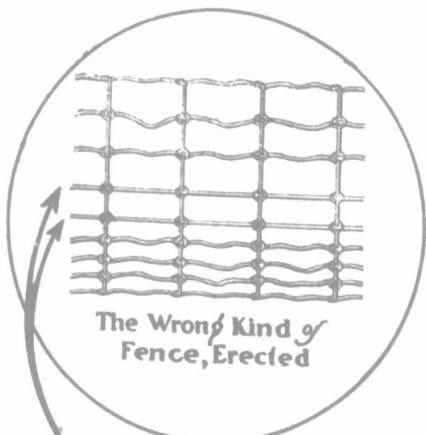
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## The Only Wire Fence You Can Afford to Buy

THE only fence you can afford to put on your farm is the one which lasts a lifetime—a fence which will stand the hardest of hard usage. It's the least expensive in the long run. The other kind may be a little cheaper in first cost—but what a difference a few years make!

### PAGE WIRE FENCE BUILT TO LAST

—some are built to sell. Many of the first fences we made, over 25 years ago, are still giving the best of good service.

Page Fence is made of all No. 9 gauge wire—even the locks are full gauge. The finest quality wire is used—it is extra strong, very rigid, tight-locked and spaced.

Our fences and gates are a lifetime security against fence troubles.

There is a Page Wire Fence for every purpose. Page Gates, built as carefully as Page Wire Fences, are obtainable in every regular size. Write our nearest branch for price list of all Page Products—Page Fences, Gates, Engines or Woodsaws. Information will be cheerfully given. Drop us a line to-day.

**Shipping Terms:**—Freight allowed on all shipments of 200 pounds or more, to any place in Old Ontario or Quebec, when payment is made within thirty days.

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## SEED BEANS

Ripened before frost and harvested before the rain  
Apply:—Harold Currie, Strathroy, Ontario

For Sale: Seed Beans

Pea and Pearce's Improved Tree.  
Over 90 per cent. Government germination test.

Isaac Lundy, Route 2, Brantford, Ont.

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

### SHERLOCK-MANNING

20th Century Piano—known as

"Canada's Biggest Piano Value"

Write Dept. 18 for catalogue "T"

THE SHERLOCK-MANNING PIANO CO.

London, Canada. (No street address necessary)  
Clear Vale Aberdeen-Angus—One bull calf, born Aug. 15, 1917; thick, low type. Dam, Pride of Larkin Farm 9th. Copy of pedigree sent on request.

FRANK JOHNSON, Manchester, Ont.

Law with misstatements in regard to the number of men and conduct of the war on the west front. In reply Premier Lloyd-George stated in the House that the figures he had given were taken from those supplied by the Department over which Maj.-Gen. Maurice then had control. Maurice had been removed from that post, Director of Military Operations at the British War Office, because of his criticisms of Gen. Foch, and the question of military discipline in regard to his letter to *The Chronicle* will now be subject to inquiry. On his removal from the War Office Maj.-Gen. Maurice was transferred to duties in the field.

Brigadier General Carey has been promoted to the dignity of Major General in recognition of his great services when, on March 23, he gathered a "scratch army" of signallers, aerial mechanics, Chinese laborers, men of the Labor Corps, and American Engineers, to bridge the gap left when Gen. Gough's Fifth Army broke. The gap was eight miles across and the scratch army held it for nearly 6 days until, by the swinging back of the right wing of Gen. Byng's Third Army and the arrival of French reinforcements under Gen. Foyelle, the line was again united.

British light naval forces have made another successful venture which resulted in the sinking of the old cruiser, "Vindictive", filled with cement, in Ostend harbour, partly blocking the channel. Zeebrugge channel is believed to be completely blocked since the last raid, in which the "Vindictive" played a prominent part in carrying troops.

On May 8th the Germans renewed their drive against the British and French troops in the Kemmel area, attacking from Voormezele to La Clytte, but the result was that von Arnim's armies were hurled back over the greater part of a 5-mile front, succeeding in penetrating the front-line trenches at only a few points. Heavy rains have, however, suspended war activities for the most part during the week, except for the big guns which have continued to boom, while airmen have fought battles in the sky at every opportunity. The Canadians have taken over a sector south of Arras, still holding the front from Hill 70 to Gavrelle, east of Vimy Ridge, a distance of 13½ miles of very critical defences. Next to them a division of Americans has been given place, and will work in conjunction with them; while farther to the south the Australians hold the lines and have been winning glory in the sector east of Amiens and again west of Morlancourt, near Albert, capturing an important table land between the Ancre and the Somme. During the week a successful raid was made by the Canadians on their new front. At time of going to press the French are attacking Kemmel Hill, upon which such a bombardment has been kept up since its capture by the enemy that it has been of little use to them. It is expected, however, that the next great German drive will be made towards Amiens. The French and British are facing this probability with the greatest optimism, and in the meantime their airmen are harassing the approaching German forces, and proving themselves more than a match for the German airmen, who have lost as many as 279 planes in one week.

In the meantime Roumania has been forced by the Central Powers to sign the Peace of Bucharest by which her territory is butchered, rich slices being given to Austria and Bulgaria. The German agreement with the Ukraine is said to be less satisfactory to the Germans, as the Government set up, under German influence, after the Treaty of Brest-Litovsk are unable to enforce the terms of the treaty by which the peasants were to be forced to give up large supplies of food. Also the German Commander, Gen. Eichhorn, has accused some of the members of conspiring to assassinate German officers, and has had three of the Ministers arrested. A rumor is current that the Ukraine may conclude peace with Russia.

Noticeable Resemblance.—"Isn't that a Bouguereau?" asked Mrs. Oldcastle as they stopped for a moment to look at the new pictures.

"Oh, my, no," replied her hostess; "it's a lion. But I told Josiah when he brought it home that it looked a good deal more like one of them things you mention."—Chicago Record-Herald.

### The Dollar Chain

For the soldiers and all who are suffering because of the war.  
 Contributions from May 3 to May 10:  
 James Capes, Bickford, Ont., \$1.50.  
 Previously acknowledged .....\$5,486.00  
 Total to May 10 .....\$5,487.50  
 Kindly address contributions to The Farmer's Advocate and Home Magazine, London, Ont.

### Washing Blankets.

A bright, breezy, sunny day is the best weather for the washing of blankets, as they, of all articles, require purification. Having been used in many cases for the greater part of the year, they are certain to retain many impurities which can best be oxidized and removed by the action of wind and bright sunshine.

First see that the lines are tightly fixed and dusted. Then take the soiled blankets to the open air and have them thoroughly shaken, to free them from all loose dust and dirt. The better a blanket is the more likely it is to retain disease germs. Soft, fleecy blankets are a luxury which every one appreciates. They are lighter and warmer than quilts or comforts and should form a part at least of the covering of every bed. They are not expensive, if you consider their durability, and if washed properly do not fill up, but retain their soft, fluffy look to the last.

Before beginning to wash blankets, it is advisable to have in readiness plenty of hot water, melted soap and ammonia, so that no time will be wasted in waiting after the work of washing is commenced. The blankets may then be gotten out and dried in the early part of the day.

**The Temperature of the Water.**  
 The temperature of the water used should be from 35 degrees Centigrade to 45 degrees Centigrade, or lukewarm; hot water would act injuriously on the fibres. Prepare in two large tubs a rather strong solution of soap lather, to which is added a small quantity of ammonia, in the proportion of about two tablespoonfuls to every gallon of water.

Immerse the blankets one at a time and press and knead against bottom and sides of the tub. Then wring tightly and repeat the washing in a second soap lather, when they will be ready for rinsing. The washing should be done as far as possible by squeezing or kneading, as rubbing helps to entangle the surface fibres and is one of the causes of shrinking. Even more detrimental, however, is too strong an alkaline solution.

Blankets must be rinsed in plenty of clean water. To insure all the soap being removed, the first water ought to be warm, as cold water tends to solidify soap and part of it might remain in the blanket to the detriment of the fabric. To the last water a little bluing might be added, to improve the color.

Blankets must be wrung tightly. Before hanging them out to dry, they ought to be thoroughly shaken; generally this part of the work requires two people, as blankets are large and difficult to manage. This treatment helps to preserve their softness and elasticity. Each blanket should then be hung over a line, keeping it as nearly single as possible to enable it to dry quickly, and pegging it closely to prevent its falling and getting soiled.—Sel.

### Another Method.

Another method is to use pearline—plenty of it—instead of ammonia, washing as given above. An expert states that blankets and flannels are softer and will not shrink if rinsed in water better than that in which they were washed. Two or three rinsings are advisable, each water better than the last.

Findin's Keepin's. "What if we lose this blinkin' war after all, Bill?"  
 "Well, all I can say is—then what heck it is quite welcome to keep it."—Pat-Bits.

### 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.

#### Binding a Bargain.

I sold a cow to a dealer who paid one dollar down. He did not take her away at the time he agreed to. Is a word of mouth agreement binding? How much money does it take to bind a bargain, when there is no written agreement?  
 P. J. M.

Ans.—In order to make an agreement binding it is advisable to have writings. Any sum of money will bind a bargain if real estate is not involved.

#### Raising Lambs.

1. Can lambs be raised on cow's milk? Do you add water or sugar? If so how much?  
 C. F.

Ans.—1. Very good lambs have been raised on cow's milk. While some advocate diluting it with water and adding a little sugar, it is not entirely necessary unless the milk is very high in fat. Fresh milk is the best up to the time the lambs are about six weeks old; after that some feed separated milk with a little oil meal added.

#### Pseudo-Scorpion.

1. What kind of bug is the enclosed?  
 B. A.

Ans.—1. The so-called "bug" is what we know as a Pseudo-Scorpion. These creatures are closely allied in structure to true scorpions but they are harmless and not abundant. I have only seen a few myself. They are sometimes found attached to flies but it is not definitely known whether they feed upon the flies or not, or whether they are merely being transported by means of the fly from place to place. They do feed, however, it is believed, upon very small insects. I have occasionally found them on trees and once found one attached to a fly. You may consider them as practically of very little or no importance.  
 L. C.

### Kill the Fly Before He's Born.

Now is the time and here is the place, wherever it may be, to swat the fly and do the most effective work. Kill him before he is born. Everyone should know of the danger of the house fly, how he comes directly from the sick room, the garbage can and the manure pile carrying millions of tiny particles of filth and depositing them on food which is later eaten by men, women and children.

Why not start a campaign for a "clean up" day, for a garbage can back of every provision house, hotel restaurant and residence, for keeping all fruit off the sidewalks, for screens over meats displayed on the counters, for wrapping of every loaf of bread and better protection for the milk and meat supply.

The one most essential thing in fighting flies is to clean, and keep clean, every horse barn and cow stable, not forgetting the corrals, where conditions are ideal for flies to breed. After all, it would require very little work, if all would co-operate, to make your town almost flyless next summer. It would save several bad accidents from runaways, much profanity, much money for new screens and several human lives. And last but not least, try to estimate, if you can, the mental anguish it will save housewives, dumb animals and bald-headed men. Get busy!—Geo. H. Glover, Colorado Agricultural College.

### You Are Wrong.

He (at the phone): "Hello, is that you, Maisie? Yes, this is Jack. Have I heard the news? No, what? Mrs. Murphy. Well, well! Five o'clock this morning? Oh, tell her I'm glad to hear she's doing well. What's that? Two of 'em? Well (hanging up receiver). What do you think of that? Mrs. Murphy smashed two of her fingers in the door this morning and fainted dead away."

## Barron's English Leghorns

Large, vigorous, pedigreed birds, great winter layers, best blood lines in America. Hatching eggs, \$2.00 per 15. Bouncing, lusty chicks, for May, 20c. each, June, 15c. Modern incubation methods. Order from this ad. or send for mating list.

GILLETT FARM

AYLMER, ONTARIO

## POULTRY AND EGGS

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

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

ANCONAS, SINGLE-COMB, STRONG, vigorous, yearling hens, genuine egg machines, mated to Sheppard strain cockerels. Eggs, \$1.25 per fifteen, \$6.00 per hundred. W. E. Williams, Clandeboye, Ont.

BABY CHICKS, WHITE LEGHORNS, GRAND laying stock, 100 strong chicks delivered safe \$15.00, 20 cents in small lots; order early. Bradley Linscott, Brantford.

BARRED ROCKS—PURE-BRED, GRAND laying strain, \$1.50 per 15, \$3.75 per 45; also Mammoth Bronze Turkey eggs, \$4 per 9. L. S. Cressman, Hillcrest Farm, R.R. 1, New Hamburg, Ont.

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

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

BRED-TO-LAY WHITE WYANDOTTES. Eggs during hatching season \$2.40 per 15. Hugh A. Carmichael, R.R. No. 1, Erin, Ontario.

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

BARRED ROCKS EGGS FOR HATCHING from wonderful producers (trapnested) \$1.25 per setting. B. Linscott, Brantford.

CANADIAN RINGLET BARRED ROCKS; Bred-to-lay strain, 241-egg kind. Trapnested; heavy winter layers. Eggs, \$2.50 setting, guaranteed. F. Coldham, Box 12, Kingston, Ont.

EXTRA SPECIAL HATCHING EGGS, BALANCE of season, front our trapnested, Barred and Buff Plymouth Rocks, \$1.75 per 15, \$3.00 per 30. W. J. Johnston, Drawer 246, Meaford, Ont.

EGGS FOR HATCHING—FROM WORLD'S best S.-C. Black Minorcas, balance of the season, \$2.50 per 15, nearly every egg hatches; also White Leghorn eggs from best strain in Canada, \$1.50 per 15. T. A. Faulds, 39 Victor Street, London.

EGGS AND CHICKS FROM THE BEST laying strains of white and brown Leghorns. Chicks, twelve dollars per hundred; eggs, five dollars per hundred. M. Shantz, Ayr, Ont.

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

FAWN INDIAN RUNNER DUCK EGGS, great layers, 10c. each. Hastings Bros., Guelph, R. R. No. 7.

FOR SALE—MUSCOVY DUCKS, \$5 A PAIR, Eggs for hatching \$2 a setting. J. A. Tancock, 96 King St., London.

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

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

INDIAN RUNNER AND MUSCOVY DUCKS, Barred Rocks, Rhode Island Reds, Black Spanish, Guineas, Campines, Hamburgs. Eggs only. John Annesser, Tilbury, Ont.

PLYMOUTH ROCK EGGS—O. A. C. LAYING strain; \$1.50 per setting. Mrs. Berry, 52 Queen's St., Guelph, Ont.

S.-C. ANCONA EGGS FOR HATCHING—one-fifty a setting. E. W. Bennett, Niagara Falls, Ont.

TURKEY EGGS—WE HAVE 50 HEALTHY Bronze Turkey Hens, mated to strong, husky, young and old toms; eggs ready in season at \$4.50 per 10 eggs; few toms left. Send in your order, we have the eggs ready for you. Everything in pure-bred poultry—write us first. We want your surplus of eggs and baby chicks. Stamps highly appreciated. Yamaska Poultry Farms, St. Hyacinthe, Quebec.

TWENTY-FIVE YEARS A BREEDER OF Barred Rocks that are barred and bred right, and from first-class laying hens. Eggs \$2 for 15, \$3.50 for 30, \$5 for 50, \$9 per 100. Order direct from this advt. Satisfaction guaranteed. Walter Bennett, R.R. 1, Cottam, Ont.

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

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

"WOODRIGHT" BRED FOR QUALITY PEKIN ducks. Eggs \$2, fifteen. White Wyandottes \$1.25, fifteen. Wainwright and Woodcock, Seagrave, Ont.

## WANTED FEATHERS OF ALL KINDS

Write for our new price list. Remittance made upon receipt of feathers. Let us know your quantities. The Canadian Carpet & Comfort Mfg. Co., Limited, 340 Dufferin Street, Toronto, Ont.

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

Rose-Comb Rhode Island Reds and Barred Rock eggs for hatching, \$1.50 per 15. Rose-Comb Rhode Island Red cockerels \$3 each. Alex. McKinney, R. R. 1, Erin, 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.

FOR SALE—TAME RABBITS, BELGIAN Hare, three for \$5.00. Vera Costello, Brantford, Ont., R. No. 2.

FOR SALE Imported and Registered CLYDESDALE STALLION "Royal Cup" by "Silver Cup", black, eight years old; a sure foal getter. For price and particulars apply to W. S. Armitage, Sherbrooke, Quebec

## CREAM

We buy cream every day in the year except Sundays and Xmas. We have been engaged in Creamery work twenty-five years and have established extensive business connections. Our trade is growing. We simply must have cream and are prepared to PAY THE PRICE and in addition guarantee a satisfactory service.

One of our regular shippers east of Toronto milked 12 Ayrshires last year and received from the TORONTO CREAMERY CO. LTD. \$1,922.00 for his cream. Another regular shipper west of Toronto milked 11 Holsteins, 6 of which were heifers freshened for the first time, and his receipts from The Toronto Creamery Co. Ltd. were \$1,505.54. In addition, he sold some milk locally and vealed some calves on whole milk for which he received \$235.00, making a total herd cash receipt of \$1,740.54. The skim milk is not included in either case. Think it over! Neither of these men are new shippers. They have shipped to us for years. If these figures interest you, write for particulars of our service. The Toronto Creamery Company, Ltd., Church Street, Toronto.

## Resorts in the Canadian Pacific Rockies.

Banff, Lake Louise, Field and Glacier are in the heart of the Canadian Pacific Rockies, and on the main line of the Canadian Pacific Railway.—Advt.

### Very Slow.

For two years the most decorous courtship of Sandy and 'Lisbeth had slowly progressed. One Sabbath night, after a silence of an hour, 'Lisbeth murmured—

"A penny for your thochts, Sandy."

"Weel," replied Sandy, with boldness, "I was jist thinkin' how fine it wad be if ye were tae gie me a wee bit kissie."

'Lisbeth kissed him. Then twenty-seven minutes of silence.

"An' what are ye thinkin' about the noo, Sandy—another?"

"Nae, nae, lassie; it's mair serious the noo."

"Is it, laddie?" asked 'Lisbeth, softly, her heart going pit-a-pat. "An' what might it be?"

"I was jist thinkin'," answered Sandy, "that it was about time ye were paying me that penny for my thochts."

### Didn't Know Him.

The day after the draft quota had reached Exhibition Camp a rookie strolled into camp after dark. As he was going past a sentry he was challenged.

"Who goes there?"

"Machine Gun 301," answered the rookie.

"Advance to be recognized."

"Aw, you don't know me. I've only been here a coupla days."

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# EATON'S GOOD NEWS FOR THRIFTY BUYERS



This Book of Big Values Mailed Free on Request. Write Now.

The EATON Guarantee that covers everything we sell—Goods satisfactory or money refunded, including shipping charges.

**I**N hundreds of thousands of Canadian homes the EATON Catalogue is considered the most convenient, the most reliable and the most economical source of buying possible. It's a 450-page book with literally thousands of illustrations—many of which are in color. It contains almost everything imaginable in the way of wearing apparel, homefurnishings, farm and garden requirements, etc., etc.—in fact it brings the vast resources of Canada's greatest store right into your home. Is there a copy of this Catalogue in your home? If not, write to-day—the earlier you get it the more you'll save. The items here listed have been selected from the new Spring and Summer Catalogue, and are typical of the values that abound throughout its pages.



Dress 100

**Dainty White Embroidery and Lawn Dress 1.00**  
72-B240 Only \$1.00 for this pretty little Dress of Lawn and Scalloped Embroidery, combined as shown in the illustration. Lawn back is trimmed with tucks and fastens with pearl buttons. Lace edges sleeves and back of neck. Sizes: 2 3 4 5 6 yrs. Lengths: 19 21 23 25 26 ins. Price ..... 1.00  
For further particulars see page 114 of our Spring and Summer Catalogue.



Middy 159

**Coat-style Middy of Strong Jean 1.59**  
COLORS: All White or White with Pink, Copenhagen or Green  
78-B486 Coat-style Middy of White Jean; closes down the front with pearl buttons, and fulness is controlled by sash girdle. Large cape-like collar, pointed turn-back cuffs on long sleeves and bands on pouch pockets are button-trimmed. Sizes: 14, 16, 18 and 20 years; also 40, 42 and 44 bust. Price ..... 1.59  
For further particulars see page 86 of our Spring and Summer Catalogue.



Waist 135

**Stylish White Pique Blouse 1.35**  
COLOR: White only  
Regular and Extra Sizes  
78-B791 Smart tailored Blouse of White Pique, is made in both usual and extra sizes. Large white pearl buttons close front. New-style convertible collar may be worn high or low. Deep cuffs on long sleeves have pointed turn-back finish. Bust sizes: 34 to 52. Price ..... 1.35  
For further particulars see page 91 of our Spring and Summer Catalogue.



Dress 1950

**Woman's Paillette Silk Dress at 19.50**  
Black, Green, Navy or Brown  
58-B303 Dress of Paillette Silk. The graceful side pieces are trimmed with self-covered buttons. Surplice bodice is mounted over net lining, and is trimmed with embroidery in silk and gilt thread. Picot edged White Georgette crepe forms vestee and over-collar which tops collar of self-colored Georgette. Cuffs of the silk on long sleeves of Georgette crepe. 34 and 36 bust with 37-in. skirt. 38 and 40 bust with 38-in. skirt. 42 and 44 bust with 39-in. skirt. With basted hems. Price ..... 19.50  
For further particulars see page 30 of our Spring and Summer Catalogue.



Dress 29c

Note the Unusually Low Price of this Print Dress at 29c  
72-B260 A clean-looking Striped Print is used for this Dress, which has neck finished with plain binding. Print with effective colored pattern finishes sleeves, bottom of skirt and top of two patch pockets. Colors: Blue and White stripes. Sizes: 2, 3, 4 years. Lengths: 19, 21, 23 ins. Price ..... 29c  
For further particulars see page 111 of our Spring and Summer Catalogue.



Skirt 450

**This Popular Donegal Tweed Skirt is Extra Good Value at 4.50**  
COLORS: Grey Mixture or Brown Mixture  
56-B109 Smartly tailored Skirt of serviceable Donegal Tweed; has gathers at back concealed beneath button-trimmed belt. Pointed patch pockets are trimmed with novelty buttons. This trim three-gore model is finished to close invisibly at side. Waistband: 22 to 29 inches. Choice of front lengths 33 to 40 inches. Price ..... 4.50  
For further particulars see page 69 of our Spring and Summer Catalogue.



8.95 and 9.95

**A Boy's Dressy Blue Serge Norfolk Suit very Low-priced at 8.95 and 9.95**  
94-B723 Here we offer a fine twill hard-finish Blue Serge Norfolk. Note the attractive and dressy appearance of this suit, then remember that special care has been given to the making and trimmings in order to insure a suit that will keep its shape and good looks. You will be pleased with the value offered in this number.  
Sizes: 29 to 33 chest measurements, to fit ages 11 to 15 years. Price ..... 8.95  
Sizes: 34 to 36 chest measurements, to fit ages 16 to 18 years. Price ..... 9.95  
For further particulars see page 253 of our Spring and Summer Catalogue.

**Workingmen! This Strong, Roomy Work Shirt for 90c**

40-B701 Man's Reliable Drill Working Shirt, made from good strong Drill, with large, roomy body. It has collar attached, double yoke, pocket, strongly felted seams. This is an extra good value that you cannot afford to miss. Comes in Black with small White stripe.  
Sizes: 14 to 17½.  
Each 90c  
For further particulars see page 268 of our Spring and Summer Catalogue.



90c



1500

**Man's Cheviot-finished Tweed Suit is a Leader in Value at 15.00**  
44-B256 This Three-button, Single-breasted Sack Suit is tailored from a very Dark Brown Cheviot-finished Tweed in a medium weight. The material has a soft-finished, closely-sheared surface and is of a close, firm weave. The coat has the usual pockets and lined with durable Italian lining; durable canvas interlinings. Trousers have five pockets and belt loops. Price ..... 15.00  
For further particulars see page 236 of our Spring and Summer Catalogue.

**THE T. EATON CO LIMITED**  
TORONTO - CANADA

A silo that lives up to its name  
**I D E A L**

YOU should exercise just as great care in choosing a silo as a cream separator.

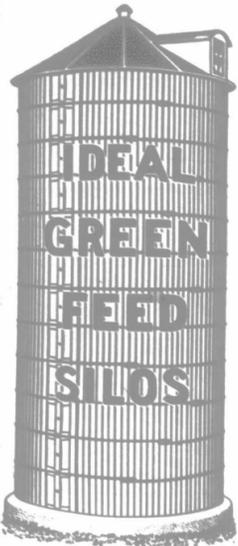
You can afford to have none but the best.

You want a silo that gives you the best silage.

You want a silo that's durable—one that will last the longest; one that is the most economical in the long run.

**You'll never regret buying an IDEAL GREEN FEED SILO**

When you consider that the average life of an IDEAL is from 15 to 20 years; that it pays for itself the first year and that each year thereafter it earns for its owner a profit equal to its first cost, you will appreciate why the IDEAL is the best-paying silo you can buy.



Now is the time for you to install an IDEAL. Summer will soon be here and you'll have so much work to attend to that you'll have little time to think about silos. Why not look into the silo question now before you get so crowded with work?

Write today for our book, which not only explains in detail the advantages of using the IDEAL but gives much valuable information about silos and silage.

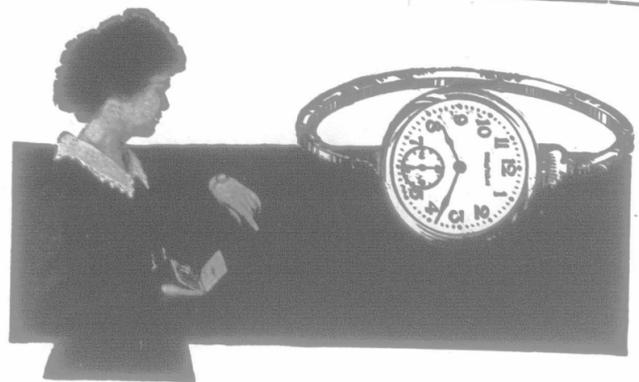
**THE DE LAVAL CO., Ltd.**

LARGEST MANUFACTURERS OF DAIRY SUPPLIES IN CANADA

Sole manufacturers in Canada of the famous De Laval Cream Separators and Ideal Green Feed Silos. Alpha Gas Engines, Alpha Churns and Butterworkers. Catalogues of any of our lines mailed upon request.

MONTREAL PETERBORO WINNIPEG  
VANCOUVER

50,000 BRANCHES AND LOCAL AGENCIES THE WORLD OVER



The  
**Waltham Watch**

A LADY'S watch, while necessarily very small and dainty, should also possess the quality of unflinching accuracy. The Waltham Ladies' Convertible Bracelet Watch answers these requirements. An exclusive feature of its construction is the "disappearing eye" which enables the watch to be worn in several different ways, as the caprices of Dame Fashion may dictate. Waltham quality in every detail assures enduring satisfaction.

*"Your jeweler will show you"*

Your jeweler will show you the Waltham range of high grade watches including many exclusive models for both ladies and gentlemen.

WALTHAM WATCH COMPANY, LIMITED  
MONTREAL

**Points on the Cultivation of Some Vegetables Most Difficult to Grow.**

Cauliflower, although one of the most delicious vegetables, is one of the hardest to grow in many parts of Canada. It damps off easily in the hot-bed, is often badly affected by root maggot and frequently does not head well. In raising plants, transplant them from the seed row, pot or flat to a distance of about two inches apart each way as soon as possible after the seed germinates. This permits a freer circulation of air between the plants and makes the danger of damping off much less. Root maggots are bad nearly every year in many places in Canada and often prevent practically all the plants from heading. Eggs are laid on the ground near the plant which soon hatch into maggots which eat into the roots and thus cut off the supply of sap. To prevent injury from these, a tar felt disc should be placed around each plant close to the ground at the time of planting. It will be too late otherwise. Full particulars in regard to the use of the disc can be obtained from the Department of Agriculture, Ottawa. If the first planting of cauliflower is a failure, a second planting should be made, as cauliflowers are much easier to grow in late than in earlier summer, as the maggots are not so troublesome at that time and there is usually an abundant supply of moisture. If the soil in which cauliflowers are growing is dry, they will not head well as they need lots of moisture and must be kept growing without a check from start to finish.

The onion is another rather difficult vegetable to grow. It requires a long season of growth and very often the seed is sown too late and if the summer is cool and wet the onions will not ripen and will run to thicknecks. The seed should be got in the ground as early as

**NORTHERN ONTARIO**

Millions of acres of virgin soil, obtainable at 50c. an acre in some districts—in others, free—are calling for cultivation. Thousands of farmers have responded to the call of this fertile country, and are being made comfortable and rich. Here, right at the door of Old Ontario, a home awaits you. For full particulars as to terms, regulations and settlers' rates, write to:  
H. A. MACDONELL, Director of Colonization, Parliament Buildings, Toronto, Ont.  
G. H. FERGUSON, Minister of Lands, Forests and Mines.

**Cream Wanted**

For good service and better prices, ship your cream to us. We guarantee the test, and pay 50 cents a pound butterfat. We remit daily and pay express charges.

**The Mutual Dairy & Creamery Co.**  
743-745 King St. W. TORONTO

**Clydesdales and Holsteins**

STALLION, rising 3 years, large size, good conformation and action; from Imp. sire and dam. Also two fillies.  
HOLSTEINS. Females, a number fresh. Also two blood sows (grade Yorkshires) due to farrow May 5.  
Warren Stringer, R.R. 1, Dunnville, Ont.

**HIDES-WOOL**

No shipment too small to receive our best attention. Highest prices always paid. Prompt returns made. ASK FOR TAGS AND LIST

**William Stone Sons LIMITED**  
WOODSTOCK, ONT.

**Summer Resorts in Ontario.**

The Muskoka Lakes, Point au Baril and Georgian Bay Resorts; French and Pickerel Rivers; Rideau Lakes; Severn Rivers; Lake, Mazinaw District and Kuartha Lakes are conveniently reached via the Canadian Pacific Railway. Particulars from Canadian Pacific Ticket Agents or W. B. Howard.—Advt.

**Great Lakes Steamship Service.**

Canadian Pacific Steamship "Manitoba" now leaves Owen Sound 10.30 p.m. each Thursday for Sault Ste. Marie, Port Arthur and Fort William. Steamships "Keewatin" and "Assiniboia" will sail from Port McNicoll Wednesdays and Saturdays, commencing June 1st.—Advt.

possible in the spring so that the onions will mature while the warm weather continues, thus ensuring a thorough ripening and curing of the bulbs. To hasten the development of bulbs, especially in places where the season is short, young plants are set out instead of the seed being planted. Onion sets will ensure good bulbs also where the warm season is short. Root maggots often do much harm in the onion plantation. Watering the row every four or five days with hellebore and water in the proportion of two ounces of hellebore to one gallon of water while the insects are most troublesome will control them to a considerable extent.

Except in the warmest parts of Canada melons require considerable care to ensure the ripening of many of them. The warm season is too short. To overcome this, melons should be started in hot-beds and kept under glass until there are warm nights in June or even July. Melons require heat below and heat above, hence the necessity of keeping the soil warm by having a good bed of manure. They will not succeed in cold soil even if the air above ground is warm. Melons require a plentiful supply of moisture in the soil to give the best results. Much watering, however, should be delayed until the ground is sufficiently warmed up so that heavy watering will not cool it too much. Brussels sprouts do not develop well in hot, dry weather and unless the autumn is a long one without severe frost, they are not satisfactory. It is important, therefore, to plant varieties that will be most likely to develop where the season is short and the dwarf ones have been found the most satisfactory.—Experimental Farms Note.

**Just Ahead.**

The road to yesterday—why travel it? A tangled skein—so why unravel it? The future calls you on, the past is dead, All, all you hope to do lies just ahead.

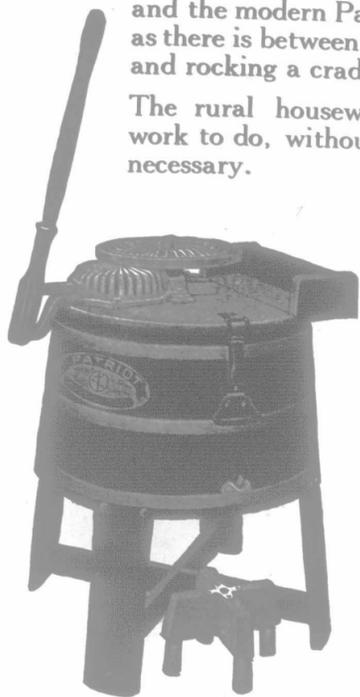
**The Watt a**

Readers of the annual... from the herd... J. M. Gardho... this year in t... Guelph Ont.,... Mr. Watt's... The change h... of furnishing t... tion in the sal... visitor, and al... accommodation... As stated in th... in this issue, th... for this year's... ing cows, how... their sides, and... propositions th... passes that of... offered by the... ers. The fami... be more attrac... Missies, Nonpa... hooks, Crimson... flowers and oth... of pedigrees, a... par with its l... breeding cows, five have calves... big roan, five... breeding bull F... imported-in-dar... keld Bellona, a... year older, is a... cow which also... nice roan got by... tion to the othe... fore getting dov... there are also... bred cows that... of interest for t... high-class mater... lies, perhaps, in... Lad's Missie an... Orange Blossom... got by Silver D... of the great Av... straight bred... daughter of the... has at foot a... bull, a solid re... Double Dale. I... good type of sho...

### As Easy as Rocking a Cradle

There is as much difference between the old-fashioned, back-breaking washboard and the modern Patriot washing machine as there is between carrying a heavy baby and rocking a cradle.

The rural housewife has enough hard work to do, without doing any that isn't necessary.



## The Patriot

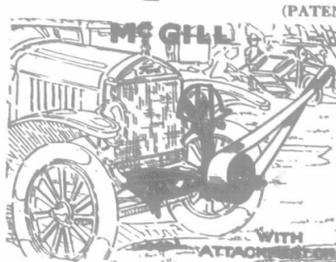
Spiral Cut Gear  
Hand Washing Machine

has made life easier and more cheerful for thousands of women. Will you let it do the same for you?

Ask your dealer to show you a Patriot or write to us for descriptive pamphlet.

**Dowswell, Lees & Co., Limited**  
Hamilton, Canada

## The Improved McGill Autopower Attachment



at the same time nearly hides from view the above cut. In this way it does not mar the appearance of your car in any way.

### IT HAS THE POWER

You know the power of the Ford. It is brought home to you every time you climb a hill, or you see the heavy loads the Ford trucks are hauling, and you ask why cannot I use this power on my farm? Autopower makes this possible. The gasoline consumption alone over the ordinary stationary engine will pay for the attachment in a short time. Just think of having a portable power plant at your control, that you can take to any job with the Attachment on if you wish, and furnish heaps of power to grind as high as 60 bushels of oats per hour; run your Ensilage Cutter to its fullest capacity, run a wood saw with two notches of gas; runs hay presses, pumps, and, in our Canadian West, farmers are running 28-in. Separators with blower attached, threshing as high as 700 bushels of wheat in 10 hours, or 1,000 bushels of oats in 10 hours.

The Attachment has an auxiliary fan which keeps the engine cool under all conditions. A special clutch pulley makes it possible to start the engine and then pull in the load. The attachment is fully guaranteed, over 1,000 in use and giving entire satisfaction. The Attachment pulley is 10 inches in diameter by 4 1/2-inch face. The engine runs at same speed as running on the road at 20 miles per hour, which is about 1,000 R. P. M.; 40 feet of belt should be used.

Price, \$60.00, F. O. B., Toronto.  
Order now and get some use out of your car this summer. We will ship C. O. D. \$60.00, and after 30 days trial, if not absolutely satisfied in every way, it may be shipped back and money refunded.

**A. M. MCGILL**  
203 Lee Avenue Toronto, Ont.

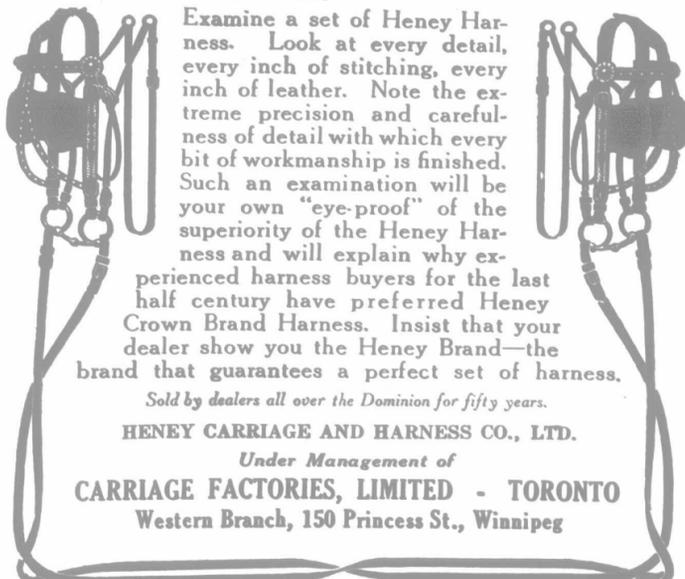


### Gossip.

#### The Watt and Gardhouse Offering.

Readers of these columns will note that the annual sale of Shorthorns offered from the herds of J. A. Watt, Elora, and J. M. Gardhouse, Weston, will be held this year in the Winter Fair Buildings, Guelph Ont., on May 21, instead of at Mr. Watt's Salem Farm as formerly. The change has been made with a view of furnishing this year ample accommodation in the sales ring for each and every visitor, and also offering better train accommodation to those from a distance. As stated in the advertisement elsewhere in this issue, there are sixty lots catalogued for this year's sale. Twenty of the breeding cows, however, will have calves by their sides, and both as breeding and show propositions the entire offering far surpasses that of any former selection ever offered by these two well-known breeders. The families represented could not be more attractive. There are Clippers, Missies, Nonpareils, Rosemarys, Broadhooks, Crimson Flowers, Butterflies, Mayflowers and others—a most desirable lot of pedigrees, and every animal is on a par with its breeding. Of the mature breeding cows, five are imported and all five have calves at foot. Among these is a big roan, five-year-old cow by the good breeding bull Prince Victor. She has an imported-in-dam bull calf at foot. Monikeld Bellona, another roan and only a year older, is a Cruickshank-Duthie-bred cow which also has a bull calf at foot, a nice roan got by Archer's Hope. In addition to the other imported cows, and before getting down to the home-bred stuff, there are also several choice American-bred cows that should add a great deal of interest for the reader who appreciates high-class material. The choice of these lies, perhaps, in the big, red show cow, Lad's Missie and the roan five-year-old Orange Blossom cow, Glenview Blossom, got by Silver Dale, one of the best sons of the great Avondale. The former is a straight bred "Missie" and a granddaughter of the noted Choice Goods. She has at foot a strong, seven-months-old bull, a solid red in color, and sired by Double Dale. Lady Castremont, a thick, good type of show cow, has a pedigree of

## Heney Harness



Examine a set of Heney Harness. Look at every detail, every inch of stitching, every inch of leather. Note the extreme precision and carefulness of detail with which every bit of workmanship is finished. Such an examination will be your own "eye-proof" of the superiority of the Heney Harness and will explain why experienced harness buyers for the last half century have preferred Heney Crown Brand Harness. Insist that your dealer show you the Heney Brand—the brand that guarantees a perfect set of harness.

Sold by dealers all over the Dominion for fifty years.  
**HENEY CARRIAGE AND HARNESS CO., LTD.**  
Under Management of  
**CARRIAGE FACTORIES, LIMITED - TORONTO**  
Western Branch, 150 Princess St., Winnipeg

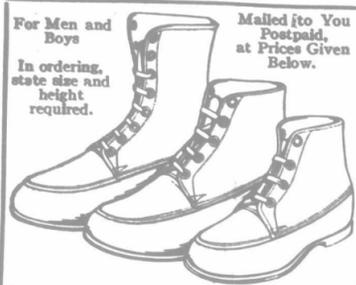
### Use Power in the House as well as in the Barn

Runs by Motor or Engine  
**YOU** know how much farm work is saved by electric motors and gasoline engines. Why not adopt the same idea in the house? Backaches from washing are out-of-date—successful housekeepers everywhere insist on washing machines, and the best idea of all is the power washer, because it does all the work itself and needs no attention whatever.



**Maxwell**  
Power Bench Washer  
has proved itself a wonderful friend to others. Let it help you. It will even do the heaviest or daintiest clothes with no tearing or wearing. Pays for itself over and over! Made in three sizes. Write for particulars.  
**MAXWELLS LIMITED, - Dept. W - St. Marys, Ontario 40**

rich Waterloo breeding and will also have a calf at foot by sale time. Still a few other mature cows that can scarcely be passed by without notice, are cows like Orange Princess 2nd, an attractive Orange Blossom cow got by the Gordon-bred bull, Village Duke, and selling with one of the best roan Right Sort heifers at foot we have seen for some time. This calf is a full sister to the \$4,000 calf sold at the Harding sale in December, and also the \$1,725 heifer sold at the Congress sale in February. Nonpareil of Hillside 2nd, by the great bull Republican, carrying a straight Nonpareil pedigree and catalogued along with a bull calf, Nonpareil Choice, is a five-year-old with Cruickshank-Broadhook breeding throughout; while Lady Madge, a thick, well-proportioned, four-year-old, selling with a Gainford Marquis calf by her side, partly completes a line-up of fifteen or sixteen of the strongest breeding cows this Advocate representative has ever seen in one Canadian sale-ring, and to make them all the more noteworthy many are safely bred to that great sire and champion bull Gainford Marquis (imp.). Others are bred to his promising son Gainford Sultan, which carries the blood of the champions of three countries on the top of his pedigree, and the worth of these females, safely bred to either of these two sires, will be hard to sum up. Then, again, among the younger things listed are ten heifers and three bulls that are all got by "Gainford." Without singling out the bulls, it is enough to say that all three are of the sort usually seen from this sire; and the calf, Gainford Conqueror, which will show in the senior-yearling class at the 1918 show, is one of the most promising youngsters Gainford Marquis has ever sired. Several of his heifers which have already been referred to are also of the strongest of show calibre. Gainford Belle, the winning senior calf on the Canadian circuit last year, and a full sister to Gainford Conqueror, mentioned above, shows this year as a senior yearling and undoubtedly will be one of the strongest things out. Lady Secret, first as a junior yearling at Toronto last year, will sell with a heifer calf at foot which is got by her own sire, and Gainford Silver is an especially good junior, that will also be around the top at any show. Like all



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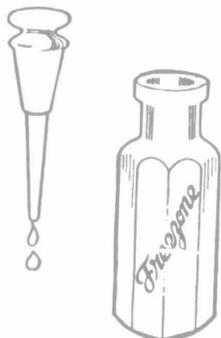
are made to give comfort and long wear — for rough or fine weather, and rough or fine usage. Cut in semi-moccasin style, to insure greatest freedom. Built on right and left lasts, with solid heels, soles and counters, they are neat and give greatest support. The leather is tanned by our famous Chrome-oil process, which makes it very soft, and so acts on the fibre, that, regardless of wet, heat or cold, the leather will never dry up, shrivel or crack.

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Five choice 13-month old bulls, straight Scotch, from good milking dams. Fifteen yearling rams, good flock headers.  
CHAS. J. SHORE, Glanworth, Ontario

three mentioned, each of the other seven heifers, sired by the noted champion, will bear the closest inspection, and as all are open heifers the buyer will have every opportunity of breeding them to a sire of his own choice. There are many other special features regarding this offering that would be, if space permitted, equally as worthy of attention as many of the individuals mentioned, but of them and the offering throughout it seems almost sufficient to say, and we say it without any hesitation whatever, that while Messrs. Watt and Gardhouse have this year drawn heavily on their own herds, they are putting into the sale-ring sixty cattle, twenty of which will have calves by their sides, and each and every lot listed is of the calibre that should and will appeal strongly on May 21 to those who are buyers of the best.

**Questions and Answers. Veterinary.**

**Diarrhoea.**

1. Why does a two-year-old heifer fed on dry hay, physic as if she were on June grass?

M. R. K.

Ans.—1. This is due to a weakness of some of the digestive organs or glands. It is not possible to say definitely what the cause is. It may be a diseased liver and if so little can be done for her. Give her a dessertspoonful 3 times daily of equal parts of powdered gentian, ginger and nux vomica, and add to her drinking water 1/4 of its bulk of lime water. V.

**Miscellaneous.**

**Rare Coin.**

1. I have an old silver coin in my possession, which is 153 years old, and I cannot make out the country from which it was issued. The inscription this coin bears is as follows: On one side is "Car. III. D. G. Hisp. Et Ind. R.—", and on the other side, "Vtra Que Unum," and also dated 1765, or 153 years ago. What I believe it to be is a Spanish coin. The first inscription I make out to be "Charles III by the Grace of God, King of Spain and India;" the other I can't make out. However, I have resorted to putting the coin under a paper and rubbing over the surface with a lead pencil, thus bringing out the inscription, etc. I am enclosing this paper. Supposing this coin to be valuable, would a little hole punched through near date make the coin worthless? Where could I get a book dealing with these old coins?

Trusting you will let me know at once through your question department, and thanking you for past favors. M. A. C.

Ans.—We are unable to supply the information desired. Possibly some of our readers would be able to throw light on this matter.

**Beans.**

What are the best varieties of beans to plant? How many bushels are required per acre? How far apart should the rows be? When is the best time to plant? Can they be sown with the seed-drill? Can they be threshed with a threshing machine?

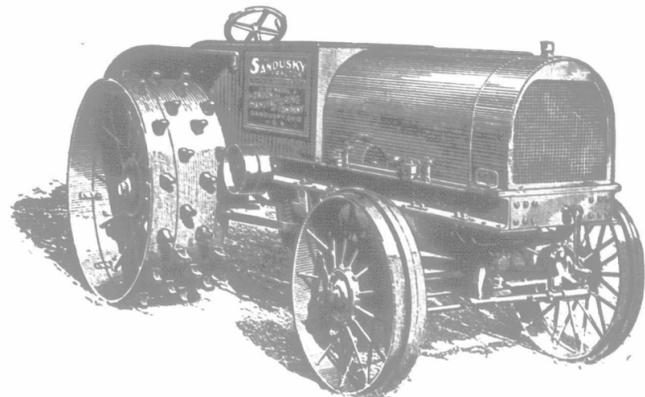
G. B.

Ans.—1. There are a number of beans which give satisfaction. Pierce's Improved Tree bean is a favorite with many. Scholfield's Pea bean, Marrowfat, Large White Haricot, Common White Pea, Yellow-Eyed Marrowfat, and White Wonder are among the varieties which are grown. The amount to plant per acre depends on the size of the seed. If the small white pea bean is used, 3 pecks of seed per acre is considered ample, but 5 pecks will be needed of some of the Marrowfat varieties. The beans may be planted in rows 28 inches apart with the grain drill. The time for planting depends on a number of circumstances, such as quality of soil, locality, place in the rotation, and variety. The last week of May or the first week in June is the usual seeding time, but it is important to plant so that the beans will get a quick start and make rapid growth. Threshing is usually done with a specially constructed machine, although the grain separator is sometimes used for threshing beans; the chief difficulty is that more of them are broken or split, which injures them for commercial or seed purposes. Where only a small quantity of beans are grown they are very often threshed with a flail.

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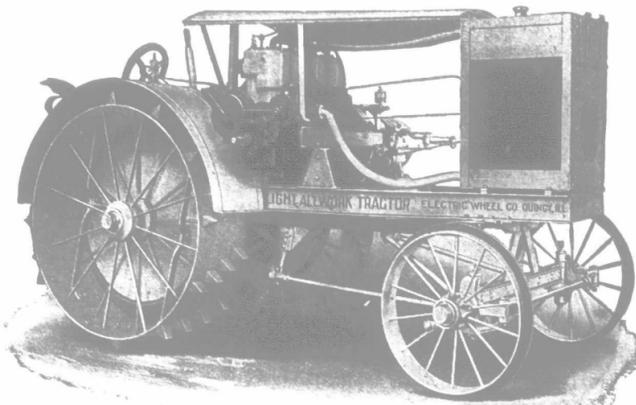
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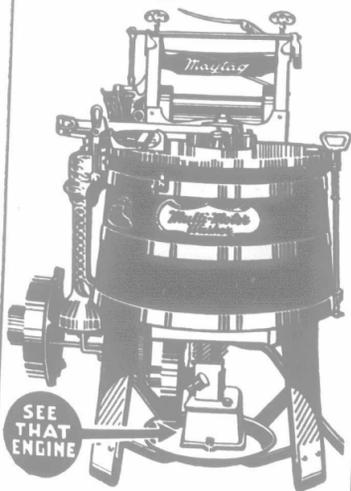
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### The Fuel Value of Wood.

Owing to the scarcity of coal in the winter just passed 1917-18; many people are becoming more interested than heretofore in the use of wood as fuel. It is the purpose of this short article to discuss the value of different woods in this connection.

The primary quality of a fuel is to give off heat when burned. Secondary qualities are ease of handling, ease of kindling, amount of ash, etc. From a chemical point of view, the burning of a substance in air simply means the combining of that substance with the oxygen of the air. This reaction liberates heat in a greater or lesser amount depending on the substance burned. The amount of this heat is measurable and the unit used for practical purposes in this country is what is known as the British Thermal Unit or more familiarly as the B. T. U. One B. T. U. represents the amount of heat necessary to raise the temperature of one pound of water through 1 degree Fahrenheit.

For every combustible substance there is a corresponding "Heat of Combustion" which is invariable for that substance and is expressed as the number of heat units or B. T. U.'s, given off by the combustion of 1 pound. This quantity is the same no matter how slowly or how rapidly the combustion takes place, and it has no direct reference to the temperature of the fire. If combustion is rapid a large number of heat units are produced in a short time and consequently the temperature is high. If combustion is slow the number of heat units per second is small and the heat gets a chance to become dissipated, consequently the temperature is low.

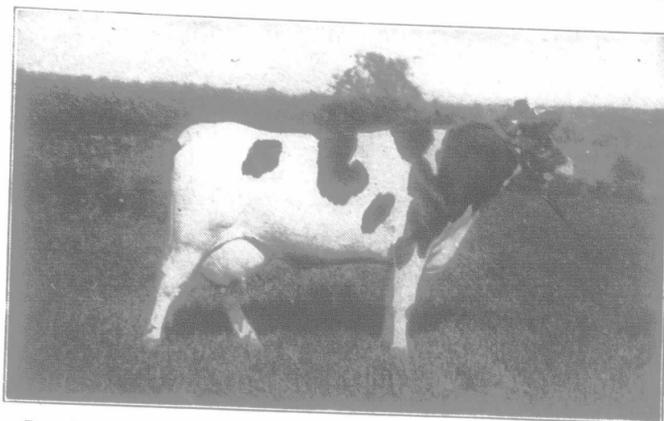
#### When Wood is Wet.

If a fuel is wet the water must all be evaporated during the burning of the fuel, and this takes away some of the heat. To heat up a pound of water from the ordinary temperature to the boiling point, evaporate it and heat the steam to the temperature of the chimney gases requires about 1,220 B. T. U. Consequently for every pound of water in the fuel, this amount of heat goes up the chimney. This loss is present to a greater or lesser extent with all fuels but is particularly important with wood. Coal may contain 2 or 3 per cent. water or 40 to 60 pounds per ton. Green wood may contain 1,500 to 2,000 pounds of water per cord. Air-dried hardwood holds about 720 pounds per cord. The reason for demanding well-dried wood is, therefore, quite obvious.

#### Why Woods Differ.

The next statements may not seem quite so evident but they are equally true. The "Heat of Combustion" or "Calorific value" is, within narrow limits, the same for all woods. That is, a pound of one wood will give off almost exactly the same amount of heat as a pound of a different wood. This does not mean that a cord of one wood will give the same heat as a cord of any other wood, because one cord may be much heavier than the other. Some woods are highly resinous—red pine, for instance—and these have a slightly higher heating value on this account but the difference is not great. The reason for all woods having equal Calorific Values is not far to seek. Fundamentally, all woods consist of the same substance and one species differs from another chiefly by the way this is arranged in the wood structure. Since all woods do consist chiefly of the one substance, the Calorific Values of all of them must be the same. Measurements of the Calorific Value show that 1 pound of perfectly dry wood yields 8,220 B. T. U. For comparison it may be stated that 1 pound of good hard coal yields about 12,000 to 13,000 B. T. U. and poor coals go very much lower. Perhaps it would be better to compare these in terms of cords and tons. One cord of air-dried maple or birch will contain about 3,250 lbs. of dry wood and about 720 lbs. of moisture. Its heating value will then be 3,250 x 8,220 = 26,715,000 B. T. U. less 1,220 x 720 = 878,400 B. T. U. giving a net heating value of 25,836,600 B. T. U.

A ton of coal gives a net heating value of 2,000 x 13,000 = 26,000,000 B. T. U. These two values are very nearly equal, so that we can say that one cord of well-dried hardwood (beech, birch or maple) is equal to one ton of good hard coal. Other woods have heating values in proportion to their weight per cubic foot.



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Photography serves a double purpose on the farm. In the taking of home pictures, in the keeping of a happy Kodak record of every outing, in the making of pictures of one's friends and the interesting places that are visited, it appeals to country people and to city people alike.

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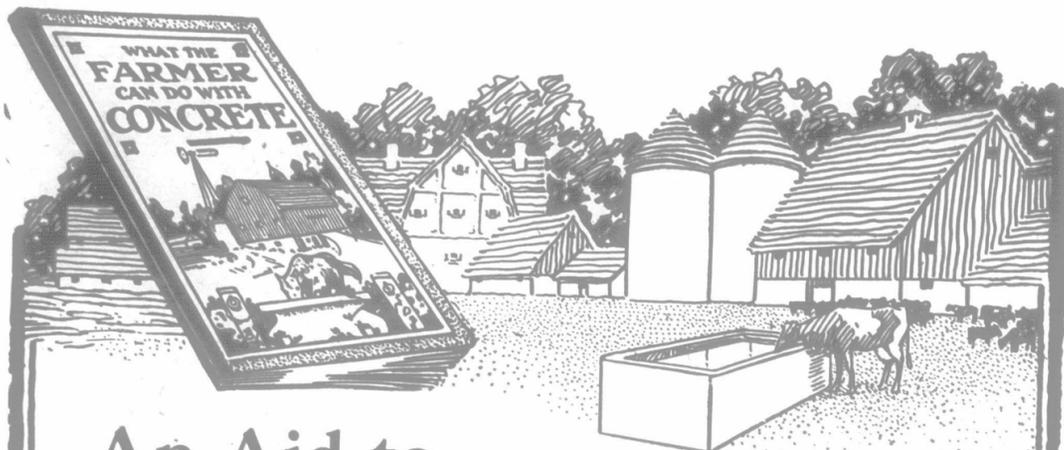
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We have a splendid selection of last spring's bull calves to offer, sired by our noted herd bulls and from our choice home-bred and imported cows. Inspection invited. Berkshire boars and sows.  
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Herd headed by Bonnie Ingleside 7th, the Canadian-bred champion bull at Toronto, 1914-1915. We are offering several young bulls that were Toronto and Ottawa winners this year, all sired by the herd bull as well as a few females in calf to him. Come and see our herd or write us for anything in Herefords.  
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### Clydesdales and Shorthorns

I still have some Shorthorn bulls, twelve and thirteen months old. Two grandsons of Old Sort, and four great-grandsons of Royal Blood; these are an exceptionally fine lot; also a number of females. Inspection invited. Apply to J. B. CALDER, GLANFORD STATION, R.R. 3.

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SMITH AND RICHARDSON, Myrtle, C.P.R., Oshawa, C.N.R., Oshawa, G.T.R., Columbus, Ont.

### A Guide to Values.

The following table shows the number of cords of various common woods required to equal 1 cord of well-dried hardwood or a ton of coal.

Ash.....	1.10	cords.
Basswood.....	1.70	"
Beech.....	1.00	"
Birch.....	1.00	"
Butternut.....	1.60	"
Elm.....	1.00	"
Maple.....	1.00	"
Oak, red.....	0.97	"
Oak, white.....	0.93	"
Poplar.....	1.55	"
Cedar.....	2.10	"
Douglas fir.....	1.20	"
Balsam fir.....	1.80	"
Hemlock.....	1.60	"
Jack pine.....	1.50	"
Spruce.....	1.60	"
Tamarack.....	1.15	"

### Split Wood is Best.

This table gives approximately the heating value of well air dried cordwood, but the amount of drying is important. Wood piled with the bark on dries very slowly so that when purchasing wood, split wood is to be preferred to small-sized, round wood, since the latter will probably not be so dry and will include more bark and rotten wood, which has little heating value.

Some other consideration may at times be as important as the actual heating value of the wood. For instance, the ease of lighting is to be considered if the wood is wanted only for kindling or for a quick fire in the kitchen range in the summer. Cedar and pine are especially good for this purpose. For an open fireplace the hardwoods are best. Spruce makes a very "crackly" fire which is sometimes an attraction, but there is always some danger that a spark may be thrown out of the fire to the detriment of clothing or the rug.

### A Comparison of Ashes.

Another point of view worth bearing in mind in connection with the burning of wood in place of coal, is the difference in the amount of ash produced. A cord of hardwood will make only about 60 pounds of ashes, while a ton of hard coal will make from 200 to 300 pounds; judging from the grade of hard coal coming to Canada during the past winter 1917-18; the latter amount is more likely and some lots will run even higher than this, especially the small "steam sizes." The calorific value of these latter may frequently be as low as 10,000 B.T.U. in place of the 13,000 B.T.U. used in the above calculations.—W. B. Campbell, in Canadian Forestry Journal.

### Dairy Products Versus Booze.

Irving M. Avery quotes a statement from the National Dairy Council to the effect that the American people consume annually some \$30 worth of alcoholic liquor, while the per capita consumption of milk results in an expenditure of but \$6.00, or one-fifth as much. The same authority gives the following daily per capita statistics in the matter of consumption of dairy products. "One-half glass of milk, one-twelfth pound of butter, nine-one-thousandths pounds of cheese, and about a tablespoonful of ice-cream." These statistics bring home very clearly the need of an aggressive campaign to educate the public as to the food value of dairy products, and as to the true condition under which our dairymen are conducting their business. In general, the attitude of the public is well represented by a story which President Aitken, of the American Holstein-Friesian Association, tells of three friends of his, who, feeling the need of liquid refreshment, stepped up to the bar in a Chicago saloon, and one of the party set up the drinks, for the crowd. The check for \$1.20 for three drinks was paid without a murmur, but one of the party of a reflective turn of mind said, "Isn't that quite a price for three cocktails?" "Perhaps it is," responded the host, "but we have to pay it if we get the quality we like." "But," persisted the other, "suppose on the same theory, they should raise the price of milk two cents a quart, what would you do in that case?" "I'd raise a fuss," was the heated reply, "they're charging enough for that now."

MAY 16

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For Sale:—2 boars,  
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All descendants of C  
Toronto Industrial,  
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Leicester rams and Y  
ALLAN B. MAH  
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thirteen months. S  
strains.  
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**Evergreen Hil**  
Herd headed by t  
Nothing for sale at  
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Good, Growthy, R  
9 months old, dam by  
(88049). An excell  
grade herd. Will sell  
E. J. Brady.

**Spruce Lodge Sho**  
Herd headed by th  
Chief Imp. = 60865  
heifers of all ages, of  
W. A. DOUGLAS,



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Bulls all sold. One extra good roan bull calf by an R.O.P. dam with an average test of 4.5.

Plaster Hill Herd Dual-Purpose Shorthorns. Six young bulls from four to thirteen months.

Evergreen Hill R.O.P. Shorthorns Herd headed by the R. O. P. bull, St. Clare.

Good, Growthy, Registered Shorthorn Bull 9 months old, dam by Broadhocks Prince = 55002 = (88049).

Spruce Lodge Shorthorns and Leicesters Herd headed by the Butterfly-bred bull, Roan Chief.

The Farm—A Training School.

"Yes, he came from the country; was born there and grew up on the farm." That accounted for it. I had been listening with great pleasure to an address given by the president of a college.

Here, then, is something worth thinking about by every young person. Today they are building character that will be called into fullest play to-morrow.

Two or three things will help to prepare us for such a future. First let us put earnest purpose. There is not much to be expected of a young man or a young woman, who has no fixed determination as to his own life.

Not less fine is a brave, cherry spirit. Anything but a sour, bitter, faultfinding young person! A smile is what wins.

But finer still is deference to and respect for father and mother. Nothing will exalt a man more surely than to love and honor his parents.

Why They Wear Them. Several members of the House were in the cloakroom discussing the large number of officers on duty at Ottawa.

"EASTLAKE" TANKS THE BEST MADE ANYWHERE. The Heavy Galvanized Tubing is locked on. The Angle Iron Braces are formed around the Tubing.

WELDWOOD SHORTHORNS

We have a choice offering of bulls ranging in age from 7 months to 1 year. They are bred for milk and have excellent quality and individuality.

HIGH-CLASS SHORTHORN BULLS

We have a number of choice young bulls on hand, ready for service. Some are straight Scotch and others are bred for milk production.

BURNFOOT STOCK FARM

Breeders of high record, dual-purpose Shorthorns with splendid conformation for beef. Have a number of bulls calved last fall and early in winter.

WELLAND DISTRICT SHORTHORN BREEDERS' CLUB

New sales list out: cows, heifers bred, young bulls, also stock bull Morrison Pride = 102330 =.

BLAIRGOWRIE SHORTHORNS

I have females all ages and bulls of serviceable age. Worth while to come and see or write JOHN MILLER

GLENGOW SHORTHORNS

We have a choice offering in young bulls, fit for service. They are all of pure Scotch breeding and are thick, mellow fellows, bred in the purple.

SHORTHORNS—T. L. Mercer, Markdale, Ont.

ROSEWOOD CHAMPION, by Nonpareil Archer, Imp., at the head of the herd. I have almost 100 Shorthorns in my stables at present.

SPRING VALLEY SHORTHORNS

Herd of seventy head, straight Scotch, good individuals. Headed by the great show and breeding bull, Sea Gem's Pride 96365, and Nonpareil Ramsden 83422.

30 Shorthorns for Sale Eight bulls and a lot of good breeding, registered females, in all conditions.

Sprucedale Dual-Purpose Shorthorns

I am offering my herd sire, Braebur Prince; dam, Bessie of Low Banks 2nd, 11,636 lbs. of milk in R.O.P. Good individual, sure and right.

**Last Call—**  
for the  
**Watt-Gardhouse**  
**Sale** **Eighty Head**  
**Sixty Lots**

**Canada's Greatest Annual Shorthorn Event**

Twenty calves with their dams, five young bulls. More sons and daughters of Gainford Marquis (Imp.) than have ever been exposed at Public Auction. Many cows in calf to him and his son, Gainford Sultan.

Selling at the  
**Winter Fair Buildings**  
Guelph, Ont.

**Tuesday, May 21st, 1918**

A chance of a lifetime to secure some good ones. For catalogue, write to:

**J. A. WATT, ELORA, ONTARIO**

AUCTIONEERS:  
Carey M. Jones, Chicago. T. E. Robson, London.  
"Scotty" Milne, Kahoka, Miss.



GAINFORD MARQUIS IMP. Champion of Two Countries

**Lump Jaw**

The only reliable treatment for Lump Jaw in Cattle.

**Fleming's Lump Jaw Cure**  
Price \$2.50 a bottle. Sold under a positive guarantee since 1896. Your money back if it fails. Write for Fleming's Vest-Pocket Veterinary Adviser 96 pages and illustrated. It is Free.

**Fleming's Chemical Horn Stop**  
A small quantity applied when calves are young will prevent growth of Horns. A 50c tube sent postpaid is enough for 25 calves.

FLEMING BROS., Chemists,  
75 Church St., Toronto, Ont.

**Flintstone Farm**

Breeders of—  
Milking Shorthorn Cattle  
Belgian Draft Horses  
Berkshire Swine

OTHER RECORDS  
Employees of Flintstone Farm have subscribed for \$5,200 worth of Liberty Bonds, besides contributing to the Red Cross, Red Triangle and other war funds.  
Eight of our men are in the service. Two of them are already in France. Those still with us are carrying on the extra load placed on them willingly and cheerfully.

**Dalton**  
Massachusetts

**Shorthorns for Sale**

Right Sort Son = 96282 = (guaranteed) \$500. A choice lot of young heifers and bulls. Special price for next 30 days. Sound Shire mare, registered, 4 years old. Radial every hour from Hamilton.

**C. N. Blanshard, R. 2, Freeman, Ont.**

**BULLS**  
am offering, for immediate sale, three good bulls. One roan, imported, 13 months, and two others, extra well bred. Anyone wanting a bull of the better sort should see these.

**A. G. FARROW, OAKVILLE**  
(Half Way Between Toronto and Hamilton)

**Mardella Shorthorns**

Dual-purpose bulls, 20 young cows and heifers—bred, some calves by side. Size, type, quality; some full of Scotch. The great massive Duke—dam gave 13,599 lbs. milk, 474 lbs. butter-fat—at the head.

**Thomas Graham, Port Perry, R. 3, Ont.**

**GLENFOYLE SHORTHORNS.**  
College Duke 4th in service—a high-record son of Rothschild and Taylor's noted stock. Am offering young cows and heifers, bred to this great bull. Have a few bulls of breeding age on hand.

**STEWART M. GRAHAM, LINDSAY, ONT.**

NINTH ANNUAL  
**Live Stock Show**

of the Live Stock Breeders' Association of the district of Beauharnois Ltd., will be held at  
**Ormstown, Quebec, June 4, 5, 6, 7th**

Prize List for 1918 is increased to  
**\$15,000 IN PRIZE MONEY**

Show will open at 8 p.m., June 4th, in the large Stadium, with judging of driving horses, and continue daily at 10 a.m., 2 p.m., and 8 p.m.

Horse racing on June 5, 6, 7th.

Plan to visit this show this year and see one of the best live stock shows in Canada. Admission, adults 25c., children 15c.

**Neil Sangster, President, W. G. McGerrigle, Sec.-Treas.**

**SALEM SHORTHORNS**

Herd headed by Gainford Marquis (Imp.), undefeated in England and Canada. Sire of the winning group at Canadian National, 1914, 1915, 1916. Can supply cattle, both sexes at all times.

**J. A. WATT, ELORA, ONTARIO**

**MAPLE HALL SHORTHORNS**

Present offering, 7 yearling bulls:  
One Cruickshank Duchess of Gloster Five Cruickshank Butterflies One Shepherd Rosemary  
All pure Scotch, and extra good; also a few young cows with calves, and yearling heifers.

**D. BIRRELL & SON, CLAREMONT, ONT.**

**FIFTY IMPORTED SHORTHORNS**

I have fifty head of newly imported Shorthorns (42 females, 8 bulls) which are acknowledged to be one of the strongest lots that have left Britain this season. You should see these if you are wanting something choice. **George Isaac, (All Railroads: Bell Phone) Cobourg, Ontario.**

**PLEASANT VALLEY FARMS**

Present offering—A number of good young Scotch cows with calves at foot and rebred to (Imp.) Newton Grand Champion; also a number of 2-year-old heifers bred to same sire. Suitable for good herd foundations; priced to move them. Inspection invited.

**GEO. AMOS & SONS, Farm 11 miles east of Guelph, C.P.R. MOFFAT ONTARIO**

**IMPORTED SCOTCH SHORTHORNS**

Our present offering includes 100 imported females and 12 young imported bulls, representing the most desirable lines of breeding. If interested come and see them. Burlington Jct., G.T.R., is only half mile from farm. **J. A. & H. M. PETTIT, FREEMAN, ONTARIO.**

**ESCANA FARM SHORTHORNS**

Five Bulls for Sale. One roan senior yearling; one choice twelve months white calf, by Right Sort (Imp.); one select, dark roan, ten months calf; one roan yearling, by Raphael (Imp.); one red roan yearling, for grade herd. Farm 1/4 mile from Burlington Jct., G.T.R.

**J. F. MITCHELL, Limited BURLINGTON, ONTARIO**

**Here at Present—TEN IMPORTED BULLS**

Sired by Beau Gaston, grandson of old Beau Brummel. These are all herd headers and good enough to head any herd. Write or phone.

**L. O. CLIFFORD, OSHAWA, ONTARIO.**

**SHORTHORN BULLS** Will. A. Dryden  
Brooklin, Ontario Co.  
Myrtle C.P. Brooklin, G.T.R.  
Brooklin, C.N.R.

of my own breeding, around a year old; best families and good colors, are for sale. Also a few young, imported bulls.

**Questions and Answers. Miscellaneous.**

**Does Not Wish Daughter to Marry.**  
I have a daughter who wishes to get married, but I object to her fiance. Both are over eighteen years of age. Can I prevent the marriage? P. J. C.

Ans.—1. Unless you can appeal to your daughter and get her to see your viewpoint we doubt if you would be able to prevent her marrying the man of her choice.

**Lump-jaw.**  
What is the best treatment for lump-jaw? I have a young heifer which is affected and would like to save her if possible. I only noticed the lump a few days ago, and I believe it is fast to the bone. Would iodide of potassium be of any use in this case, and will the milk be all right for feeding calves? A. A. R.

Ans.—If the bone is not involved, the quickest method of treatment would be to dissect the tumor out. As the lump was only noticed recently, give the cow iodide of potassium three times daily, commencing with one-dram doses and increasing the dose by one-half dram daily until she refuses food and water, fluid runs from the eyes and mouth and the skin becomes scurfy. When any of these symptoms become well marked cease giving the drug. If necessary repeat treatment in three months. The disease in the early stages is not likely to affect either the milk or flesh; at the same time few people care to use either from a diseased cow. We doubt if there would be any danger from feeding the milk to calves.

**Calves Unthrifty.**  
1. I have four calves in a pen, which is kept clean and dry. I have been feeding silage with rolled oats and a little hay. The calves have been doing well, with the exception of one which does not eat freely and is troubled with diarrhoea. One of the other calves has an enlargement on each side of the jaw. What is the cause? H. L. S.

Ans.—1. The diarrhoea is possibly caused by overfeeding, or by feeding the milk a little colder than usual. If possible give the calf whole milk and add to it one-quarter of its bulk of lime water. Give it a few rolled oats, a little oil cake, and a reasonable allowance of clover hay. We cannot diagnose the case in regard to the lumps, as it would require a personal examination to enable a person to say definitely what was the cause. We have seen lumps appear on the jaws as the result of injury. There are some forms of stanchions which a calf puts its head through but has difficulty in getting it back. This has caused lumps or a thickening to form on the jaw. When a calf is through drinking out of a pail, some have the habit of taking the pail by the handle and giving it a jerk in order to get it away from the calf. The edge of the pail striking the jaw will sometimes cause a lump.

**Material for Barn.**  
1. How will I get the most returns from sale of two cedar log barns, one is 30 by 40 feet, and is practically all cedar logs but the two sill and two wall plates. The other is attached to this barn and therefore has only one end, there is just one side of this barn cedar logs, its dimensions are 30 by 30 feet. I want to erect a new bank barn with cow and horse stable under it, would it be advisable to sell the cedar logs or have them sawn and rebuild with cedar lumber instead. My intentions are to get enough money out of the two barns to build all the cement walls and cover the cost of nails and stable fixtures. M. R. D.

Ans.—1. As to which would give the better returns would depend somewhat on the market available for the logs and the distance you would have to draw them to be sawed. It is not customary to use cedar lumber in the erection of barns. While the material is lasting, it does not hold the nails as well as some of the other timbers. For flooring it might be used to advantage. There might be a demand in your neighborhood for long cedar posts and you could possibly sell them to advantage; if so, we would prefer to dispose of them and use other material for the building.

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**HOL**  
1 bull 2 years  
from a 23 1/2 lb  
bull 13 mos.;  
**R. M. Holtby**

**KING SEGIS**  
A 34 lb. other to the  
young bulls offered  
ready for service.  
**R. W. Walker & S**  
G.T.R.,  
Please me



## Butter Prices Will Be Maintained

THE Food Controller for Canada states: "I do not expect that the sale of oleomargarine will result in any reduction in the price of butter. The overseas demand is practically unlimited—For years after the war Europe will require all the butter which Canada can produce for export, and the prices are certain to be high."

High prices for butter make every pound of butter-fat saved a source of extra profit that is a revelation to many farmers and dairymen. The

# Renfrew

saves you about one half-pound of valuable butter-fat, per cow, per week, over other machines, even if they are in running condition, and much more if they are not running properly. Multiply this half pound by the number of cows in your herd and then calculate what this means to you in dollars and cents per year. Will it pay you to continue losing money by using an ordinary machine? The Renfrew gets all but the last three ounces of butter-fat in a ton of milk skimmed.



MADE IN CANADA

Which would you rather sell at present prices?



**10 Gallons** of good firm butter-fat from the Renfrew which gets all but 1-10 pound in every 1,000 lbs. skimmed.

**7 Gallons** of butter fat from other machines which lose a whole pound in 1,000 lbs. of milk skimmed.

Besides quantity, the Renfrew gets quality. Good first-class cream means globules of fat unbroken, and better, firmer butter. This high quality of cream is secured by the exclusive curved wing centre-piece of the Renfrew, which distributes the milk to the discs in thin sheets, and prevents the slapping of milk and breaking up of the fat globules, which occurs with the ordinary straight wing machines.

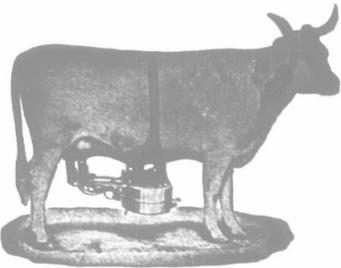
Our illustrated booklet gives Government Dairy Schools proofs of the close skimming. Also read about the Renfrew's exclusive interchangeable-capacity feature, self-oiling system and many other modern advantages. Write for booklet today.

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

### The Renfrew Machinery Co., Ltd.

Head Office and Works: Renfrew, Ontario  
 Eastern Branch: Sussex, N.B. Agencies almost everywhere in Canada  
 Our Other Lines: Renfrew Kerosene Engine, Happy Farmer Tractors, Farmers 2,000 lb. Truck Scale, Wood Saws, Grain Grinders.

## The OMEGA Milking Machine



has been installed in the private dairy of H.M. King George V. at Windsor Castle, and also at His Majesty's private estate at Sandringham. The OMEGA, in a 17-day test on ten cows, (against 17 previous days), at the O. A. C., Guelph, increased the milk flow 206 lbs., or 3 per cent.

### CLEANLY AND EFFICIENT

The OMEGA is the only machine that draws the milk from the teats through stiff, transparent, celluloid tubes to the pail, which is suspended from the cow. (See cut.) The pail cannot be kicked over and the teat-cups cannot fall to the floor and suck up straw or manure. There are no rubber tubes in the OMEGA to crack and harbor germs. The OMEGA is simple in design and easily cleaned.

**WRITE TO-DAY** for free booklet describing the many exclusive and desirable features of the OMEGA.

**C. RICHARDSON & CO.**  
 St. Mary's, Ontario

**D. M. WATT**

For imported or Canadian-bred Ayrshires, bulls or females, get my prices. My importations win wherever shown. Write me for one animal or a carload. St. Louis Station, Que.

## Hospital for Insane, Hamilton

We offer bulls only for sale, but they are from some of the choicest cows to be seen in any herd, and bulls equal to the best.

—Apply to Superintendent

## Cream Wanted

Ship your cream to us. We pay all express charges. We supply cans. We remit daily. We guarantee highest market price.

**Ontario Creameries, Limited**  
 London, Ontario

## AYRSHIRE COWS

are good breeders, rich milkers easy feeders.

WRITE W.F. STEPHEN, Secretary  
**CANADIAN AYRSHIRE BREEDERS' ASS'N**  
 Box 513, Huntingdon, Que.

## Fernbrook Ayrshires

Young bulls for sale (out of R. O. P. dams) from one to fifteen months old; tracing closely to the world's champions, Garclaugh May Mischief and Jean Armour.

**COLLIER BROS., Beachville, Ontario**  
 (OXFORD COUNTY)

## HILLHOUSE AYRSHIRES—F. H. Harris, Mt. Elgin, Ont.

Headed by Burnside Lucky Master Swell, a combination of blood so hard to equal, being of the Masterpiece and Lucky Girl families, a combination which means quality, production and constitution. Ninety head to select from. Special offering—20 yearling heifers and 3 bulls. Inspection invited.

## GLADDEN HILL AYRSHIRES

Herd headed by Fairvue Milkman. Have one choice bull of serviceable age for sale—a 3rd-prize senior calf at Toronto, 1917—17 months old. Also a few females. Two Canadian-bred Clydesdale stallions from Imp. stock. **Laurie Bros., Agincourt, Ont.** C. N. R., G. T. R., C. P. R.

### LAKESIDE AYRSHIRES

A choice selection of young bulls for sale from Record of Performance dams imported and Canadian bred.

**SIRE:** Auchenbrain Sea Foam (Imp) 35758 many times grand champion.  
**SIRE:** Fairfield Mains Triumph (Imp.) 51137 a son of the noted Hobbsland Perfect Piece.

Write for catalogue.  
**Geo. H. Montgomery, Proprietor, Dominion Express Building, Montreal. D. McArthur, Manager, Phillipsburg, Que.**

### SUNNYSIDE AYRSHIRES

We have, at present, the strongest lot of young bulls we ever offered—1 by Hobbsland Masterpiece, 1 by Sunnyside Matchless—and the others by our present herd sire, Sunnyside Masterpiece.

**JOHN W. LOGAN, HOWICK STATION, QUE.**  
**JAS. B. ROSS, MEADOWVALE, ONTARIO,** for high-producing, show-yard Ayrshires. Herd headed by SNOW KING 47376, first-prize two-year bull at Toronto, 1917. Write me also for anything in Yorkshires.  
 Meadowvale P.O., Streetsville Station

## Dairying and Fertility.

The importance of conserving our natural resources is a subject that is occupying the attention of the most eminent men of the country. One of the most vital natural resources of any nation is the fertility of the soil. The milk cow is the greatest aid the farmer has in conserving the fertility of his land. By separating the milk produced and selling the cream, the fertility lost will be inconsequential. The skim-milk and the manure left on the farm will increase the fertility to such an extent that bigger and better crops may be grown and more cows milked each succeeding year. The results will be continually increasing profits without an increase in the number of acres cultivated.

In his famous book, "Feeds and Feeding," Professor W. A. Henry says: "The dairyman who sells butter and feeds the skim-milk to farm animals, parts with an insignificant amount of fertility. When cheese is made; if the whey is returned to the farm, a considerable proportion of mineral matter is conserved, but most of the nitrogen is lost. If whole milk is sold, the drain of fertilizing matter is considerable. These differences should always be borne in mind in conducting the various branches of dairy farming."

There is no branch of agriculture that takes as little fertility from the soil, and at the same time returns as good a profit to the farmer as dairy farming. It is a noteworthy fact, that wherever butter-making has been practiced for a number of years, there has been a steady increase in the crop-producing capacity of the soil.

When you sell \$1,000 worth of wheat off your farm there goes with it \$240 worth of fertility; with \$1,000 worth of beef, \$85 worth of fertility; with \$1,000 worth of pork, \$60 worth of fertility; with butter there is only \$1.35 worth of fertility taken off the farm with over \$1,000 worth of butter sold.

The first requisite of good farming is in so managing that the fertility of the land will be maintained. The only thing that makes your land worth anything is that it contains a supply of plant food. That supply is not inexhaustible. If you take from it, you must put back or eventually the supply will be exhausted.

A man who would annually sell a few acres of his farm, instead of cultivating it, would be considered a very poor farmer. Yet this is just what is being done when the crops which take a large amount of fertility from the soil are sold off the farm.—W. F. Willoughby, of the I. H. C. Service Bureau.

## Treating Birds For Tuberculosis.

There is a heavy loss to poultrymen each year through the disease known as tuberculosis. This disease has gotten into many flocks and has been the direct cause of a heavy mortality. Treatment has been unsuccessful, and it is generally thought advisable to kill all birds showing symptoms and destroy the carcasses. One of our subscribers who has had his flock greatly decimated by this trouble was in the office the other day, and informed us that he had commenced feeding a little bluestone to his birds. About one teaspoonful to twelve quarts of water was the proportion used. This was for drinking purposes. The birds showing marked symptoms of the disease were given a stronger dose. A piece of bluestone about the size of a small bean was dissolved in a cup of water and given to each bird. Our subscriber stated that a few days after feeding this material the birds appeared to be a great deal better, and that where he had been losing a bird or two every week, he had not had a casualty since starting the use of bluestone. We have never tried this mixture, and must admit that it is the first we have ever heard of it being used for this trouble; however, we pass it on for what it is worth. If it has increased the vitality of one flock, it is possible it will give similar results with another. Care should be taken not to give the solution too strong else the results might be fatal.

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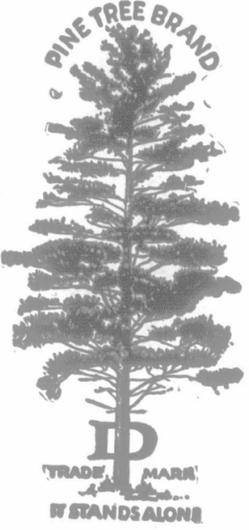
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**JERSEYS**  
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**Shropshires**  
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**Pine Tree Brand**  
**TIMOTHY SEED**  
GRADE NO. 2  
PURITY NO. 1 AND EXTRA NO. 1  
If your dealer cannot supply you, write  
**The Albert Dickinson Co.**  
SEED MERCHANTS  
CHICAGO, U.S.A. Established 1855



**IRON AGE**  
GARDEN TOOLS  
Answer the gardener's big questions:  
How can I grow plenty of fresh vegetables with my limited time?  
How can I avoid backache and droopery? Use  
**IRON AGE Wheel Hoes and Drills**  
Do the work ten times faster than the old-fashioned tools. A woman, boy or girl can push one. 30 combinations—easily adjusted. Light, strong and durable. Prices, \$5.00 to \$8.00. Will help you to cut the high cost of living.  
Write us for free booklet today.  
**THE BATEMAN-WILKINSON CO., Ltd.**  
41 Symington Avenue, Toronto, Canada.

Twenty-Five Years Breeding REGISTERED  
**JERSEYS and BERKSHIRES**  
We have bred over one half the world's Jersey champions for large yearly production at the pail. We bred, and have in service, the two grand champion Berkshire boars. If you need a sire for improvement, write us for literature, description and prices.  
**HOOD FARM, LOWELL, MASS.**

**RAM SALE**  
Lethbridge, Alberta  
October 9 and 10  
Under the auspices of the Southern Alberta Wool Growers Association.  
Over one hundred members, owning 200,000 sheep.  
**Entries Close July 1st**  
ENTRY BLANKS MAY BE HAD ON APPLICATION TO THE SECRETARY, SHERLOCK BUILDING, LETHBRIDGE, ALTA.

**Shropshires and Clydesdales**  
Besides my regular offering of ram and ewe shearlings, I have the three-year Clydesdale stallion, Cairnbrogie Heir 18299. Write quick, don't wait.  
**W. H. PUGH, Myrtle Station, R. R., Ontario.**  
**Cloverdale Shropshires and Berkshires**—40 shearing rams, 70 shearing ewes; an exceptionally choice lot, true to type and well grown, nearly all sired by the show ram, Nock 16 imp. In Berkshires, the usual strong offering, including sows just bred.  
**C. J. LANG, Burketon, Ont.**

**Questions and Answers.**  
Miscellaneous.

**Fencing.**

Must I build a fence along the road to keep cattle off my premises?  
Ontario. J. R.  
Ans.—No; but perhaps it would be best for you to do so.

**Replevying Wire.**

I sold my farm and on it at the time of selling was a roll of fence wire that had been used for a temporary fence but at the time of selling was in a roll. When I moved it was frozen down so that I could not get it out, and in the spring when I went for it I was refused possession, it having been moved to the back of the farm and later it was taken to the adjoining farm, which also belongs to the man who bought my farm. May I legally claim my fence and damages for having it removed and putting me to the trouble of going after it in vain?  
F. A. H.

Ans.—Yes, by replevin proceedings in the Division Court.

**Separation Allowance.**

One of our neighbors has been in the army for some time, and his wife and four children are left to work the farm, the older one being a girl of about 12 years. I have been batching for some time, as my sister who was going to keep house for me has been poorly and not able to work; so I called the other day to see if I could make some arrangements for her to come and keep house for me and I would look after her farm for her as the farm joins mine, and she has a hard job to get any one to do the work for her. Would there be any danger of her losing her separation allowance in this case if she came to work for me?  
Ontario. E. M.

Ans.—We cannot say that there would be no danger. There ought not to be.

**Unthrifty Team.**

I have a team of mares rising five years old, which are quiet, steady workers. They are fed on good timothy hay and they get two and a half quarts of chopped oats when idle and a gallon when working. After a few days' work they become gaunted up and do not look well. Kindly advise what treatment to give.  
J. R.

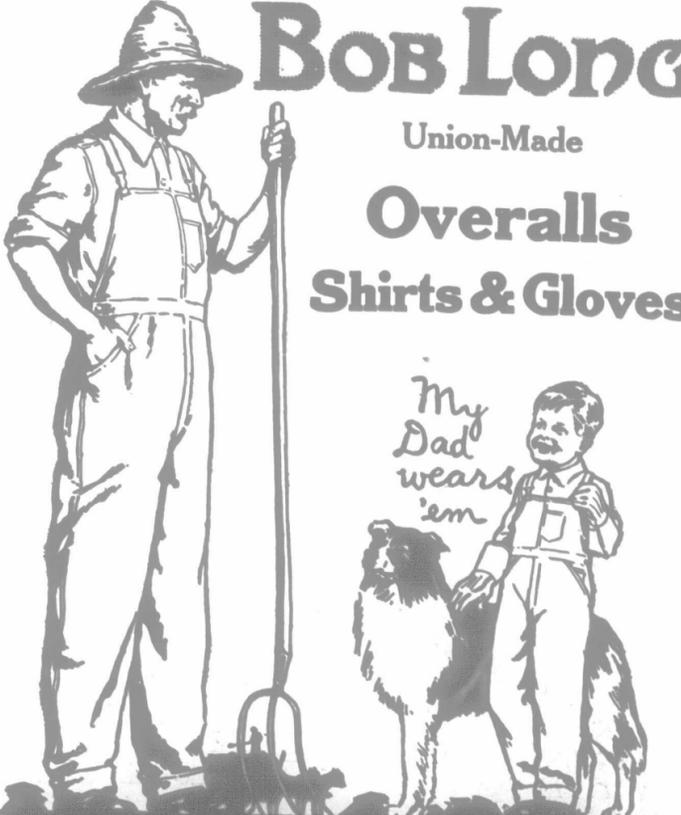
Ans.—We doubt if you are feeding quite heavily enough when the horses are working hard. Many teamsters feed four and five quarts of whole oats three times a day. Some feed a little heavier than this. Of course, it depends on the quality of the grain. While rolled oats are recommended by many horsemen a little larger quantity by measurement could be fed than of whole oats, or, in other words, they should be of equal weight. It is possible that the mares' teeth need attention. Have your veterinarian examine them. Thorough grooming and regular feeding and watering go a long way in keeping the work team in a thrifty condition.

**Mutual Telephone Company.**

1. A year ago we organized a mutual telephone company and received our charter. We built our line the required distance to meet all shareholders. Some parties living along the line did not come on at that time, but are anxious to do so now. Can we take them on at the same rate as it cost us, or have we the privilege of charging them a higher rate owing to the increased cost of material? The Act states that we must give service to anyone desiring it. Would that mean on the company's terms?

2. We are asked by four parties to extend our line an additional four miles in order to reach their relatives. Do we have to help build that line, bear equal expenses with them and have our money invested in the line already built for over a year and let them in on equal basis with the chartered members? We understand that a mutual company must do this. Is it compulsory or not?  
Ontario. J. A. C.

Ans.—1. Seeing that you can do practically nothing in the ways suggested without the approval of the Ontario Railway and Municipal Board pursuant to the Ontario Telephone Act (Revised Statistics of Ontario, 1914, chap. 188), we think that it would be best for you to write the Secretary of the Board at Toronto for the desired information. We could not undertake to say what the Board might consider proper or otherwise in the premises.



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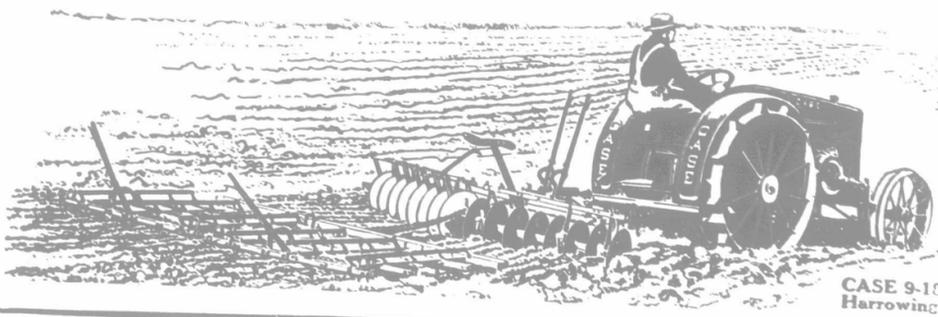
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Young stock for sale, both sexes, from prizewinners.

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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.  
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### Agriculture in England.

EDITOR "THE FARMER'S ADVOCATE":

March has been a beautiful month so far as the weather is concerned. It has been much drier and less windy than is the custom. While that factor has contributed to the success of the German efforts on the Western front—and they may have assumed a totally different aspect by the time this reaches you—it has also given the farmer a better opportunity of getting his land ready for the spring crop, than he would have had in different circumstances. The result is that the plows are still busy turning down the grass lands for spring cropping. Of course, this cannot continue much longer and even now one sees the seed drill at work preceded by a drag harrow, but this is rather an uncommon sight as most of the grass land is properly laid up with the plow so that the seed may be scattered broadcast and carefully covered by harrowing. In many places the grain is already growing nicely, and some fields are becoming rapidly green. Every effort is being made to carry out the program which I referred to in a letter many weeks ago. It is falling somewhat short of what was desired, but that was inevitable. The advice given to the farmer has changed rather rapidly at times, and has certainly resulted in much confusion and delay. Just now, the authorities are asking particularly for increased production in hogs and potatoes. The Board of Agriculture has issued stirring appeals to this effect. The Prime Minister has addressed a stirring appeal to the whole nation to increase the production of potatoes, in which he has particularly addressed himself to the man who can only plant a small allotment in any case. The counties have, then, taken up the campaign and have posters and pamphlets, showing the production and consumption of potatoes in the country for the year 1917. In this manner the people are shown the deficit in production as compared with consumption, so we are getting on. Intelligent and well-directed propaganda is what is required, not education.

The campaign for the increase of hog production has been largely due to the *Daily Mail*, and has assumed some very funny aspects. To begin with, the fixing of prices and the prohibition of certain foodstuffs as live stock foods, has almost driven many of the farmers out of the live-stock business, and driven a large number of the remainder to despair. The Northcliffe press was quick to see what was about to happen, and so commenced a vigorous campaign to save the hog. Accordingly, we have, through that press, been given an education from amateurs and experts on the gentle art of hog raising. The titled women have contributed their share and many of the gentry have taken a hand. Lord Chaplin is especially enthusiastic and assures a doubtful people that a good sow will give one anywhere from 20 to 30 pigs a year. He even cites a case where he knew of a sow, which had, within 13 months, three litters of 14, 18 and 26 pigs, respectively. No doubt he will in this way arouse many an amateur to great enthusiasm, which enthusiasm will be greatly reduced when he counts his returns at the end of the first year, but nevertheless the effort put forth will certainly increase the pig production of the country. Pigs and potatoes, so say we all. All the papers advise them, everybody talks about them, and presumably every one is lending a hand in redoubling the efforts of the country.

The live-stock situation is rather doubtful here, owing to shortage of food supplies. In one particular respect, however, this has been improved by the fine March weather. I refer to the lamb crop. Reports from all over the country state that it is one of the best for many years, and the flocks that I have been able to see certainly look very thrifty. As the pastures improve, flock masters will find less difficulty in keeping their flocks thrifty, so that I believe the sheep industry will not suffer such a severe setback as some other branches of the live-stock industry have. We must be prepared to expect difficulties, however, until the obstacles caused by the war are removed by the cessation of hostilities and a return to peace conditions.—F. W. Crawford.

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