

APRIL 17, 1919

PUBLISHED EVERY WEEK. \$1.50 PER YEAR.

# THE FARMER'S ADVOCATE

AND HOME MAGAZINE

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FOUNDED 1879

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LIV.

LONDON, ONTARIO, APRIL 24, 1919.

No. 1387

## Beauty, Fire-resistance, Economy combined in this Roofing

MANY costly homes have been roofed with Brantford Asphalt Slates. Architects select these slates because of the artistic beauty of the soft, harmonious shades of reddish-brown and dark green, which are the natural, unfadeable colors of the slates.

## Brantford Asphalt Slates

are made from a special grade of long-fibered felt which is exceedingly absorbent, so that it will take a very heavy and thorough saturation and coating of asphalt and on top of that a surface of crushed slate. The slate is rolled into the asphalt while the asphalt is hot and becomes part and parcel of the roofing. It cannot be washed off, blown off, or even kicked off by the the heel unless you use force enough to tear part of the asphalt with it.

The regular Brantford Asphalt Roll Roofing has been on roofs for many long years and shows little or no signs of wear. Brantford Asphalt Slates have the additional slate surface and are that much heavier. They are also laid to overlap, adding still further to the wear-resistance of a roof. It seems reasonable to expect that they will last almost as long as the walls.

### Non-absorbent—Do not get water-soaked

Asphalt is one of the most waterproof materials known, and Brantford Asphalt Slates being non-absorbent, do not get water-soaked and rot. Neither do they crack, break or fall off. In fact, they possess one great advantage over any other form of roofing material:—they cement together under the heat of the sun shortly after



Home in Kingston roofed with Brantford Asphalt Slates

they are laid, resulting in a solid pavement-surface on the roof under which rain or snow cannot drive and no individual slates become loose or blow off.

Brantford Asphalt Slates are wonderfully fire-resistant and are approved by the fire insurance companies, being put into the non-combustible class. Flying embers from burning buildings, sparks from threshing engines or railroad locomotives die out on Brantford Asphalt Slates. If a fire should start in an interior of a building roofed with them, the slates act as a blanket and retard the spread of the fire.

Brantford Asphalt Slates are moderate in cost, and are very rapidly laid because they are regular in size and pliable. They can be laid over ridges or curved surfaces, and every one is perfect. No knots or worm holes to look out for. No care required to avoid splitting them when nailing. And you can re-roof an old building with Brantford Asphalt Slates without any extra bracing being required.

### Send for illustrated booklet

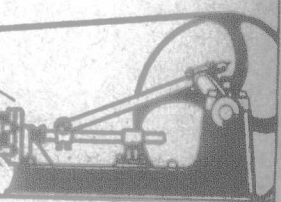
Our booklet "Permanent Roofing Satisfaction" and a sample "slate" will be mailed on request. Both are worth getting if you are going to do any roofing this season.

Brantford Asphalt Slates are suitable for country homes, city homes, golf clubs, churches, garages, barns or any kind of a pitch roof where an artistic effect is desired.

## Brantford Roofing Co., Limited

Head Office and Factory, Brantford, Canada  
Branches at Toronto, Montreal, Halifax

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A good silo  
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Illustrations of our machines.

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**GILSON**  
SILO FILLERS

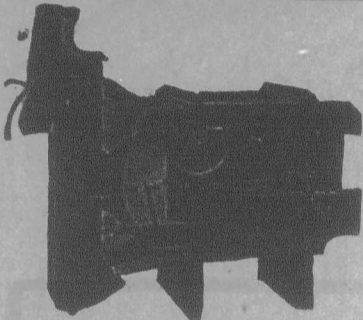
THE GILSON SILO FILLER is the one blower which can be successfully operated with as little power as 4 h.p. There is a Gilson Silo Filler for every purpose—for the individual farmer, for the syndicate, and our large capacity machine for the custom jobber.

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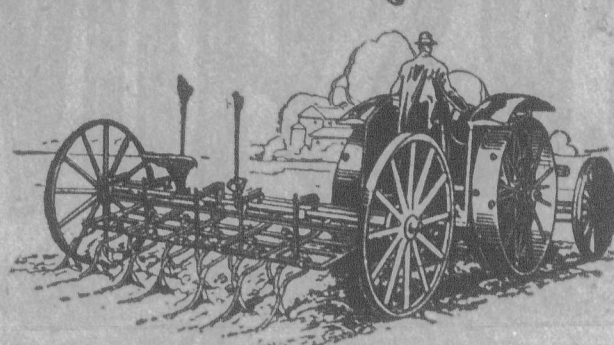
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Get your Tractor and Implements from the Company which makes both and accepts responsibility for the whole outfit.

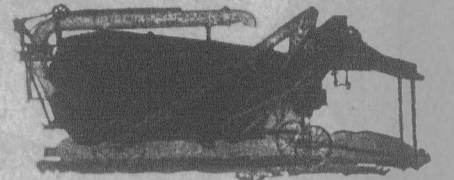
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At last a tractor is available that will do all your work,—that will do it quickly and cheaply,—that is compact, close, coupled and light in weight,—that anyone can operate and look after,—that sets new standards of design and incorporates exclusive features that are infinitely superior to the old types,—that is made right here in Ontario by an old established reliable firm,—and that sells at a price that makes it a really profitable investment for the average farmer.

The DIXIE-"ACE" has four speeds from 1 to 5 or 6 miles per hour,—a speed for every purpose. The wheel base is only five feet nine inches,—which means extra short turning and no uncultivated corners. It is controlled just as easily as a car. The "DIXIE-ACE" is a Thoroughbred in Performance, Form and Finish.

Write for our catalogue to-day and learn more about these and other startling improvements and refinements,—improvements that you or any other farmer can see at a glance place the DIXIE-"ACE" far in the lead. Big opportunity for live agents. Some choice territory still open.

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Light, Compact and Convenient

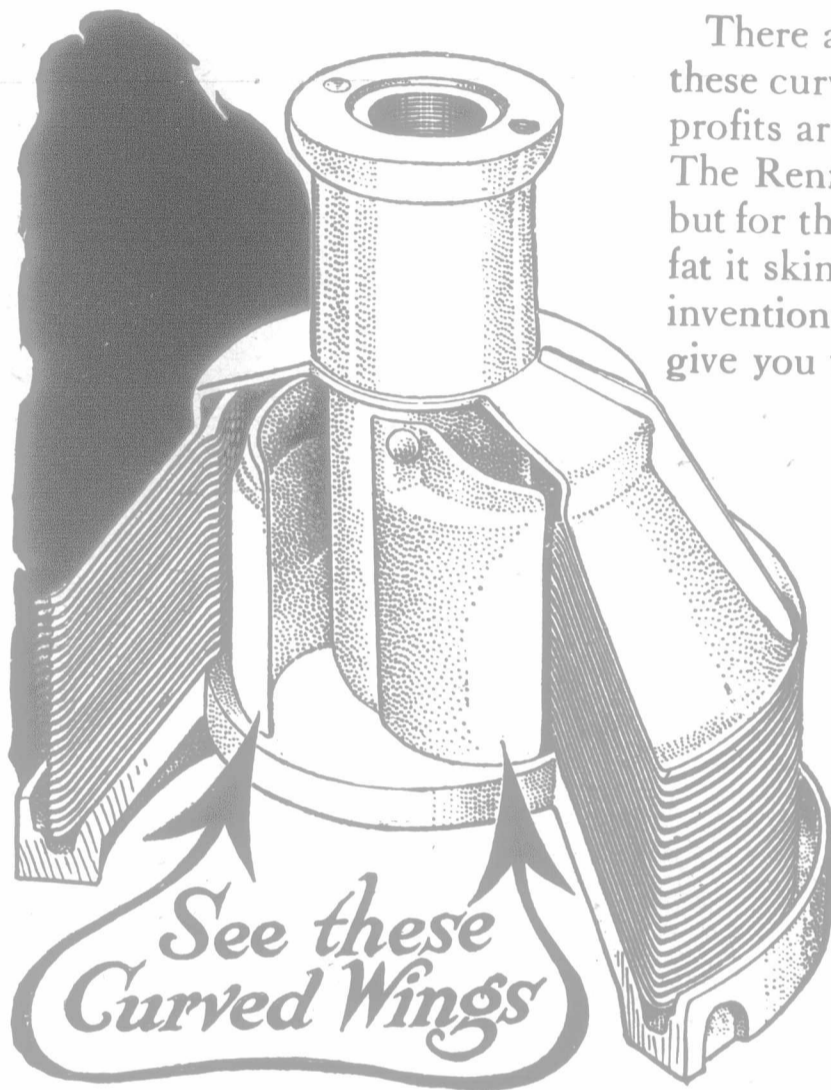
particularly at our Sure-grip, Clogless Drive Wheels, that give perfect traction even under most unfavorable conditions,—and they do not pack the soil like other wheels. This wheel is marvelously efficient in all soils, from loose sand to heavy mud and clay and cannot fill up between the lugs. In addition to equipment shown, conical spikes for frozen ground and quick attachable smooth rims for paved roads are furnished.

There isn't an exposed gear on the whole machine. This is a real triumph in engineering. Imagine how long an automobile would stand up if the gears were exposed,—and tractor service is a good deal harder on gears. Compare other tractors with the DIXIE-"ACE",—which has all gears machine cut, hardened, cross-rolled nickel steel running in oil in dust-proof cases.

All four wheels and rear axle are equipped with Timkin adjustable roller bearings,—the same as a Packard car. Other places where friction, (the thief of power) might take place are fitted with either roller or oversize annular ball bearings. You can readily appreciate that in this tractor the power of the motor is delivered to the wheels with less loss in transmission than with any other type.



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*See these Curved Wings*

There are extra pound prints of butter for you in these curved wings. At prevailing prices these extra profits are well worth any man's while to investigate. The Renfrew is famous not only for close-skimming but for the excellence of butter made from the butter-fat it skims. Both these advantages are due to this invention. Only one separator in the world can give you these wings.

That separator is the

## *Renfrew*

The superior skimming of the Renfrew is in a large degree creditable to the curved wings. The milk is conveyed to the discs in a thin film evenly distributed over the curved wings, the distance over which the milk has to pass being thus increased. The result is that the milk, in a thin film as it passes over the curved wings, is partly skimmed before it reaches the discs. In fact, these curved wings relieve the discs of half the work.

Besides, these curved wings mean better quality butter-fat. Instead of the milk being shot at the disc edges with such force as to break up the globules of fat, the wings conduct it evenly and smoothly in thin sheets, dividing it equally among the discs. With a Renfrew you not only skim down to the last drop, but your butter is always of firm, superior grade that commands a better price.

Wouldn't you like to see proofs of the Renfrew close-skimming records? Government Dairy Schools tests are fully described in our illustrated book; also other exclusive Renfrew features, including interchangeable capacity by which you can increase capacity without having to buy a new machine. Write for literature to-day.

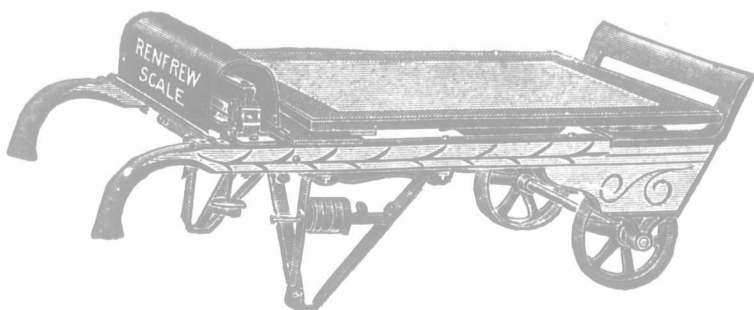
Furthermore, the inner edge of the discs are farther from the tubular shaft, so that there is no danger of the cream clogging the inside edges of the discs, as it is drawn up to the cream outlet. Having only about fifty per cent. of the usual amount of skimming to do, and being free from clogging, they skim closer. That is why the high skimming efficiency of the Renfrew cannot be equalled.



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Concrete—the material that has *everything* to recommend it for farm buildings—is fortunately a material that lends itself to successful construction without the need of skilled labor. This book of ours explains how, with your own two hands, you can build most of the things of concrete which your farm needs.

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If your Farm is 100 acres you can get a PRESTON STEEL TRUSS BARN that will give you ample capacity for \$1813 and up. For 50 acres the cost would be \$1335 and up, and for 150 acres \$2558 and up.

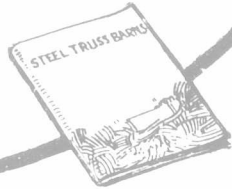
## PRESTON STEEL TRUSS BARN

are strong, neat, thoroughly protected—supplied with Preston lightning protection.

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## To All Onion Growers

We say get a pound each of ordinary "Red Wethersfield" and McDONALD'S SPECIAL STRAIN. Grow them apart and at harvest-time, see the proof of pedigreed seeds.

The big crop of better onions you get from McDonald's Red Wethersfield "Special Strain" will demonstrate the value of expert breeding and selection of seeds, and show you that Quality is more important than price.



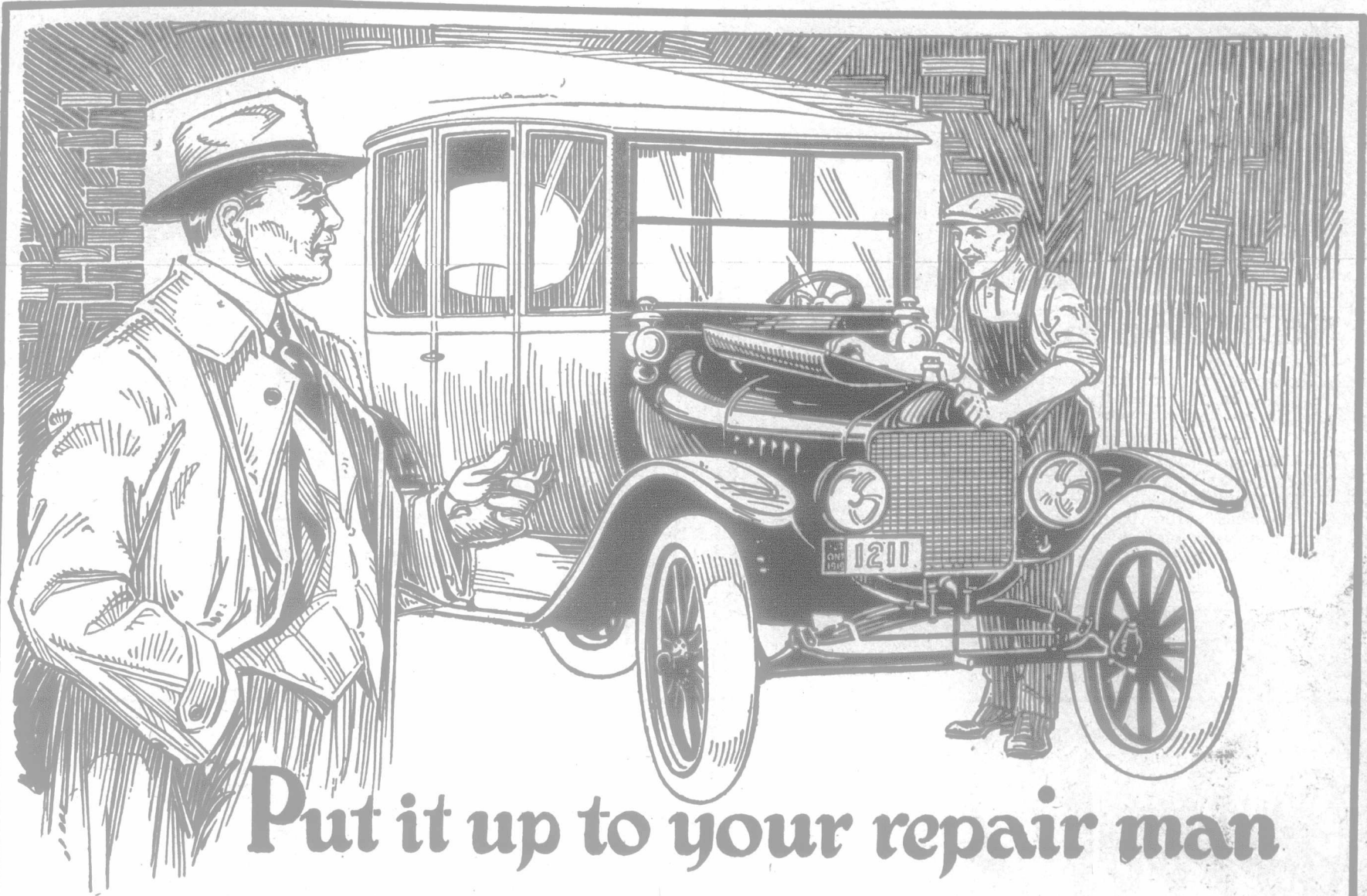
### McDonald's "Special Strain"

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## Put it up to your repair man

Make it strong.

The garage man cannot evade your demand for Genuine Ford Parts.

He *knows* that only genuine parts will give you satisfactory service.

If he wants to give you real Ford service;

If he will agree to play fair with Ford Owners;

He can get a complete stock of Genuine Ford Parts.

Nothing has caused Ford Owners more trouble, annoying breakdowns and expense than the use of "spurious" or imitation repair parts.

They are not made up to the Ford standard. They weaken the car.

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The owner of a Ford could not be expected to accept repairs made with such inferior parts.

And there is now no *need* to accept them.

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If your repair man will not supply you, there is a garage around the corner displaying the Ford service sign.

That means a garage pledged to fair play with Ford owners.

To stand out for fair service is the surest way for the Ford owner to get it in *every* garage.

*Look for the Ford Service Sign.*

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demonstrate the  
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## Mellow Soils Best for Growth

A HARD-CRUSTED soil surface excludes the air, dries out the soil and dwarfs the crop. Any soil, no matter how hard or dry, can be made into a good mellow seed-bed with a Peter Hamilton Stiff Tooth Cultivator. The tender seedlings or young plants push their way more easily through a mellow soil than through a stiff and cloddy one.

### Peter Hamilton Stiff Tooth Cultivator

is exceptionally good for breaking up land or for summer fallow. The frame is thoroughly braced and trussed, which gives it extraordinary endurance for deep cultivation in the hardest kind of soil.

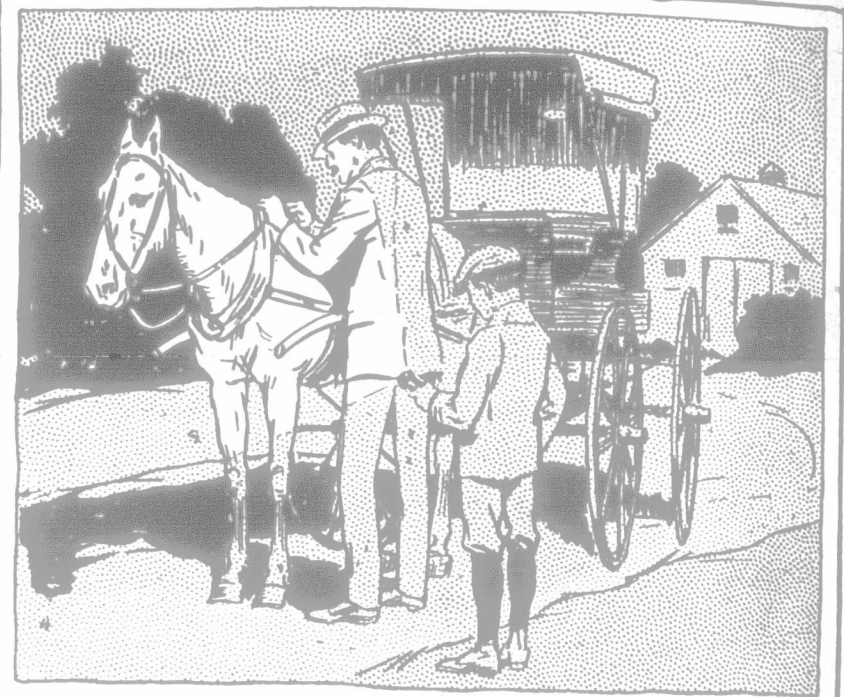
Deep cultivation is now advocated by agriculturists and for this work and killing weeds the Peter Hamilton Stiff Tooth Cultivator is unequalled.

The relief spring is the most successful yet used. After a stone or other obstacle is passed the foot flies back automatically into place again. The foot can be set forward to work into the hardest land. You can cultivate just as deep or just as shallow as you like.



Any width of thistle or weed cutters can be had. One set is supplied with every machine. You need the help of a Peter Hamilton Cultivator for your field work. With it you can prepare the best seed-bed and get increased crops. Don't put off buying. Write us to day.

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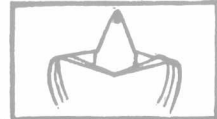
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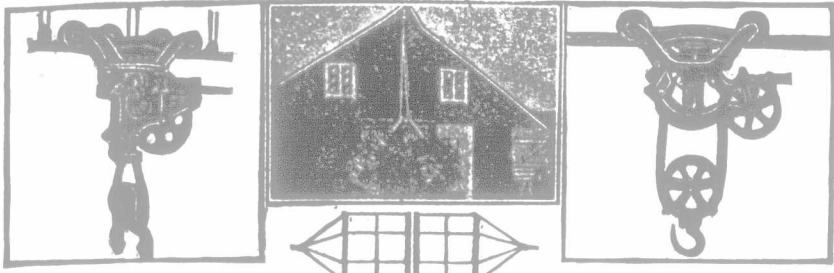


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A day's delay or a sudden storm in haying may mean a heavy loss. Wherever hay must be handled quickly and economically you can depend on

### LOUDEN HAY TOOLS

Honestly built—simple—sturdy construction—stronger than your work will ever demand—safety first—use good judgment.

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we unload from..... I prefer to use.....(state  
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I expect to build new barns size.....x.....in month of.....  
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# CANADA PAINT



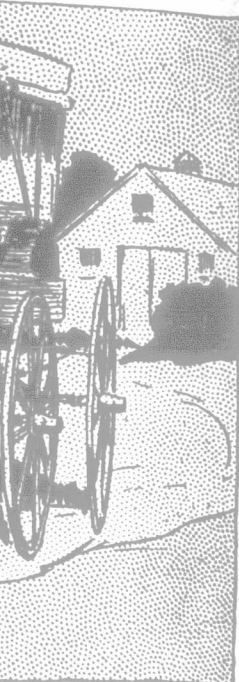
## "HOMESTEAD LIQUID RED" FOR BARN AND SILO

These are the most valuable buildings on the farm. Think what it would cost to replace them!  
It's cheaper to paint than to repair—and "HOMESTEAD LIQUID RED" will protect the farm buildings against the ravages of climate and weather.

Give the buildings a coat or two of this reliable paint—rich in color, permanent and durable—because of the high-grade oils and pigments used, and the thorough grinding of ingredients in the oils.

Our book, "What, When and How To Paint" tells all about CANADA PAINT for the house—SANITONE for walls—and "SUN" VARNISH STAINS for floors, furniture, etc. Write for a copy.

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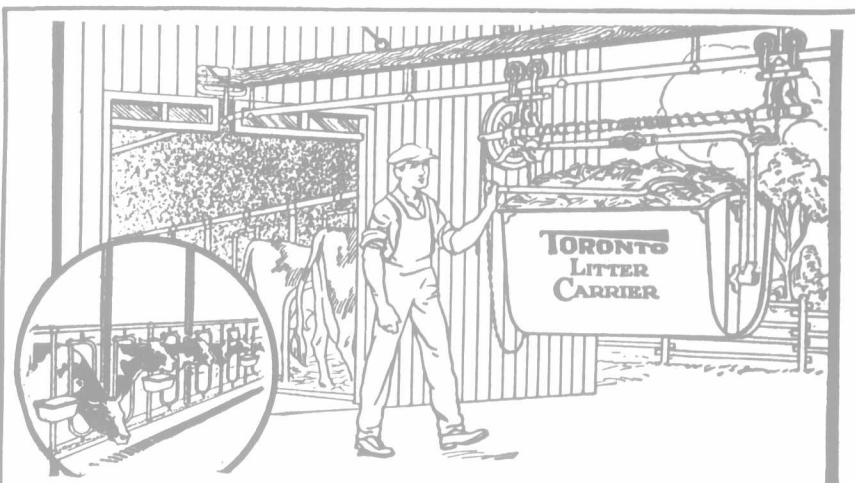


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CANADIAN EXPLOSIVES  
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Sentenced to do 10,000 miles  
They will long outlive their term

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A Toronto Litter Carrier will astonish you with the amount of work it does. Enables one man to clean the stables as fast as six men in the old way. Cuts out the dirty part of the job. Takes away the danger of the old wheelbarrow and the slippery plank. Encourages cleanliness in the stable—and that means healthier cattle.

All Toronto Stable Equipment is designed to save work and make cattle bigger profit producers. You'll find with this equipment that stable chores become easy. Time is saved. Cattle are contented.

A wide knowledge of proper stable equipment can be gained from a study of our big stable equipment book. This will be sent free if you ask for it. Write now.

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Made in Canada

## Freight-Paid Prices

Direct from Factory to Farm

### Our Guarantee:

IDEAL FENCE is guaranteed to be exactly as represented. If you are not satisfied with "IDEAL," send it back at our expense, and we will return your money. This guarantee covers everything—no conditions, no loopholes.

REFERENCE: ANY BANK OR BANKER.

## Fence, Farm Gates, Brace Wire, Barb Wire, Etc.

Freight paid to your nearest railway station (except electric) on all orders of \$15 or over. Remit by Bank Draft, Post Office Order or Express Order.

### Heavy "IDEAL" Fence

Made throughout of Full Gauge No. 9 evenly Galvanized Hard Steel Wire. Carried in stock in 20, 30 and 40-rod rolls.

- No. 4330 4 line wires, 33 inches high, uprights 22 inches apart. All No. 9 Hard Steel Wire, evenly galvanized. Spacing 11, 11, 11. Per Rod..... **30c.**
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- No. 7400 7 line wires, 40 inches high, uprights 22 inches apart. All No. 9 Hard Steel Wire, evenly galvanized. Spacing 5, 6, 6, 7, 7½, 8½. Per Rod..... **49c.**
- No. 7480 7 line wires, 48 inches high, uprights 22 inches apart. All No. 9 Hard Steel Wire, evenly galvanized. Spacing 5, 6½, 7½, 9, 10, 10. Per Rod..... **51c.**
- No. 8420 8 line wires, 42 inches high, uprights 22 inches apart. All No. 9 Hard Steel Wire, evenly galvanized. Spacing 6, 6, 6, 6, 6, 6, 6. Per Rod..... **56c.**
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- No. 950 9 line wires, 50 inches high, uprights 16½ inches apart. All No. 9 Hard Steel Wire, evenly galvanized. Spacing 4, 4, 5, 6, 7, 8, 8, 8. Per Rod..... **69c.**
- No. 1050 10 line wires, 50 inches high, uprights 16½ inches apart. All No. 9 Hard Steel Wire, evenly galvanized. Spacing 3, 3, 3½, 4½, 5½, 6½, 8, 8, 8. Per Rod..... **75c.**

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- No. 6410 Same as Style No. 641 with uprights 22 inches apart. Per Rod..... **29c.**
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- No. 7261 Same as Style No. 726, but with uprights 8 inches apart. Per Rod..... **40c.**
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- No. 936 9 line wires, 36 inches high, uprights 13 inches apart. All Hard Steel Wire, evenly galvanized. Spacing 3, 3½, 4, 4½, 4½, 5, 5½, 6. Per Rod..... **43c.**
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Length, feet	Height, inches	Price
3	36	\$3.15
3	42	3.30
3	48	3.40
3½	36	3.30
3½	42	3.40
3½	48	3.75
4	48	4.00
10	36	6.75
11	42	7.00
10	48	7.25
12	42	7.25
12	48	7.75
13	48	8.00
14	48	8.25
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Universal Post Hole Digger, each.....	2.75
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Galv. Staples in 100-lb. boxes.....	6.75
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No. 9 Coiled Spring Wire, per 100 lbs.....	5.75

### Barb Wire

4-pt. 4" Galv. Cabled, per 100 lbs.....	\$6.00
4-pt. 6" Galv. Cabled, per 80-rod spool.....	5.10
2-pt. 5" Galv. Cabled, per 80-rod spool.....	4.80

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## IDEAL FENCE AND SPRING COMPANY OF CANADA, LIMITED

1050 McDougall Street

WINDSOR, ONTARIO

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# The Farmer's Advocate and Home Magazine

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LIV

LONDON, ONTARIO, APRIL 24, 1919.

1387

## EDITORIAL.

Plan for a full silo next winter.

Spare the good dairy-bred calves; they will be needed later on.

Grow plenty of roughage, such as hay, straw and silage. If anything must be purchased, let it be concentrates.

That famous trade mark "Made in Germany" will not help Germany very much in paying off her huge war debt of one hundred billion marks.

It may be more profitable to purchase fertilizers this spring than grain and millfeeds next winter. Figure the problem out according to your own circumstances and the requirements of your soil.

The committee appointed by the Government to consider the question of titles know full well before they hold a session what the Canadian people want, or more properly speaking, do not want.

The matter of prohibition will come before the electorate of Ontario in the form of four questions. The ballot will consequently be rather confusing, and every voter should understand the ticket thoroughly before going to the polls.

With labor more costly than ever and the price of millfeeds still soaring, meat animals and dairy products must remain high in price if production is to be maintained. City people are looking askance at the farmer, but urban dwellers do not understand what \$50-bran means.

The women of Ottawa ask that oleomargarine be placed permanently on the list of saleable commodities in Canada in order to safeguard the health of children. It was found by thorough investigation in the United States that even rats would not thrive on it; in fact, they sickened and died.

If we have an unemployed army, as is claimed in some quarters, why not mark off certain sections of our highways to be patrolled by men with horses and carts to keep the roads in repair? A shovelful of earth in time would save a whole cart-load. Roads can be kept in repair more cheaply than they can be remedied after a season of neglect.

Labor is demanding a higher wage and shorter hours; production costs are soaring every day, and every day they are striking back at the laborer. Meanwhile, farmers are equipping their farms with labor-saving implements in order to withstand the siege. The time is coming when someone will call "quits," and then we will get down to a reasonable basis and transact our business of living and trading in a sensible manner.

The plot deepens. The Board of Railway Commissioners claim to have no jurisdiction in regard to Daylight Saving; the Acting Premier is not sure but what the matter of time is a provincial affair any way, and thus it goes. So long as the masses take no hand in affairs of state the Government can legislate without difficulty, as they did last year when the Daylight Saving Bill carried; but when it comes to giving everyone a square deal the cogs of Government don't mesh. We have built up in Canada a huge and intricate piece of machinery which works beautifully when legislating for the few, but it requires new parts before it will turn out suitable laws for the many.

### Class Differences.

The development of class organization is being carried to a greater degree day by day. This means that each class organized, according to occupation, is developing a deep consciousness of its importance, and is making demands upon other classes and upon the State that reflects beneficially upon itself alone, and with little thought as to how its actions will affect the neighboring classes upon which it depends. Demands and counter demands are rapidly following each other. The question is, where will they lead?

In looking at the situation, it must be understood that rapid organization among certain classes recently has been taken in self-defence. Some organizations had developed to a high degree, and because of the lack of organization and united power in other classes, had been able to profit at the expense of those still unorganized. The situation we find to-day is but the result of action taken in the past. We are, as it were, reaping the harvest.

We cannot to-day look back at the Government of Canada with a great deal of pride. If it had been government for the people rather than government for the classes we would have had a different situation to-day. Yet in this present day and generation we must look to the Government largely to meet the present situation. It is the only body we have that should truly represent all the people and all the classes. Yet we find it divided into factions representing the different classes. This is both good and bad. It is well that all classes should be represented in proportion to their strength and importance, but there is a tendency to legislate in favor of class rather than in favor of the State.

What is needed to-day is a sane organization that would bring into it representatives of all classes, something that would break down the acute class consciousness and bring all to a realization that each class is dependent upon the other; that as one class builds up wealth in huge quantities another class must suffer; that each class is playing an important part in our civilization, and must be respected and rewarded for its services in a fair manner.

Unless at an early date there is serious consideration of these problems by the leaders of the different class organizations who should be endowed with national ideals and a readiness to re-adjust their demands according to the best interests of the State, which includes all classes, then we may look for a continuation of the turbulence and unrest that is undermining the health of the civilized world to-day.

### The Labor Market.

The labor market is in a very peculiar condition. For some months the Governments of this country have been discussing large appropriations for building and construction work in order to alleviate the unemployment situation. During all this time laborers have been clamoring for higher wages and getting them. Farmers find it just as difficult to get help as during the worst years of the war, and viewing the subject from all angles, it is indeed a complicated one. We hear that in all the towns and cities there are a great number of men out of work, yet we know of many instances where employers are driven almost to exasperation in their attempts to get good men who will work. On top of this the Minister of Labor says: "The unemployment situation throughout Canada is improving from day to day, except in the Province of British Columbia, where there is unhappily an exodus, or I might term it a migration of soldiers who returned to that province. . . . Only yesterday I received word that our railroads west of the Great Lakes, who just a couple of days ago placed an application for a large number of laborers, have stated that within thirty days, or as soon as the

frost is out of the ground, they will want 10,000 men. That is going to absorb the large number of aliens who have found themselves out of employment, or have been displaced to give employment to returned soldiers."

This seems to indicate that the price of labor will, at least, be maintained during the coming season. The effect of a high-labor market on agriculture is quite obvious. Farmers are purchasing larger and more labor-saving implements, with the intention of doing what they can alone on their 100 acres and by co-operating or changing work with neighbors. While this may be the best plan, under the circumstances, for the individual farmer yet the effect on agriculture in general will be bad, for which the country as a whole will suffer. There will be a diminution in both area and yield of crops, less live stock will be maintained, and production will be decreased in general. Food prices will, in consequence, remain high, and the laborer will be the greatest sufferer in the end.

Prices are still high all round, due, in part, to the abnormal demand for food, wearing apparel and building material, but it does not appear like good planning to endeavor to keep them high. We are not blaming the laborer in the least for his efforts to obtain a living wage, which the majority are barely getting now on account of the enormously high and increasing cost of living. However, if the strength of the labor organizations were directed to the end of reducing the cost of living the results would be more gratifying. Increased wages act like a boomerang. They increase the cost of production, and thus strike back at the very man who was clamoring for relief.

### Bovine Tuberculosis and its Effect on Trade.

It is not difficult to see which way the wind is blowing in regard to our trade in pure-bred live stock. All countries, provinces and states are erecting barriers against tuberculosis, and breeders of pure-bred live stock in Eastern Canada who look to the United States, Western Canada or even the local associations for business must recognize that their cattle will have to pass the tuberculin test.

The United States import regulations say: "Cattle over six months old for breeding purposes and milk production shall also be accompanied by a satisfactory certificate of tuberculin test (which test shall have been made within 30 days of the date of importation by a veterinarian in the employ of and receiving a salary from the Canadian Government, or by an inspector of the Bureau of Animal Industry) giving the date and place of testing, and a description of the cattle, with ages and markings."

Western Canada is getting quite in earnest regarding this matter of tuberculous cattle. They are going to look to it more in the future than in the past that no tuberculous cattle come into their country. Perhaps the Province of British Columbia is more vigilant in this regard than any other, but the sentiment is strongly in favor of prohibition against tuberculosis. In the Eastern Provinces associations are purchasing sires on the co-operative plan. Many of these are assisted by the Provincial Governments, and the demand is for tuberculous-free animals. We can no longer wink at this matter of tuberculosis in our herds and let it pass at that. Anyone desirous of building up a remunerative trade will have to maintain a herd that is free from the disease. We do not wish to imply that our pure-breds are tuberculous, what we desire to point out is that we must take more precautions and have ample proof that they are not diseased.

Just how far we can get with accredited herds, it is difficult to say until a clear statement is made by the Government and the Health of Animals Branch outlining their scheme. However, accredited herds are becoming



## The Farmer's Advocate and Home Magazine.

THE LEADING AGRICULTURAL JOURNAL IN THE  
DOMINION.

Published weekly by  
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JOHN WELD, Manager.

Agents for "The Farmer's Advocate and Home Journal,"  
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numerous in the United States where they have, all told, in the neighborhood of 400.

We question very much whether breeders who understand tuberculin testing will be very enthusiastic about accredited herds so long as tuberculin can be obtained and used by anyone. It is a well-known fact that an unscrupulous breeder can render animals immune to the test for a period of approaching 60 days by the use of tuberculin itself. It is doubtful if breeders will consider the accredited herd system with the favor it deserves until such time as they are not robbed of its advantages by the free and unrestricted distribution of tuberculin.

This is a subject to which breeders should give very honest and serious attention, for tuberculosis is becoming a great problem in the live-stock trade.

### "The Year of the Deep Snow."

BY SANDY FRASER.

I had a visit from Tommy Red Angus McLeod yesterday. He wis wantin' to buy a couple or three heifer calves, as he has been havin' an unco' poor run o' heifers this spring, and he thought maybe I wad be in a way to let him have what he needed.

"I hae plenty o' milk," says he, "and I could hae raised a dozen, if I'd had them. I mind the time when I used to be knockin' them in the head and sellin' their skins for twenty-five cents to the tin peddlers that used to be comin' around every few days wi' their pails an' pans an' dippers piled up inside their big red box on wheels. We dinna see mony o' them noo-a-days."

"Not a one," I replied, "they're as much a thing o' the past as home-made soap an' tallow candles. It mak's me lonesome, Tommy," says I, "to be thinkin' o' the changes that are coming over the country. Those were pretty guid days, when ye come tae think about it."

"Oh aye, I suppose so," replied Tommy slowly, "just the same we ha' oor hard times too. We used to gae through some pretty lang an' cauld winters, forty or fifty years back. D've mind the winter o' the deep snaw? Ye may be thinkin' that this spring is a wee bit backward like an' be watchin' yer hay an' straw in the barn pretty close these days, but it isn't likely that ye'll have t' gang to the bush to be gettin' brush to feed ye stock."

"That year o' the deep snaw, that we were speakin' about, along about the first o' March we saw that the feed wis no gaein' to hang oot, so my feyther says to

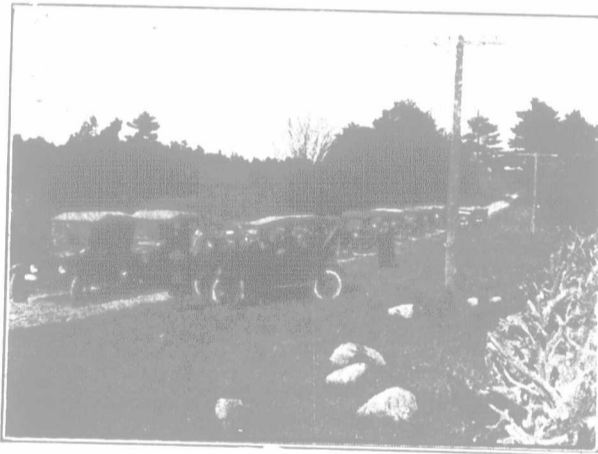
me, 'Tommy, we'd better be cuttin' doon some o' those big elm trees back at the edge o' the clearin' an' takin' the branches hame to feed the coos.'

"So I took my axe and went back to where the trees were an' went at it. Those auld elms were unco' tough, to say naething about the size o' them. It used to tak' me the best part o' a day to bring one o' them doon. And then it was trim it up an' brag the branches hame for the cattle. We used to dae that in the mornings when the snaw wad be hard wi' the frost."

"But that got to be ower muckle like wark to suit my idea o' things, so one day I got ma young brithers with me an' we shovelled out a road clean back to where the elm trees were, an' then we made a kind o' a yard that I thought wad be handy to get to wi' the brush that I trimmed off the trees. Ye see, my idea wis to bring the coos to their fodder instead o' carryin' the fodder tae the coos. And it warked fine. Ilka mornin' we wad drive the cattle back tae the yard we had fixed up in the bush and feed them their breakfast o' elm tops. Then we wad leave them till along in the afternoon, when we wad gie them anither feed. When they had finished this we wad drive them back to the barn for the night. On stormy days we would leave them in the stable, as we had kept a wee bit o' straw in case o' an emergency, ye see. But I mind some o' my neebors that had to get the brush for their coos lika day, snaw or shine, for they hadn't as much feed in their barns as wad mak' a decent hens' nest. They'd a wee pickle hay for their horses an' that wis all. We used to think it little short o' a sin to feed hay to the coos in those days."

It wis the regular thing for ilka man that kept coos to hae a couple or three o' them 'on the lift' every spring. It took a coo wi' a strong constitution to come through the winter wi' oot bein' the better o' a little help when it came to gettin' up in the mornin', especially on towards the spring o' the year. I mind when it used to be the regular thing for one man to ask anither, when they met; 'weel, are yer coos strong this spring?' Instead o' sayin', 'as is the fashion noo-a-days: 'are ye recoverin' frae the effects o' the grippie?'

"But the year o' the deep snaw there wis lots o' cattle came through the winter in better shape than they ever did before, or after, for the matter o' that. The scarcity o' straw an' all kinds o' fodder wis a 'blessin' in disguise', as they say. There's naething better than elm branches



An Auto Excursion.

for live-stock o' all kinds, especially coos. It's medicine as weel as fodder. And it wad surprise ye to see the chunks o' limbs that they wad break off an' chew up. Maple an' maist o' the ither kinds o' trees were not sae guid. There wis naething like the elm—once ye had it cut doon. I mind my feyther helped me cut doon a few first, to gie me a start. After that I had to keep the coos going on my own account. And I did it. Their skins were shinin' that spring; the first time it ever happened, I guess.

"But if ye think I wisna glad to see the first signs o' green grass that year ye can think again. There wis an unco' lot o' snaw to be melted, but once it wis gone everything came along in great shape an' ye'll maybe mind what great crops we had the next fall. There wis lots o' straw for the coos and as a consequence a guid mony o' them went back tae their auld habit the next spring and only those wi' the strong tails ever saw the grass."

"Noo-a-days," went on Tommy, "the maist o' farmers wad be ashamed to starve their coos to death, but in those times they used to look on it as what oor meenister called a 'dispensation o' Providence.' Talkin' about the 'guid auld days'; they may hae been a richt in some respects but frae what I can see I'm thinkin' that, as a rule, farmers o' the present day are inclined to treat their live-stock better than their feythers did before them. It's na mair than common-sense, however. If ye dinna feed them they willna feed you. And the most o' farmers hae found that oot, by hard experience, if in na ither way."

"And there's anither side to it. I could never see that there wis sae muckle difference between ourselves and the animals in oor barns that we were justified in treatin' them wi' ony less consideration than we dae oor ain families. Oor coos an' oor horses are subject to pain an' the feelings o' happiness just as we are ourselves and when we tak' advantage o' our position to abuse them, I canna see where we're ony better than the Hun, that we hae all been swearin' at for the last four years, when he went through France an' Belgium, killin' the auld men an' women an' the bairns."

"Hoot, Tommy," I interrupted him; "dae ye no think that's puttin' it pretty strong? Ye must be a

member o' this society they hae, in some o' the cities, for the prevention o' cruelty to animals. Gin they see a pimple or a scratch on yer horse they'll hae ye arrested an' fined."

"Weel," returned Tommy, "they're headed in the right direction, onyway, and maybe they do the owner as muckle guid as they do his horse. They mak' him stop an' think for one thing, and sometimes that's worth a guid deal. He'll maybe come to understand that it's himsel' that is gettin' the warst o' it, ilka time he abuses his horse or his cow, and if onything will keep him straight that should. As I've heard it said somewhere, 'the merciful man is merciful to his beast.' Sae there ye are. If ye want a certificate o' character for ony man go to his horses an' coos for it."

### Social and Anti-Social Activities.

BY W. C. GOOD.

A business motto that has been very popular in recent years runs as follows: "Every man for himself," and it is argued that if every one looks out for his own interests, the interests of all will be looked after. Fortunately (or unfortunately) the second half of the motto, its corollary, is seldom quoted: "The devil take the hindmost." The logic of the motto would be open to suspicion and its moral character questionable if the corollary were quoted, so it is customary to leave it unsaid, and to assume that the policy of selfish individualism will in fact result in "The greatest good to the greatest number."

The fallacy in this argument will become more apparent if we examine the nature of the various occupations in which men engage. The farmer, the carpenter, the machinist, the teacher, the artist, are all engaged in occupations that are socially helpful. In so far as the farmer grows more wheat, or a better beeve, or produces milk more cheaply, he augments his own income, other things being equal. And at the same time he confers a greater benefit upon his fellowmen. For example if he can breed and feed high-producing cows he increases the supply of milk available for consumption without increasing the cost of the same, and in like proportion increases his own income. So a carpenter by skill, intelligence and industry accomplishes more than the average of his fellow workmen, and is better paid in consequence thereof. And so it is with all such cases. Individual welfare coincides with social welfare; the more the individual makes the more he contributes to the welfare of others. Such occupations as the above can be termed social occupations.

But there is another and very different type of vocation. The burglar may, by dint of ingenuity, hard work and industry, obtain a very respectable income. But in the degree that he augments his own revenue he diminishes the welfare of his fellows. He is engaged in an anti-social occupation. So the sharper, the liquor dealer, the land speculator enrich themselves at the expense of others. The more they make for themselves the less there is for the rest of humanity. Such occupations are sometimes called parasitic, which is a very suitable term, because the parasite grows fat as its host grows thin.

Now it so happens that most people's activities are partly social and partly anti-social. The farmer is engaged in a social occupation when he grows wheat, or cattle or hogs. But he is engaged in an anti-social occupation when he operates as a land speculator and pockets the "unearned increment" in the value of his farm. In the latter case he is taking for himself what others earn, just as the burglar or the swindler. Moreover when prices rise owing to drought, accident or war, the farmers' additional income is obtained at the expense of other's needs or misfortunes. The farmer may not be conscious of any wrong doing, and cannot very well avoid taking what the market offers. At the same time he cannot get, or should not get, the same satisfaction from an increase in the price of wheat due to the sinking of wheat cargoes as he gets from an increased yield of wheat. The increased yield represents gain both to him and his fellows; the increased price represents gain to him and loss to his fellows. The same holds good of practically all occupations. A terrible epidemic may place a doctor in a position of affluence; litigation between friends may put money into the lawyers pocket, as war between nations puts money into the coffers of the munition manufacturers; a disastrous fire may create an unusual demand for bricklayers and carpenters, and increase their wages. It follows, therefore, that both by the direct choice of a parasitic occupation, or by getting prices enhanced by social disasters. The individual may be anti-social. Everyone is probably anti-social in some of his activities and the best that can be done is to minimize such and maximize the social activities. This can be done both by deliberate choice on the part of the individual and by such social action (or legislation) as will hamper anti-social conduct and encourage social conduct.

Price enhancement may be due to drought, sickness or warfare. It may also be due to legislation. A protective tariff, for example, enhances prices; if it did not it would not protect. Does it thereby encourage anti-social conduct? I think it may be fairly maintained that it does. It shuts out competition and competition regulates prices in the direction of fairness, though it cannot prevent the effects of calamity. If, therefore, it should be the aim of legislation to encourage social conduct and discourage anti-social conduct, protective tariffs must be ostracised. Putting it in the words of the late Sir Wilfrid Laurier: "Protection is legalized robbery."

Adopt some system of crop rotation and make it as short a one as labor will permit.

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## THE HORSE.

### Retention of the Meconium or Constipation in Foals.

Retention of the meconium in foals is probably responsible for more fatalities than any other abnormal condition. During foetal life the liver of the foetus secretes small quantities of bile. As this is secreted it is conveyed to the small intestine by the bile duct. Here it becomes inspissated and formed into balls of a dark brown, almost black color, a gummy, sticky nature, about the consistency of putty, and is called meconium. Under normal conditions its expulsion commences soon after birth and continues at intervals until it is all expelled, which usually is in about 24 hours, after which the faecal matter voided is of a yellowish color. The passage of yellow excrement is evidence that the meconium has all been voided, and that now passing is the excreta from nourishment taken after birth.

While retention of the meconium may occur under any and all sanitary conditions, it is more frequently observed in early foals whose dams have been fed on dry fodder and have had little exercise during the winter. The foals of mares that have had regular exercise or light work during the winter, and been fed on laxative, easily-digested feed, do not suffer so frequently, but the condition is liable to occur even under these conditions, and it is not unknown in late foals, whose dams have been on grass for a greater or less length of time before parturition. Again, the condition is very liable to occur in foals of dams from whom the milk has been escaping for some time before delivery. The first milk or fluid that escapes from the mammae of the dam after or shortly preceding parturition is of a different character, both as to appearance and constituents, from real milk. It is of a clear, viscid nature and of an oily appearance. It contains more constituents of a laxative nature than milk does. Its function is to nourish the young animal and, at the same time, exert a slightly laxative action on the bowels. It is called "colostrum," and if, from any cause, the young animal is deprived of it, there is a greater danger of retention of the meconium than under other conditions.

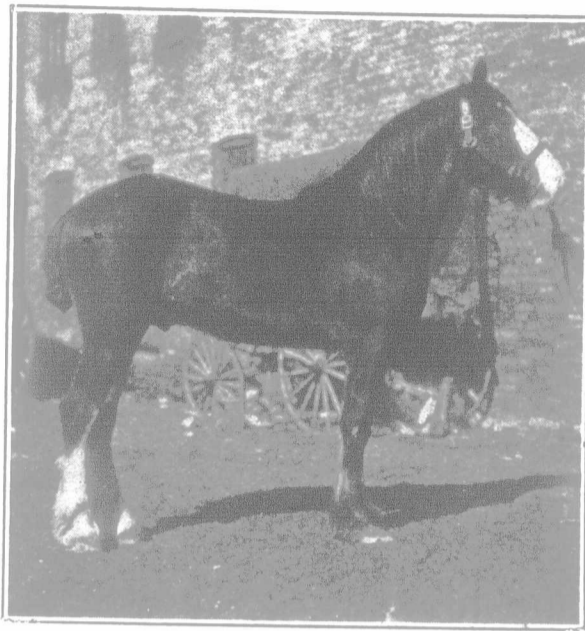
At the same time it must not be considered necessary, or even advisable, to substitute purgatives when the colostrum is absent. The administration of purgatives in such cases (unless in very small doses) usually complicates matters, and often renders incurable a condition that in all probability could have been successfully treated. The meconium, as stated, "exists in lumps of a gummy nature and of about the consistency of putty."

In the majority of cases where this is not spontaneously voided, these lumps, with which the rectum is full, are so large that the little animal has not sufficient expulsive power to force them through the anus. In such cases it is obvious that purgatives would tend to complicate matters, as they act upon and tend to fluidify the contents of the anterior intestine, increase the backward action of the same, but have practically no action upon the contents of the rectum. We can readily see how this, by increasing the action of the anterior intestine, without removing from the rectum the obstruction which prevents the escape of faeces, will increase distress and lessen the prospect of successful treatment. Hence, we must be very careful about dosing with purgatives or laxatives, but depend largely upon mechanical treatment.

**Symptoms.**—The symptoms are plain. The foal arches his back, elevates his tail and makes ineffectual efforts to defecate. At first the distress is not great, but as time passes these efforts become more frequent and prolonged; he becomes restless, lies down, rolls on his back, takes little nourishment, becomes "tucked up" in the flank, grinds his teeth, becomes weaker and weaker, suffers intense abdominal pain, looks around toward his sides, and eventually dies.

**Treatment.**—As stated, purgatives should be avoided. When the first symptoms are shown the attendant should trim the nail of his fore finger, oil it, get an assistant to hold the foal, and then carefully introduce the finger into the rectum, and remove all the lumps that he can reach. In the meantime the foal makes expulsive efforts, and as the meconium is removed from the rectum a fresh supply is forced into it, and, of course, this also should be removed. It is not unusual for the operator to remove a pint or more at one operation. This should be followed by injecting into the rectum of a liberal supply of soapy, warm water or of warm water and raw linseed oil or glycerine in equal quantities. In the course of 3 to 4 hours the operation should be repeated, and every few hours afterwards until yellow faeces are observed. So long as the meconium reaches the rectum it can be removed by the finger or by the use of a doubled wire, and it is not wise to give any medicines whatever by the mouth, but when the obstruction is so far forward that it cannot be reached, even by a wire, it is well to administer 1 to 2 oz. of raw linseed oil or castor oil (according to the size of the patient), but in no case should drastic purgatives, as aloes be given, except in very small doses, as diarrhoea is very easily caused and very quickly weakens the foal. It is good practice to remove the meconium, as stated, from all foals shortly after birth. The operation, if carefully performed, so as to not irritate or scorch the parts, does not injure the foal in the least, and in all cases saves more or less exertion, and while in many cases it is not necessary, it is better to be on the safe side and anticipate trouble, rather than await symptoms. The lives of many foals would be saved if this precaution were taken early.

Foals should be carefully watched in this respect, until the faeces passed are of a yellow color, after which there is little danger of constipation if the mare be properly fed. WHIP.



A Well-bred and Well-grown Two-year-old Clydesdale Stallion.

## LIVE STOCK.

Don't forget to dock the lambs.

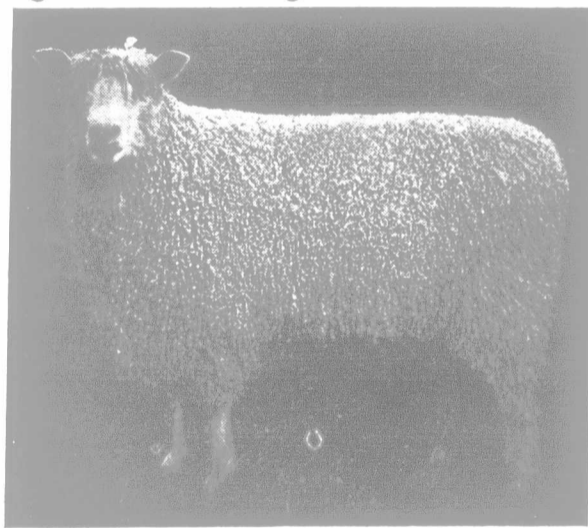
Study the individuals in the herd. Some animals require different treatment from others.

Squeeze out the warbles on the cattle's backs and so prevent the grub from developing into the fly to propagate its species during the warm days of August next.

McConnell's Herefords, of Nebraska, averaged \$596, and fifty-eight Angus in Iowa, averaged \$562. The prices of cattle of all breeds are maintaining a high average.

The apparently lifeless new-born lamb or calf can sometimes be revived by blowing into its mouth and vigorously rubbing its sides with sacking or straw. This starts lung action and sets the blood circulating if there is a spark of life left.

A number of Shorthorn sales have recently been held across the line, at which high averages have been obtained. At Williamsville, Illinois, J. R. Jones made an average of \$1,029 on thirty-four head. L. M. Andrews, of Iowa, realized \$24,095 on forty-one head.



A Champion Wensleydale Ram.

A consignment sale at Columbus Grove, Ohio, made an average of \$675 on seventy-three head. In Illinois, G. G. Atwood's herd of sixty-six averaged \$502. A Shorthorn Breeders' Association Sale, at Kansas City, averaged \$314 for one hundred and eighty-seven head.

### Our English News Letter.

The English Board of Agriculture is to be reorganized and made a first-class Department of State. That announcement was made in the House of Commons on March 26. Legislation is going to be introduced to effect that end as soon as possible. It has been proposed to set up an agricultural authority in each country and to follow the Irish practice of establishing an Agricultural Council in England and Wales. The Commissioners of Agriculture are to be increased and a number of demonstration farms are to be run to prove

to the young mind and the slothful old mind how to increase market production. These state farms are to be run on commercial lines—with pedigree cattle I hope; not scrub commercial stock.

We have a live-stock improvement scheme operating these last five years among small holders and little farmers who cannot afford to invest in pedigree stock and build up a herd. The time for running this scheme has ended, but it has proved such a success that the Board of Agriculture is going to carry it on and per chance increase its workings as it itself grows into a first-class Department of State. The scheme is fundamentally one of giving small farmers assistance in the matter of obtaining the services of sound and pedigree heavy stallions, pedigree boars and pedigree bulls—both milch and beef strains. So far 710 bulls, 254 boars and 110 heavy stallions are on the list of assisted nominations, and that they are improving the stock of the countryside goes without saying. We have a bad lot of "commercial cattle" in this country, considering also that across in the next field to a pack of scrub cattle may be one of the finest pedigree herds in the Kingdom, of one breed or another. The dividing line is cut sharp and short by the hedges in between. However, the Board of Agriculture is now spending £25,000 a year on improving our scrub stock, and the money is being wisely spent, too. Milk recording is one especial phase of this work and £1,000 more will be spent on extending this important section of the scheme in the immediate future.

England held its first sale of milk-recorded cattle—mainly dairy Shorthorn type—at Reading in March, and the most dubious farmer now must be convinced, as a result of this sale, that there is money in milk records and that £10, £15 or £20 can be added to the value of each heifer calf got by a milk-bred bull. Cows of good dual-purpose type with praise-worthy records were eagerly snapped up at prices from £15 to £20 in excess of what they would have been had they been sold in local markets without any milk records appended to their names. A massive-framed red cow with an average of 10,264 lbs. of milk with her first four calves made 140 guineas. She had no pedigree! A 9,129-lb. cow fetched 84 guineas, and another cow with 11,929 lbs. to her name made 86 guineas. Your farmers are much more alive to the value of milk records than ours, but the cult is growing apace.

Shire-bred working horses made 250, 230, 210 and 200 guineas at Crewe, and vanners offered at Reading realized £130, £107 and many over £100. Farm horses (Shire-bred) realized 200 and 150 guineas on a holding at Louth (Lincolnshire). Clydesdale-bred farm animals realized 200 guineas at Penrith. In Hereford, 212 guineas was the top price for a Shire-bred six-year-old gelding. Twenty-three working mares averaged £120 5s. at Borough Fen, Lincolnshire, where two-year-olds realized £63, and yearlings £48. The farmer who sold the stock I have just enumerated reckons that he has in sixty-two years' tenancy on one farm sold 53,000 sheep, 549 Shires and 3,500 Lincoln Red Shorthorns. Thus is pedigree breeding the mainstay of successful farming in the Old Land.

ALBION.

### The Sheep Protection Act.

The time is drawing near when sheep will be turned on pasture and the danger from dogs worrying the flock will be accentuated. Dogs have been blamed for preventing a more rapid growth of the sheep industry in this country, and it must be admitted that it is very discouraging to have a few of the best of the flock killed and the rest mutilated, or thoroughly frightened, by the inroads of dogs into the sheep paddock or pasture. It is not the well-bred dog used to stock that molests the flock so much as the mongrel cur that is forced to hunt for his living and is allowed to roam the country day and night. Under such circumstances the wolf-like instinct of the canine is almost bound to show itself. It is generally believed that the Dog Act for the protection of sheep, enacted by the Legislative Assembly of the Province of Ontario, is the best in existence. True, there may be faults to be found with it, but if the law is enforced it does give protection to the sheep owner; at least, the penalty is such that few will take the chance of giving their dog unlimited freedom if he shows the least disposition to wander from home. By increasing the tax on dogs, many of the curs have been disposed of. The assessor enters on the assessment roll the number of dogs owned by each man on the list, and the penalty for not giving the assessor the correct information is a fine of five dollars. If the assessor fails to carry out the provision of the Act he incurs a penalty of ten dollars. The Act put into force in 1918 states in Section 8 that "any person may kill any dog: (a) which is found pursuing, worrying or wounding any sheep; (b) which is found straying between sunset and sunrise from the premises on which such dog is habitually kept." Section 10 of the Act is to the effect that the owner of any sheep killed or injured by any dog shall be entitled to recover the damage occasioned thereby from the owner of such dog by an action for damages or by summary proceedings before a Justice of the Peace. The aggrieved party may recover in such action or proceedings whether or not the owner of the dog knew that it was vicious or accustomed to worrying sheep. The Act states that "If it appears at the trial that the damage or some part thereof was the joint act of some other dog than of the dog owned by the person charged, the court, judge or justice may, by the judgment or conviction, apportion the damages among and against the respective owners of the dogs as far as they are known, in such proportions as may be deemed just." The owner of any dog to whom notice is given of



injury done by his dog killing sheep is obliged to destroy his dog within forty-eight hours after such notice and incurs a penalty if such is not done. Where the owner of the dog or dogs is not known, then the man suffering loss may collect compensation from the municipality in which such sheep were killed, injured, terrified or worried. In order to collect compensation from the municipality it is necessary that application for damages be made within three months after such sheep have been killed, terrified or worried. The amount of damage is determined by sheep valuers appointed by the local municipality. The sheep valuer must be notified within forty-eight hours after the discovery of damage. He then makes full investigation and reports in writing to the clerk of the municipality, and at the same time forwards a copy of the report to the owner of the sheep damaged. One clause in the Act provides for the appointment of a competent arbitrator to make an investigation and award, where the award made by the local sheep valuer is deemed inadequate. If the sheep are killed or injured while running on any highway or on enclosed land, the owner has no right to compensation from a municipal corporation.

While the owner of the sheep may receive full value for the loss of the sheep killed or injured, it is not always possible at the time to ascertain the amount of damage done the remainder of the flock by being chased and frightened by dogs. However, the present Act gives a fair degree of protection. Sheep owners living near small towns or villages usually suffer more than those who reside in more remote districts. If more of the apparently homeless and low-bred dogs of our towns and villages were destroyed, there would be less damage to sheep in the surrounding districts. It is very often the town dogs which do the damage, and, their owners not being apprehended, the township must recompense the breeder for the loss of his sheep. There are some who would go so far as to destroy practically every dog. However, this might be carrying it a little too far. There are good and bad dogs, and there is a place for the well-bred dog both in the village and on the farm. There is no place, however, for the cur; he is of no use to man or beast and simply eats his head off and gets into all kinds of mischief. It is the idle dog which does the damage. The Collie, Airedale, or some of the other breeds, are seldom accused of molesting the flock. They may be seen going among the sheep with their master without causing the least disturbance in the flock. It is not likely that such dogs would commit any depredation when out by themselves. While a few breeders do suffer each year, they are comparatively few as compared with the number of sheep breeders in the Province. The owner of a good dog is quite willing to pay the tax imposed by the municipality and to keep his dog housed at night if he shows the least inclination to roam.

**Portable Hog Pens.**

As a number of subscribers have written for information regarding the different types of portable hog pens, we herewith illustrate three different types, any one of which may be built for a comparatively small sum and all are light enough for a team to move from place to place. These pens are suitable for shelters for sows or growing pigs on pasture during the summer, and may be used for farrowing pens at any time of the year. The A-shaped colony house is favored by some. It is sufficiently warm for use in the winter, but it does get a little too warm for comfort during the summer unless placed under a tree or out of the direct rays of the sun. It is constructed by nailing boards to six joists, each two by four inches, and seven feet eight inches long for a floor. Beneath the joists are bolted three stringers to serve as runners when moving the pen. A two by eight inch piece, nine feet four inches long is spiked to the end of the joists, having the bottom of the plate even with the bottom of joists. The rafters are attached to this and nailed on a two by four inch piece at the top. A door may be placed in one end which slides up and down. This will be found more satisfactory than having it on hinges. For large sows, a door two feet wide and three feet high will be found large enough. It is advisable to put a ventilator in the top. This may be made by cutting an opening in a couple of the roof boards and then covering the opening with boards raised a few inches off the roof. The illustration shows the roof boards placed up and down and the cracks battened. This gives a satisfactory yet inexpensive roof. Figure 3 shows a somewhat more elaborate hog cabin which is more expensive to build. The structure rests on three six by six inch posts, and the framework is made of two by four inch studding. Inch lumber is used to encase the building, and also for the roof. As in the Figure 1 pen, the cracks are battened. However, some breeders use prepared roofing or shingles on the roof. A door is placed in one end and some put a window in the gable. The pen is six by eight feet and makes an excellent farrowing pen. The illustration shows one portion of the roof to be battened so that it may be raised to give ventilation during the summer. This is a very satisfactory pen only for use in the summer or winter use. Figure 2 shows another type of portable pen. This is used quite extensively on the York Street Farm at Ottawa. These cabins are six by eight feet and are built with a two-inch plank floor and two by four inch studding, with inch-lumber for roofing, and the cracks are battened. A special feature of this pen is the hinged sides, which shade the interior and keep it cool during the summer. This is a particularly good type of cabin to use in the centre of the paddocks or where there is no shade. These sides are securely fastened down when the pen is used during the winter. It makes a very comfortable winter cabin. A window may be put in

one end and a door in the other. All three cabins illustrated give satisfaction. It is just a matter of which type the breeder prefers. At Weldwood Farm we have used the A-shaped house, and one somewhat on the style of Figure 3, except that the roof is not hinged.

A paddock in which rape or clover is grown is an excellent place to run the hogs during the summer. The brood sows require exercise and green feed, and considerably more economical gains can be made by growing the pigs on pasture supplemented with a little grain, than when entirely pen-fed. If a pig paddock is not already provided on the farm, an acre or two of the hay field might be fenced off for the sows and growing pigs. One or two of the pens herewith illustrated will provide shelter for them. The beauty of these pens is that they are light enough to be drawn from place to place and are serviceable the year around. Hogs do not require elaborate quarters, provided they are dry and well ventilated. They do need a certain amount of warmth during the winter, but if their pen is dry and they are given an abundance of bedding they will not suffer.



Fig. 1—A-shaped Hog Cabin.

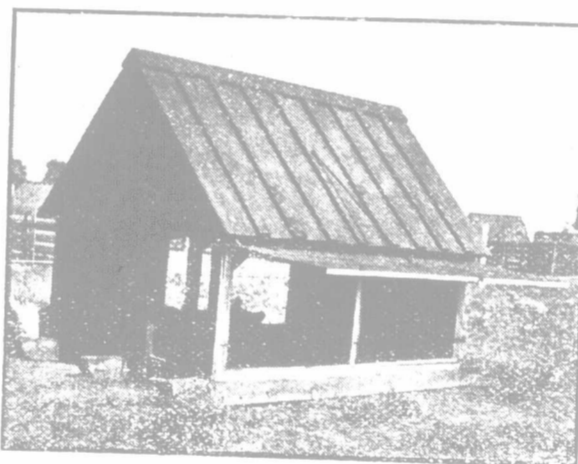


Fig. 2—Hog Cabin with Hinged Sides.

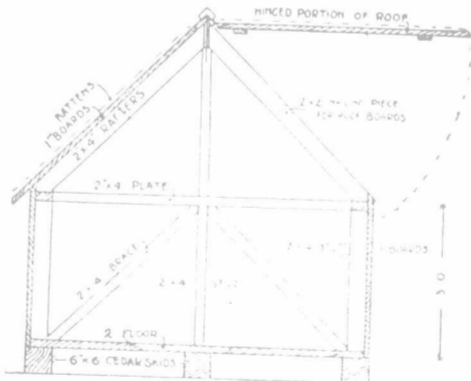


Fig. 3—Hog Cabin with Hinged Roof.

**Shorthorn Sale and Congress at Brandon.**

April 3 and 4 were red letter days for Shorthorn breeders of the Western Provinces, when ninety-seven head of the Reds and Reels were disposed of by auction at an average of \$534 for bulls, and \$500 for females. Two females sold above the top price for females at the Shorthorn Congress and sale, at Chicago, last winter. Hon. Duncan Marshall bought the highest priced cow of the sale. She was Dale's May and went to the \$3,100 bid of Charles Beeching, De Winton. The next highest price was \$3,000 paid by Charles Beeching for Lady Lancaster 16th, consigned by Miller Bros., Clarendon, Ont. Of the ninety-seven lots of early bred sold under the highest priced male going to the bid of J. G. Clark at \$1,250. Hon. Duncan Marshall had a \$1,000 bull in Lancaster Champion.

The executive in charge of the sale were fortunate in securing such high quality stock. Undoubtedly, they labored severely in getting the entries they did, but it was worth while and the success that has attended the best Shorthorn Congress in Western Canada will go down in the history of Shorthorn cattle breeding as a

great event. On the first day of the Congress the cattle were judged by Prof. Day, Secretary of the Shorthorn Breeders' Association. It was no easy task to decide upon the winners, so close was the competition. In aged bulls, J. G. Barron won with Augusta Star, an animal known to many of the Ontario breeders. G. W. Brown, of Saskatchewan, was second with Governor Butterfly, a particularly smooth bull with quality and condition. King of Hearts topped the two-year-old class for S. G. Carlyle, of Alberta, with Miller Bros., of Clarendon, Ont., second with Rector. R. A. Wright, of Saskatchewan, went to the top in the senior yearling class with Clarence, an imported bull. His nearest competitor was Columbia Wonder, contributed by Sharp Bros., of Alberta. Both bulls sold for \$700 apiece. The junior and grand championship was awarded to Myrtle Beau, the deep-set, well-fleshed youngster which headed the junior yearling class. He was contributed by J. B. Davison. This calf topped the sale of bulls. Scotland's Delight was the reserve junior champion and went under the hammer at \$755. Augusta Star was the senior champion and sold for \$625. McMillan Bros., of Manitoba, were first in the aged-cow class with Rosebud 2nd a beautiful well-fitted cow with splendid lines. She realized \$1,225 in the sale. Second place was won by Royal Minnie, a well-built cow consigned by Hon. Duncan Marshall. She went under the hammer at \$1,100. P. Talbot & Son, of Alberta, topped the two-year-old class with Serene 2nd, a heifer which sold for \$600. Miller Bros., of Clarendon, were first in the senior yearling class with Lady Lancaster 16th, a square, blocky individual with great depth, which brought \$3,000 in the sale. The second honor was won by Miss Clara 2nd, a strong heifer with a good spring of rib. Dale's May, the highest priced animal of the sale, topped the junior yearling class and was junior champion. The Lady Lancaster cow was senior and grand champion. The following is a list of the animals sold together with name of purchaser and price paid:

Lancaster Champion, M. R. Zentz, Cando, N. D.	\$1,000
Dale Secret, W. J. McFadden, Methven	600
Cumberland's Stamp, Thos. J. Clark, Manitou	500
Count Cumberland, J. E. Mann, Bangor	675
Jilt King, Frances B. Carey, Codina	500
Augusta Star, Ed. Jameson, McAuley	625
Coral Chief, R. J. Huxtable, Conquest	525
Governor Butterfly, F. S. Shaw, Gainsboro	425
White Coral, A. J. Quigley, Sinaluta	575
Prince Coral, Marius Maire, Dumas	375
Lovely Prince, G. R. Sherman, Bienfait	400
Rector, P. McKay, Swan River	450
Fancy Sort, Ed. Muir, High Bluff	600
Scotland's Delight, A. McManes, Alexander	775
Royal Heir, Foley Bros., Manitou	800
Stronsa Pride, W. J. Renton, Deloraine	500
Rosebud Choice, A. Biesea, Qu'Appelle	310
Myrtle Beau, J. G. Clark, Clark Manor	1250
College White, Alex. Currie, Cando, N. D.	210
Scottish Mint, H. C. Waston, Oxbow	700
Augusta Golden, Wesley Benson, Weyburn	450
Clarence, J. G. Wilkinson, Tuxford	700
Columbus Wonder, Alex. Currie, Cando, N. D.	700
King of Hearts, John McDonald, Oak Lake	350
Nompareil Chief, John Fennelly, Somerset	280
Proud Emblem, A. L. Hill, Red Jacket	350

**Cows and Heifers.**

Dale's May, C. G. Beeching, De Winton	3,100
Averne Lass, J. G. Clark, Clark Manor	925
Stamford Pearl, W. J. Pollock, Kenmay	375
Myrtle Jilt, Jas. Richardson & Sons, Winnipeg	390
Miss Myrtle, J. C. Halford, Sinaluta	350
Mildred Maiden, C. G. Beeching, De Winton	1,100
Flora Princess, Jas. Houston, Bradwardine	650
Royal Minnie, W. N. Oxby, Somerset	1,100
Moss Rose, C. G. Beeching, De Winton	575
White Heather, C. G. Beeching, De Winton	900
Crocus, Freeman Rice, Binscarth	400
Nompareil Beauty 9th, Follett Bros., Duval	475
Red Rose, J. A. McKinnon, Napinka	375
Miss Clara 2nd, McMillan Bros., Poplar Point	975
Shenley Matchless 2nd, G. A. Logan, Tuxford	1,000
Autumn Rose 9th, Andrew Graham, Roland	775
Countess Lancaster, Thos. Clark, Manitou	400
Shenley's Ideal 2nd, J. G. Clark, Clark Manor	600
Countess Ury, McMillan Bros., Poplar Point	1,025
Lady Susie, Follett Bros., Duval	875
Conlee Rose 12th, Jas. Richardson & Son, Winnipeg	300
Siren 2nd, C. G. Beeching, De Winton	600
Conlee Pearl 8th, J. W. Ching, Darlingford	500
Sweetheart 3rd, S. Fletcher, Holmfield	375
Waterloo Princess, W. D. Nelson, Weyburn	435
Lorene Spring Maude, H. L. Tutt, Rouleau	925
Rosebud 2nd, S. Gellie, Harnsworth	1,225
Roan Violet, W. L. Drewery, Rolla	260
Darlingford Lily, G. R. Sherman, Bienfait	200
Nell Rosebud, G. R. Sherman, Bienfait	265
Lady Lancaster 16th, C. G. Beeching, De Winton	3,000
White Princess, I. G. Washington, Ninga	450
Roan Maid, M. C. Pitt, Theodore	350
Lavinia G 3rd, Andrew Killoh, Manor	335
Pansy Bloom, Jas. Richardson, Winnipeg	400
Myrtle Queen, Jas. Alexander, Goodwater	510
Oakland Beauty	750
Roan Lass, Follett Bros., Duval	375
Octavia's Best, T. O. Taylor, Minnedosa	275
Betsy Diadem 2nd, Thos. Clark, Manitou	355
Duchess Lake view 2nd, McMillan Bros., Poplar Point	575
Jessie Strathallan, McMillan Bros., Poplar Point	550
Miss Jessica, John H. Mains, Gainsworth	600
Duchess 4th, J. Judge, Southey	425
Lady Margrave, McMillan Bros., Poplar Point	550
Aberdeen Queen, W. J. Pollock, Kenmay	600

Snowdrop, Roan Rose, Fancy Lady, Miss Ramsdell, White Hall, Lady Hesper, Lily of the Valley, Claret Cup, Rosebud Gen, Shenley Rose, Dora, A. J. C. Isabella 14th, Mabel D., Th. Isabella D., J. Velvet Queen

EDITOR "THE FARMER'S ADVOCATE"

I herewith should be had. To begin with, you can't train it for a cannot take a of it. Neither expect to make think you have just when you run amuck. any place for of years on the the puppies find and at present ing stock dog them. The a naturally as a am taking it for start with.

It is quite teach anybody yourself. Some the same reason average person sense and shou The average don't find some it will not alw Your rubbers n hens may be or is forced to reach it; in f pups to do." F he should be tie learn bad habit habits when ic make the best A Collie is a of our best dog in that old ad In a few instar average Collie mere tone of yo If you are kin please you and it on his mind thing. A little him than a lot

A pup should it is too young. time for it to c and the tender heads—which y gets about six old cow does bo mind made up if he is kicked that he is "to Take the pup a to the stock bu A young pup





day of the Congress the cattle  
y, Secretary of the Shorthorn  
was no easy task to decide  
the competition. In aged  
with Augusta Star, an animal  
tario breeders. G. W. Brown,  
nd with Governor Butterfly, a  
with quality and condition.  
e two-year-old class for S. G.  
iller Bros., of Claremont, Ont.,  
A. Wright, of Saskatchewan,  
yearling class with Clarence,  
re competitor was Columbia  
harp Bros., of Alberta. Both  
ce. The junior and grand  
to Myrtle Beau, the deep-set,  
ch headed the junior yearling  
d by J. B. Davison. This  
s. Scotland's Delight was the  
nd went under the hammer at  
s, of Manitoba, were first  
h Rosebud 2nd a beautiful  
id lines. She realized \$1,225  
was won by Royal Minnie, a  
by Hon. Duncan Marshall.  
er at \$1,100. P. Talbot &  
the two-year-old class with  
sold for \$600. Miller Bros.,  
the senior yearling class with  
square, blocky individual  
ught \$3,000 in the sale. The  
Miss Clara 2nd, a strong  
rib. Dale's May, the highest  
topped the junior yearling  
pion. The Lady Lancaster  
champion. The following  
together with name of pur-

Snowdrop, G. R. Sherman, Bienfait.....	\$ 200
Roan Rose, G. R. Sherman, Bienfait.....	450
Fancy Lady, W. F. Drewery, Rolla, N. D.....	500
Miss Ramsden 13th, C. G. Beeching, De Winton.....	625
White Hall Nan.....	400
Lady Hesper 2nd, Jas. Alexander, Goodwater.....	200
Lily of the Valley, A. C. Little, Hamiota.....	550
Claret Cup, Thos. J. Clark, Manitou.....	375
Rosebud Gem, Geo. Kinnon, Cottonwood.....	500
Shenley Rosemond, McMillan Bros., Poplar Point.....	950
Dora, A. J. Quigley, Sintaluta.....	310
Isabella 14th, McMillan Bros., Poplar Point.....	675
Mabel D., Thos. J. Clark, Manitou.....	275
Isabella D., J. G. Clark, Clark Manor.....	300
Velvet Queen 2nd, A. S. Gee, Cupar.....	430

**How to Train a Dog.**

EDITOR "THE FARMER'S ADVOCATE":

I herewith venture to give my ideas on how a puppy should be handled to make a good farm dog of him. To begin with you must have a dog of the proper breeding. You cannot take a Percheron or a Clydesdale and train it for a trotting horse and expect success. You cannot take a Jersey and expect to make a beef animal of it. Neither can you take a bull-dog or a hound and expect to make a good sheep or cow dog of it. You may think you have them fairly well trained, and then—just when you least want it or expect it—they will run amuck. The Collie is the only breed that there is any place for on our farms. He has been used for hundreds of years on the stock farms of Scotland and England; only the puppies from the very best dogs were raised and and at present the Collie is as near perfection as a working stock dog as it is possible for the breeders to make them. The average Collie takes to handling stock as naturally as a duck does to water. In writing this I am taking it for granted that the reader has a Collie to start with.

It is quite easily understood that before you can teach anybody or any thing you have to know something yourself. Some people have trouble teaching a dog for the same reason. They don't use "horse sense." The average person has at least a smattering of "horse sense" and should be fairly successful in training a dog. The average healthy puppy is always busy. If you don't find something for him to do he will himself, and it will not always be something you appreciate either. Your rubbers may be carried off and chewed up—your hens may be exercised—the cat gets a good mauling or is forced to climb trees—the harness suffers if he can reach it; in fact "the devil always finds work for idle pups to do." For this reason if the pup is not with you he should be tied up where he can't get into mischief and learn bad habits. Dogs are like boys, they learn bad habits when idle. The most mischievous pups usually make the best dogs if they get proper training.

A Collie is a very sensitive animal. A large number of our best dogs have been ruined by men who believed in that old adage "spare the rod and spoil the dog." In a few instances whipping may be necessary, but the average Collie is so intelligent that he can tell by the mere tone of your voice if you are displeased with him. If you are kind to him he will do everything he can to please you and it isn't necessary to thump him to impress it on his mind that you don't want him to do a certain thing. A little kindness will make a lot better dog of him than a lot of whipping.

A pup should never be used for driving cattle when it is too young. If a young pup is kicked it takes some time for it to overcome that fear of the cattle's heels, and the tendency will be for it to go to the cattle's heads—which you don't want it to do. After the pup gets about six months of age it will not hurt him if the old cow does bowl him over a few times; he will have his mind made up enough to know he can be boss, and if he is kicked will usually proceed to impress the fact that he is "boss" on the animal which kicked him. Take the pup along as soon as he will pay any attention to the stock but keep him back away from their heels. A young pup will wander right up to a cow's heels and

he is kicked so quick that he is not sure whether it was you or the cow that did it, and will always fight shy of the rear end of an animal afterwards.

It is impossible, or next to impossible, to train a pup properly if there is an old dog along. The pup will want to play with the old dog all the time. When you tell him to do anything he will run and pile on the old dog, and the same thing will happen if you tell the old dog to do it. In a very few cases the old dog will keep the pup in its place and teach it something. An old dog must



An Intelligent Dog Which Will Respond to Training.

know something itself before the pup will learn anything useful from it. As it is possible to make a much better dog of the average Collie pup than the average dog is, it is a good plan to dispose of the old dog before starting unless he is an exceptionally good one.

A lot of people object to a pup playing with children. I would much rather a pup was playing with them than have it out around the fields chasing birds or doing some other similar foolishness. It will at least learn to take care of the children if it plays with them.

Sometimes a young dog is too harsh with stock and drives them too fast. This can be overcome by



A Pair of Sheep Dogs.

tying up one of his front legs or keeping him on a leader until he learns better. Using a leader is about the best and easiest way of breaking a pup of going to the cattle's heads.

The practice of castrating or unsexing both the males and females cannot be too highly commended, both from the breeding and utility standpoint. The average farmer could castrate the males, but the females should be taken to the veterinarian. If this is done the females make really the best dogs. They are quicker to learn and are often the best workers. Castrating a dog before

he is fully developed usually prevents and often cures that rambling instinct. Some people claim that an unsexed dog is lazy but some of the best dogs I have ever seen were unsexed males and females.

In Ontario the dog question is quite a serious one. The number of undesirable dogs kept does not seem to decrease in proportion to the increased dog tax as much as we would like. In my mind there is no reason why a dog should be taxed any more than a cow or a horse. As the present system of dog taxation has had no appreciable results, why not try something else? The system I would suggest for controlling the number of undesirable dogs would be to tax all the dogs which are not unsexed, and not tax those which are. The tax for one year would pay the veterinarian's charges for the operation, and it would certainly pay to have the dogs unsexed unless they were worth keeping for breeding purposes. When it came to a matter of dollars and cents only the sex of our very best dogs would be preserved, and in a few years the mongrel, the cur and the undesirable breeds would be conspicuous by their absence throughout the province.

Prince Edward Co., Ont. G. E. DE LONG.

**THE FARM.**

**Factors Governing the Use of Fertilizers.**

BY PROF. R. HARCOURT, O.A.C., GUELPH

Judging from the nature of the questions asked by correspondents this spring, we may conclude that many farmers, market gardeners, and others are deeply interested in fertilizers. They are looking well to the question of food, and it is an important point; but, plants, like animals, require more than food if they are to make good growth. They must also have water, plenty of sunshine and air, and they must be comfortable. One of the first things a good feeder insists on is comfortable surroundings for the cattle he is feeding. Only then can he hope to get the best results from his feed. The same is true with plants. The soil is the home of the plant, and in that soil the roots must spread in search of the food and water they require. There may be an abundance of air around the leaves of a plant, but, if the soil is not open and porous, there may not be enough in contact with the roots, for it is worthy of note that air in the soil in which crops are growing is just as essential to the life of plants as air in the stable is to the animal. This ventilation of the soil is necessary to supply oxygen required in the germination of seed, to permit roots to live, for they, too, must breathe, and to supply this life-giving element to the millions of organisms in the soil whose work it is to prepare soluble food for the plant. These conditions are controlled by drainage and cultivation, and they are fundamental. The application of fertilizers cannot take their place, nor can the plants make proper use of the food supplied unless good cultural methods are followed, and the surroundings of the plant made comfortable. It must not be forgotten then that while fertilizers are valuable in proportion as they contain good forms of plant food, the results that will be got from their use is influenced by the condition of the soil.

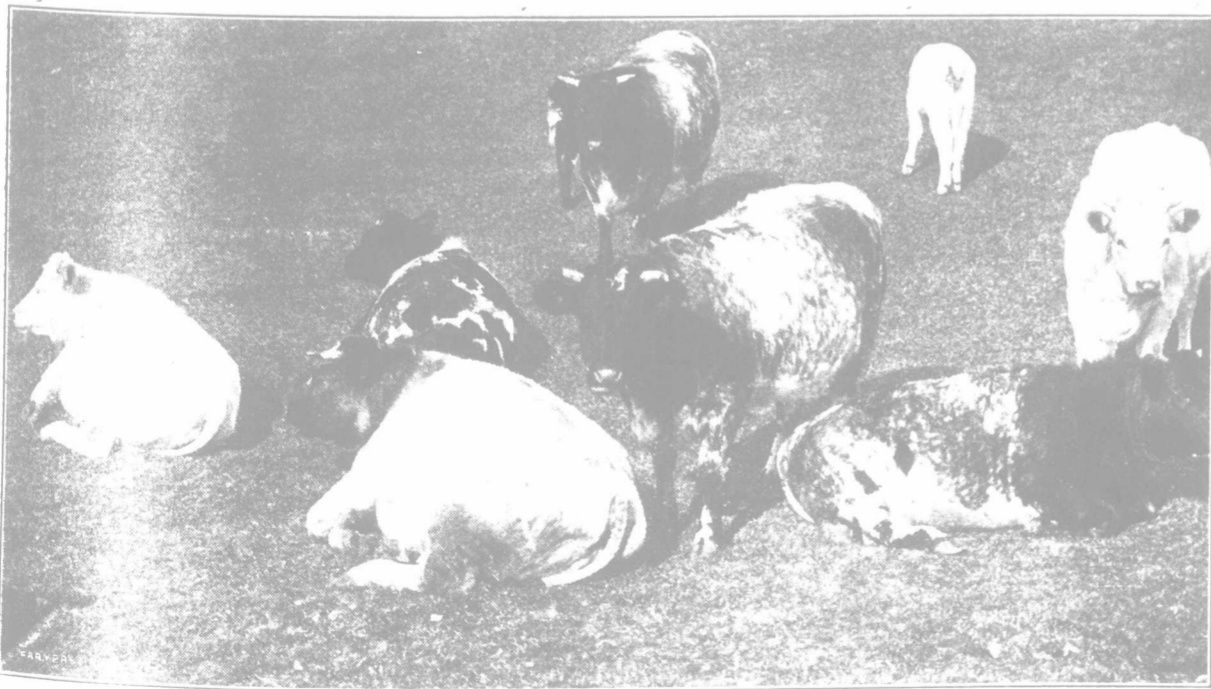
Aside from the above considerations, to make good use of the fertilizers, we must know something about what the soil is most deficient in, what the crops to be grown have most difficulty in securing, and something about the fertilizers themselves.

The soils of this province are quite diversified, but so far as we have been able to gather results from the first part of our soil survey work, the two constituents that our soils are most deficient in are decaying organic matter and lime. Lack of phosphoric acid comes next.

The importance of having an abundance of decaying organic matter in a soil is hard to overestimate. If it is derived from leguminous plants so much the better; but in any case, it is the natural source of the most of the nitrogen to the plant; it very definitely improves the physical condition of the soil, and in its decay acids are formed which bring the insoluble mineral plant food of the soil into an available form. Consequently, where there is plenty of decaying organic matter, there is, if other conditions are right, plenty of nitrogen, good physical condition, and some use is being made of the stores of plant food in the soil. In connection with the last point, let me further emphasize the matter by stating that chemical analysis of the various types of soils collected in our survey shows that most of the soils of this province carry nearly 2 per cent. of potash and from 0.10 to 0.15 per cent. of phosphoric acid. These do not seem like large quantities, but the weight of soil in an acre of land is so enormous, that even these small proportions of plant food may amount to very considerable quantities. Thus an arable soil, clay or loam, to the depth of six and two-third inches over one acre, will weigh, when dry, about 2,000,000 pounds. If it contains two per cent. of potash, there would be 40,000 pounds of potash in the plowed land of one acre, and there is probably as much in each succeeding six inches of the subsoil. Phosphoric acid is not so abundant, yet even of this there is from 2,000 to 3,000 pounds in the surface soil of one acre. When we take into consideration that a 30-bushel crop of wheat, straw and grain, takes from the soil less than 40 pounds of potash and only half that amount of phosphoric acid we see how immense are the stores in our soils. A 22-ton crop of mangels, leaves and tops, will, however, take from the soil as much as 300 pounds of potash and over 50 pounds of phosphoric acid. Even this amount seems negligible when we consider the enormous quantities there are to draw upon. But these stores of plant

Zentz, Cando, N. D.....	\$1,000
n, Methven.....	600
J. Clark, Manitou.....	675
ann, Bangor.....	500
Codina.....	500
McAnley.....	625
Conquest.....	525
aw, Gainsboro.....	425
Sintaluta.....	575
Dumas.....	375
in, Bienfait.....	400
ver.....	450
Bluff.....	600
ines, Alexander.....	775
nitou.....	800
Deloraine.....	500
'Appelle.....	310
ark Manor.....	1250
Cando, N. D.....	210
Oxhow.....	700
son, Weyburn.....	450
ixford.....	700
rie, Cando, N. D.....	700
ald, Oak Lake.....	350
ly, Somerset.....	280
ed Jacket.....	350

<b>Heifers.</b>	
De Winton.....	3,100
rk Manor.....	925
e, Kenmay.....	375
& Sons, Winnipeg.....	390
Sintaluta.....	350
ing, De Winton.....	1,100
Bradwardine.....	650
Somerset.....	1,100
De Winton.....	575
g, De Winton.....	900
rh.....	400
Bros., Duval.....	475
apinka.....	375
os, Poplar Point.....	975
Logan, Tuxford.....	1,000
aham, Roland.....	775
rk, Manitou.....	400
rk, Clark Manor.....	600
, Poplar Point.....	1,025
al.....	875
son & Son, Winnipeg.....	300
Winton.....	600
Darlingford.....	500
olmfield.....	375
on, Weyburn.....	435
tt, Rouleau.....	925
worth.....	1,225
Rolla.....	260
an, Bienfait.....	200
Bienfait.....	265
ching, De Winton.....	3,000
on, Ninga.....	450
re.....	350
Manor.....	335
Winnipeg.....	400
Goodwater.....	510
.....	750
.....	375
Innedosa.....	275
g, Manitou.....	355
illan Bros., Poplar.....	575
os, Poplar Point.....	550
ainsworth.....	600
.....	425
s, Poplar Point.....	550
Kenmay.....	600



A Contented Group of Shorthorns.



food are insoluble, and can be but slowly brought into a form that is suitable plant food. Hence we cannot waste these materials, and it is only by practicing good methods of cultivation that we can render them available. To bring this about is one of the great functions of decaying organic matter.

But even when we have plowed down all the vegetable matter possible in a rotation, we may not be able to bring into an available form enough of these mineral plant-food substances to supply the needs of the crops, Farm-yard manure supplies some of these desired substances; it also contains much vegetable matter and is loaded with germ life, so that it quickly decays in the soil and thus helps to bring the stores of mineral food into an available form. Yet, even the manure and the food got from the soil constituents may not furnish all that is required to produce maximum crops. Naturally the stable manure is applied for the root and corn crops, because these are the crops that take up large amounts of food, and the lighter-feeding crops follow later in the rotation. Even in this class of farming and when fairly large quantities of manure are made and applied, supplementing with special fertilizer constituents may be decidedly advantageous. The addition of nitrogenous manures to such crops as mangels and phosphates to turnips usually gives good results. At this season of the year the judicious use of nitrate of soda on fall wheat may be found profitable. Much of the heavy land of the province will respond to the use of phosphoric acid. Possibly it would not be far wrong to say, provided a rotation is being followed that makes it possible to plow down considerable vegetable matter, thus getting a fair amount of nitrogen, and that the soil is not decidedly acid, that money spent on phosphoric acid is surer to give profitable returns in increased production than any other fertilizer constituent we may purchase.

In the case of market gardens and fruit growers, where heavy feeding crops and crops of the same kind are grown year after year on the same land, the use of fertilizers is more necessary. Even if stable manure can be procured in abundance, it is probable that a better quality of material would be grown if a partial substitution with fertilizers was made. If, however, this is to be done it is essential that the grower be familiar with the functions of the various plant-food constituents and the different forms in which they may be purchased.

In general, we may say that nitrogen forces leaf and stem growth and retards maturity; phosphoric acid particularly aids in the formation of the seed and forces maturity, while potash is more especially essential for all big, fleshy leaf plants where storage of carbohydrates is important. Thus, nitrate of soda may be used very freely on such crops as lettuce and spinach, for quality is dependent upon quick growth and maturity is not desired. A similar application of a soluble nitrogenous fertilizer in growing tomatoes would probably destroy the crop by forcing the growth of a big plant that would not ripen what little fruit it did set before the frost cut it off. It may also be pointed out that while nitrate nitrogen is valuable for quick results, the organic nitrogen may be just as valuable for its continued action throughout the season.

We have comparatively little information on the influence of mineral fertilizers on the quality of garden crops, but it is probable that in these crops, as well as in many other food materials, a very small quantity of essential ash constituents may very materially affect the quality of the product. The poor keeping quality of celery grown in soil which was formerly very heavily dressed with potash, but which received little or none of this constituent in the last three years is a case in point. Schreiner's studies on the influence of potash hunger in potatoes and the possibility of malnutrition being responsible for some of the diseases that have caused so much trouble the last year or two may also be cited.

Many people imagine that a simple chemical analysis of a soil will furnish the information required to determine the kind and amount of fertilizer that may be used on a soil to produce maximum results. But such analysis only tells us how much of each constituent there is present in the soil, not the amount that is available.

Unfortunately no satisfactory method of determining the amount of plant food that will be rendered available during the growing season has yet been devised. The difference in ability of plants to assimilate food, the variation in period of growth, time of growth, and the many different conditions in the soil as influenced by weather, season, etc., render it difficult, if not impossible, to determine what amount of plant food will be rendered available during the growing season. The chemical analysis does show what amount of plant food material there is to work on, and the decaying organic matter is the natural agent for bringing it into an available form. Good cultivation hastens the action. It also increases the possibilities of good root development, and, consequently, increases the feeding power of the plant. Therefore, it will be seen why factors are so important, and they should go hand in hand with the use of fertilizers.

If the seed grain is not extra good, run it through the mill once more.

Make a thorough test of the seed corn before planting. Vitality is quite important and one must have germination before a crop can be started.

Pastures and new seeding can often be improved by the use of the roller. In most cases the rains have beaten the soil down but where the plants have heaved badly the roller might still do some good.

## CANADA'S YOUNG FARMERS AND FUTURE LEADERS.

### Don't Disparage Your Job.

EDITOR "THE FARMER'S ADVOCATE":

This question of how to keep our young men from leaving the farms is a problem which as yet has not been solved, as they are daily flocking to the cities. The reason which is generally given for this is that the farms lack the modern conveniences and pleasures which the city has. This is an inducement which lures a few to the city; yet, if such a small thing as modern conveniences and pleasures, and I might add an easier way to make money, is taking some from our farms, we are much better without those which it takes, for if their idea of life is no larger than pleasure and money they have lost life.

Every young man at some time or other has the desire to do something great and good for the world. That is, he has ambition. Given that ambition he has to have something on which to work out that ambition and where better than on a farm. But he does not see it that way and why? The answer to that "why", is this. Farming is not held in as high a social light as it should be. I'll admit there are some people who take the proper view of farming; but speaking generally and of people in general it is not held in as high a social scale in our country as it should be. True it is one of the grandest and noblest callings but people do not see it in that way. This I think is the reason our young men leave the farm.

The farmer has too poor a conception of his occupation. I think the idea is growing among the farmers that he has not much of a job. Now this is a wrong idea and the sooner it is got rid of, the better; for what is more natural than that our young men get hold of the same idea and subsequently leave the farm.

I believe it is the purpose of the U. F. O. to raise farming up to a higher level, but from the meetings I have attended I have come away with the impression that this purpose is being lost sight of by a desire to make more money easily. Oh! that almighty dollar. When are people going to get hold of the idea that there is more in life than money. True, it is a necessity of life, but when it becomes our all we lose our life.

When we start out to farm let us get in a mad rush to see who can get rich the quickest and get off the old farm to the city to have a good time. For we will not find the good time waiting for us there. It is contrary to natural law that we can jump from work to vain pleasure-seeking and enjoy ourselves. It is well that is so, for what a poor end in life that would be.

When we start out to farm let us enjoy the work; not merely the money it gives, but the work in itself, for therein comes true joy. Let us make our farm life such that when we come to our declining years we will be able to say: I have had the best life that was possible right here on the old farm.

What we must instill into our young minds is a love for the farm. Make them feel that the biggest thing in life is not dollars and cents, but instead, how much greater it is to be able to go out and commune with nature, to be able to listen to her whisperings on every side and to put it simply, to feel nature.

Victoria Co., Ont.

JUNIOR FARMER.

### Congeniality in Farm Life.

EDITOR "THE FARMER'S ADVOCATE":

Before rural life is attractive there must be a strong community spirit of friendliness and sociality tinged with sympathy, and devoted to the enlightenment and happiness of the younger generation.

Humanity is devoid of strong discerning facilities. Farmers are heart-broken to see their sons regard with disdain and contempt the old homestead. They cannot fully comprehend why the youth's ambitions and aspirations are so different from their own. Nevertheless the reason is obvious to a student of human nature. A philosopher said, "If people harbor opinions adverse to the beliefs of others, it is only because they have inherited different instincts of character, or the environment has so greatly modified their traits, that it is by their own ignorance, they fail to understand each other." In all probability the inherited characteristics of father and son are quite similar; therefore the environment must be accountable for the variances.

The early days of the modern country boy are spent in school, and here we find the seed of attraction, which lures him from the land. Early mental culture is a necessity. An education is invaluable, since it is essential for the development of brain power, as exercise for the healthy growth is of muscle. If, however, the acquirement is limited to the gaining of knowledge, which is of no practical value to a young farmer, it is evident that the growing powers of intellect in the community will be concentrated upon study unrelated to agriculture. In the average school the student is taught geometrical theorems and dead languages, but not a word of the composition of the ground he walks upon, or of the growing plants about him; he studies geography and learns the curious animals in foreign countries, but finds out nothing concerning the proper care of farm stock, which he perhaps feeds twice a day; he discovers the properties of elements and compounds but fails to find out the symptoms of the common diseases of our domestic animals. Ultimately, the education renders him incapable of being contented with the

farm, he is prepared instead for a law office, commercial enterprise, or other city vocation.

The Junior Farmers Association may counteract this defect in our educational system, if they will petition and interview the high school boards of each district, requesting and urging that they engage the services of an agricultural teacher. Moreover, the organization may make farm life more interesting, educative and inspiring by establishing a Science Club Library in each locality. I would not infer that the majority of farm homes are without suitable reading material. Many of them contain valuable books, but literature of the educational variety, such as the ambitious youth desires to read, is often sufficiently expensive to prevent its purchase. Libraries are constantly being stocked with cheap literature, fictitious tales without an atom of truth, while the desired types are rarely seen. Fiction at its best can only teach us a little of the English language, or excite our emotions; science books and studies of nature, develop clear and independent thinking, teach us practical lessons, show us a real beauty in life and are in themselves a lasting source of information which would enable even the poorest farmer's son to work more scientifically, and indirectly place at his disposal money with which he could beautify his home and purchase better live stock and farm conveniences.

"Man liveth not by bread alone." Recreation is necessary for vigor and longevity. The play spirit should prevail among the junior farmers. Dignity and ceremonies should be laid aside at times. Athletic Associations should be formed and the young fellows dress in old clothes and have a good time in an old-fashioned rough-and-tumble style once a week. The program should consist of running contests, tug-of-war and wrestling matches, anything in fact, which combines physical activity with freedom from conventional ideas.

The older people may make life more satisfactory for the boys and girls by carefully studying their character, and learning to sympathize with them in their fancies and changing ambitions, by allowing them ample time for recreation and by teaching them the beauties and superior advantages of country life. Moreover all parents or guardians should encourage sociability, but not favor the butterfly society of the cities. They should have parties regularly in their homes for the purpose of entertainment. The young people in becoming better acquainted would undoubtedly secure friends whose influence would cause them to conclude, that the country is man's natural abode, a garden of nature without an equivalent, either as a health-builder, a source of beauty, or a store of wonders.

Dundas Co., Ont.

LEONARD LA ZERTE.

### Make Your Calling Attractive.

EDITOR "THE FARMER'S ADVOCATE":

The greatest measure of success in an endeavor to improve rural conditions will result from the combined efforts of the Junior Farmers rather than from individual action; therefore, the initial movement must be to co-operate; to combine into some form of club or society, created for the purpose of improving rural life.

Following upon the establishment of a club, the next item is the procuring of a meeting place, and I would suggest the erection of a hall, size and style in accordance with the number and wealth of the surrounding population, the building to be known as a "Community Hall", erected for the purpose of holding business meetings, social gatherings educational classes, and the various rural functions for which a hall is necessary. Such a building, erected by the community for the community, and not the special property of any set or clique would prove of benefit in ways too numerous to mention. The Junior Farmers could inaugurate a campaign for this object, and the "old folk" could support them in every way possible. A drive shed in connection with this building would prove of great practical value, the provision of horse shelter permitting the attendance of those living at a distance. The club formed, and a meeting place procured, an improvement program can now be arranged.

To ensure satisfaction in any walk of life, a measure of success must be obtained and a degree of amusement or recreation must be procurable. Education is to-day one of the prime factors incidental to success; much of rural amusement is obtained by concerts, dances, and various forms of social gatherings; thus it can be shown that the club can justify its existence by providing both education and recreation to its members and the community at large. In connection with the organization, a debating society should be formed. Agricultural methods, types of stock and varieties of seed, and topics of every day interest can be discussed. Beside the beneficial influence exerted over all by this procedure, the ability to speak fluently will be developed in many, the good results of which may very reasonably be beyond calculation. Due attention must be paid to the recreative side of the question; arrange for as much social intercourse as possible; endeavor to cater to the varying tastes of the community; increased opportunity for meeting one's neighbors produces a sense of satisfaction with one's surroundings, make the community hall the social centre of the neighborhood and much of the discontent at rural conditions will vanish.

Congeniality of conditions can be improved individually by the adoption of modern methods of farming, with the introduction of as much labor machinery as possible. This is a machine age, and in the manufacturing world few operations are performed manually that can be more easily performed mechanically; and the same rule is applicable to the farm. The milking

machine, lift increase the folk can mal to the young circumstances increased efficiency this work circumstances d put in a kitchen woodshed or to and from save mother for every little tion along the numerous wa house, thereby for the women machinery in handiness of for much rural naturally wish in convenient conditions do is sought, usu young farmer be materially represented, because "Dad proposes to ha ers and test legislate for ag Therefore, cultural world surroundings at education and improvements, all callings, ha endeavor to c disposition an many counter-city. Temiskaming

## AUTOM AND

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stead for a law office, commercial city vocation.

Association may counteract this system, if they will petition school boards of each district, that they engage the services of Moreover, the organization more interesting, educative and a Science Club Library in each town, that the majority of farm reading material. Many books, but literature of the type, the ambitious youth desires to prevent its constantly being stocked with tales without an atom of types are rarely seen. Fiction each us a little of the English emotions; science books and up clear and independent thoughts, show us a real beauty, a lasting source of information even the poorest farmer can appreciate, and indirectly place at which he could beautify his live stock and farm com-

breed alone." Recreation is longevity. The play spirit the junior farmers. Dignity is laid aside at times. Athletic and the young fellows have a good time in an old-style once a week. The of running contests, tug-of-war anything in fact, which combines freedom from conventional ideas. They make life more satisfactory by carefully studying their characteristics with them in their ambitions, by allowing them and by teaching them the advantages of country life. More should encourage social butterfly society of the cities. regularly in their homes for ment. The young people in ed would undoubtedly secure could cause them to conclude, a natural abode, a garden of ent, either as a health-builder, ore of wonders.

LEONARD LA ZERTE.

### ing Attractive.

OVOCATE":

of success in an endeavor to will result from the combined efforts rather than from individual effort. A movement must be to some form of club or society, improving rural life.

establishment of a club, the a meeting place, and I would size and style in accordance with the surrounding population known as a "Community of holding business meetings, educational classes, and the variety of a hall is necessary. Such a community for the common property of any set or benefit in ways to numerous Farmers could inaugurate a and the "old folk" could possible. A drive shed in holding would prove of great on of horse shelter permitting living at a distance. The place procured, an inow be arranged.

any walk of life, a measure and a degree of amusement variable. Education is to-day incidental to success; much gained by concerts, dances, gatherings; thus it can be ly its existence by providing on to its members and the connection with the organization be formed. Agricultural and varieties of seed, and can be discussed. Beside orted over all by this pro- fluently will be developed which may very reasonably e attention must be paid e question; arrange for as sible; endeavor to cater to munity; increased oppor- neighbors produces a sense surroundings, make the centre of the neighborhood at rural conditions will

ns can be improved in- modern methods of farm- as much labor machinery ne age, and in the manu- s are performed manually rmed mechanically; and o the farm. The milking

machine, litter carrier, etc., lighten the barn labor, and increase the efficiency of farm operations, and the older folk can make the farm more congenial and attractive to the young by installing such devices when financial circumstances permit. The same opportunity for increased efficiency exists in the house, and much of this work can be performed by the juniors. If circumstances do not permit of a complete water system put in a kitchen sink and drain, place the pump in the woodshed or kitchen and obviate the carrying of water to and from the house; install a "dumb waiter" and save mother or sister a journey down and up stairs for every little item wanted from the cellar. Investigation along these lines will reveal to the young farmer numerous ways in which he can lighten labor in the house, thereby providing more attractive surroundings for the women folk. The use of obsolete methods and machinery in farm operation, and the absolute unhandiness of many farm homes is largely responsible for much rural exodus. The young and developing mind naturally wishes to be modern and up-to-date, operating in convenient and efficient circumstances, and if rural conditions do not permit of this a fresh field of activity is sought, usually far removed from the farm. The young farmer should remember that rural conditions will be materially improved when agriculture is properly represented, hence he should not vote Party merely because "Dad" does; support an organization that proposes to have the industry represented by its followers and test the theory that a farmer could better legislate for agriculture than a lawyer or physician.

Therefore, Juniors and Seniors, both of the agricultural world, if you would have your calling and surroundings attractive, organize and co-operate, provide education and recreation, be modern and embrace improvements, remember there are disadvantages to all callings, have your industry properly represented, endeavor to cultivate and observing and analytical disposition an you will perceive that nature offers many counter-attractions to the lure and lights of the city.

Temiskaming Dist.

NORTHERN SCRIBE.

### AUTOMOBILES, FARM MOTORS AND FARM MACHINERY.

#### Cleaning Reflectors.

How can I clean the reflectors in headlights of car without spoiling the high polish, which is given them.

D. H. B.

Ans.—The reflectors of head-lights are covered with a composition that is very easily removed by rubbing. It is almost impossible to restore the polish to reflectors. By the gentle use of a cloth soaked with alcohol, a beneficial effect is sometimes secured. AUTO.

#### Things to Do and Things Not to Do to Insure the Long Life of a Rope.

1. When taking it from the coil always remove it from the centre by laying coil flat on floor with inside end at bottom and pulling this end up through the centre.
2. Do not drag the rope over the ground, over sharp or rough objects. Do not drag one part of a rope over another part.
3. Do not store away rope when it is wet. Dry it thoroughly.
4. Do not store rope near places where any kind of acid is stored or where acid has been stored. The slightest trace of acid will shorten the life of a rope. Keep the rope out of the reach of animals.
5. Slings and small ropes should always be hung up in dry places that are well ventilated. Large ropes should be stored on gratings raised above the floor.
6. When ropes are to be spliced or knotted follow the accepted rules for the best knots and splices.
7. Always buy good rope; it will pay you. Remember that human life and property are often jeopardized by the breaking of a rope. Use care.

#### The Vacuum System.

There are three methods by which gasoline is fed through the carburetor to the combustion chambers of a motor car. The simplest idea is that of gravity, the gasoline tank being placed at some point in the car well above the carburetor. One position is under the front seat, and another under the cowl. The simplicity of this arrangement recommends itself very highly, but there is always the difficulty that when the tank is practically empty, and the machine going up a grade, that the gasoline will not feed into the carburetor. Instances are not common where under these circumstances drivers have been compelled to back their cars up stiff hills. There is another disadvantage to the gravity system, and it is contained in the fact that perhaps the safest place to carry fuel is at the rear of the car, where it is away from dangers due to passengers smoking or the car turning over in a ditch. You can readily understand that a gasoline tank working under the gravity system cannot be placed at the back of the body unless it is at a point higher than the carburetor, and this for obvious reasons is out of the question.

The second system of gasoline supply is what is commonly called "air pressure feed." This invention calls for the development of pressure by pumping and,

of course, makes necessary a series of pipes. The inconvenience of such a method has not recently met with much popular favor.

At the present time the vast majority of better class cars are equipped with a vacuum gasoline system, which makes use of a small tank, installed under the engine hood cover at a point above the carburetor. This little tank is connected by means of thin tubing to the intake manifold, to the gasoline storage tank, and to the carburetor. When a motor is in operation, and the pistons are going up and down, their action calls for gasoline through the carburetor. It is this pumping of the pistons that pulls the gas from the fuel supply, wherever it may be located, into the vacuum tank. There are two chambers in the vacuum system, the upper one being for filling, and the lower one for emptying. There is a valve between the two chambers that closes when the suction of the pistons on the intake stroke establishes a vacuum in the upper chamber. Of course, you are familiar with the fact that nature abhors a vacuum, and so when the vacuum has been created it develops a suction of fuel from the gas tank. This, in a general way, will give you some popular ideas regarding systems of gasoline feeding. There are very few things that can happen to embarrass the gravity method. If the pipe from the tank to the carburetor becomes blocked with foreign matter, you will simply have to clean it out by air pressure or a thin wire. Any other troubles that may arise can be easily remedied, because the system itself is as simple as ABC. When your pressure method of fuel supply becomes difficult of operation, it might be well to command the services of an expert, unless the trouble is very apparent and easily cared for.

The main things to remember about a vacuum tank are these: when a leak occurs in the outer wall, a simple job of soldering will restore matters to normal. If you find a leak in the tubing, either put in a new part, or have the vent closed up by a mechanic. Sometimes the carburetor connection in the bottom of the tank may become loose. It is an easy matter to tighten it up. It will be a wise policy on your part not to tamper with the vacuum system until you are sure that the difficulty you are attempting to locate is not in some other piece



Fairview Posch.

Highest priced female at the Canadian National Holstein sale, Toronto, April 10 and 11. Consigned by A. E. Hulet, Norwich, and sold for \$1,380.

of mechanism. Bear in mind that if "tickling the carburetor" brings the gasoline along, that the vacuum system is doing its work. Should occasion arise to remove the top of the tank, the utmost care must be exercised in replacing it as the joint, from the very nature of the work required, must be air tight. Sometimes a hole develops in the float. When this happens, bore another hole in order that any gasoline inside of the float may be poured out. Then solder up both holes and test the float in water, making sure that the leak has been repaired. Sometimes dust and dirt and foreign matter gets into the gasoline supply tank, and runs along the feed pipe to the vacuum system. In order to prevent trouble, there is a screen in the vacuum system where the gasoline enters. It will be a good idea to clean this screen at frequent intervals in order that the passage of the gasoline may not be blocked. It might also be a good idea for you to drain your gasoline through a screen or chamois, when filling the storage tank; or if it is not possible to do this, make it a rule to clean out the vacuum system once every two or three months. AUTO.

### THE DAIRY.

At the Oregon experiment station it was found that the loss of fat in whey with careful handling, during the process of making cheddar cheese was about 10 per cent. greater with pepsin than with rennet.

About 90 per cent. of the foreign solid matter in bottled milk, settles to the bottom of the bottle where it may be seen. It has been found that 83.72 per cent. of fresh manure and 10.96 per cent. of air-dried manure is soluble in milk, so that every care should be exercised to keep milk from becoming contaminated.

From experimental results secured at the Iowa Agricultural Experiment Station it was found that with the continued use of pure-bred Guernsey, Holstein and Jersey sires, the first generation produced an increase of 45 per cent. and the second generation 110 per cent. of milk over their scrub dams and grandams. The increase in butter-fat was 39 and 102 per cent. respectively.

A writer in a recent issue of the Journal of the American Medical Association concludes that "certified milk, produced with scrupulous care, under the oversight of a reliable medical commission and then properly handled in the home, is the ideal solution of the milk problem, at least as far as the delicate infant or invalid is concerned." This conclusion followed a general discussion of the properties of raw milk and the alteration of some of these properties by heating the milk.

Experimental data from 29 cows, collected in Kentucky shows that fat production declined on an average .1 pound and milk production 1.5 pounds on the day of most evident heat. Some cows were not affected by oestrus and a few increased slightly in milk and fat production, while a few sensitive or nervous cows were greatly affected. One cow dropped from a test of 3.7 in the morning, at the onset of heat, to 1.9 at night, while the next day her test rose to 7.3 per cent of fat.

A recent writer in the Journal of Agricultural Research shows that all samples of high class corn silage examined, contained lactic, acetic and propionic acids. The crops and crop mixtures under examination from which first-class silage was secured and which showed an acid fermentation similar to corn silage were as follows: Oats and peas in any proportion, oats, peas, wheat and peas, clover, and clover and wheat straw. A mixture of alfalfa and wheat straw made silage unfit for feeding purposes.

#### Act to Regulate the Purchase of Cream.

Dairymen will remember that the Ontario Legis-

lature passed an Act in 1916 called the Dairy Standards Act, the object of which was to improve the quality of dairy products and to make the payment of milk and cream by test, compulsory in the Province. This Act was not enforced and is not in force now, although there have been some representations made recently to the authorities, to the effect that the important principle of paying by test should now be adopted.

At the present time the Ontario Legislature has passed or is about to pass an Act to regulate the purchase of cream. The following is a copy of the provisions of the Act, one or two of which are taken directly from the Dairy Standards Act:

"1. This Act may be cited as The Act to Regulate the Purchase of Cream.

"2. All cream purchased for sale, shipment or fat content.

"3. (1) In determining the fat content of cream supplied to a factory, the sample of cream taken for testing shall be weighed into a test bottle officially stamped and shall weigh 9 or 18 grams.

(2) Every person who makes a Babcock test of milk or cream supplied to a factory shall proceed in accordance with the official method and shall observe the details of making and reading the test as set forth in Bulletin No. 266 of the Ontario Department of Agriculture, or revised edition of the same.

"4. Any person who violates any provision of this Act or who falsifies in any way, or over-reads, or under-reads the Babcock test, shall, upon summary conviction thereof be liable to a penalty of not less than \$10 nor more than \$50.

"5. For the purpose of carrying into effect the provisions of this Act or any section of this Act according to their true intent, the Lieutenant-Governor in Council, on the recommendation of the Minister of Agriculture may make such regulations as may be deemed necessary, advisable or convenient, and may impose penalties for the violation thereof, and such regulations shall have the same force and effect as if incorporated herein.

"6. The penalties imposed by or under the authority of this Act shall be recoverable under the Ontario Summary Convictions Act."

It is also proposed to change the legal standards for butter fat and total solids in whole milk, from 3 per cent. of butter fat and 12 per cent. of total solids to 3.25 per cent. of butter fat and 11.75 per cent. of total solids.

This Act may be said to be the direct result of work done by the Ontario Milk and Cream Producers' Association and is levelled at a few unscrupulous creamery operators who have been detected, during the course of some preliminary investigational work, in paying for cream on a basis of test lower than the



regular method really shows. The Ontario Milk and Cream Producers' Association first made some 47 tests on behalf of certain members and found that there was a variation between test and payment of as much as 3 per cent. on the average. Then over 200 tests were made by a Government tester at the instigation of the Association and the result showed similar variations running as high as 5 per cent., always favor-

able to the creameryman. The Association then pressed hard for legislation to take care of this difficulty and after several disappointments are securing it this session. It was important to secure easy conviction in case of violation of the Act and to secure also some definite pronouncement as to how a cream test should be conducted. The Act given above is a copy of it as it was before passing the committee stage in the House. Amendments

are, of course, possible between this stage and its final passage as an Act of legislature. This kind of legislation is not necessary to regulate the dealings between farmers and most of the creamerymen. It is always a few unscrupulous men who make legislation necessary for us all.

## Rotation for Dairy Farms.

The principle of crop rotations is well grounded by now in agricultural practice and it is almost commonplace to say that several economies are secured by the adaptation, whenever possible, of a systematic rotation in the growing of farm crops when one considers labor saving, the control of weeds, the control of root insects and the maintenance of soil fertility, the advantage of so planning the crop area as to bring out the full plant feeding capacity of the soil and to minimize the amount of labor involved in keeping the farm clean, is very great. From the very nature of dairying, a rotation for dairy farms must, of necessity, differ somewhat from that applied to mixed farms. A representative of "The Farmer's Advocate" recently visited Macdonald Agricultural College, Ste Anne de Bellevue, Quebec, and discussed this question with Professor H. Barton, Chief of the Animal Husbandry Department. Professor Barton is also superintendent of the large farm at the college and because dairying is such an important industry in Quebec, a very large dairy herd must be maintained. In fact, any rotation followed on the farm must be such a one as would be suitable for a dairy farm, because of this fact.

We were very much gratified to note a decidedly practical turn to Professor Barton's ideas on crop rotations. So often one finds that advocates of the principle of rotation seem to leave the impression that if it is not a cure-all for the ills of the farm it is at least something which should be adopted—rarely are we even told it should be adopted—on every farm regardless of the peculiar conditions that may have to be met. At Macdonald College the principle of rotations is very firmly adhered to it is true, but not with a slavish consistency which so often repels the practical farmer who, when told that a certain rotation if applied to his farm would appreciably increase the fertility of his soil, finds that while this may be true, the same rotation increases his labor costs, or would force him to grow on certain fields, crops that would be much more successful elsewhere. Actual experience on the farm at Macdonald College and a careful study of the principles of farm management have taught Professor Barton that the size, shape and soil of the farm and the climate, labor available and the character of the seasons must all be considered before a dairy farm may be intelligently operated under a system of rotation.

The one object in each and every dairy farm rotation," said Professor Barton, "is to get the greatest possible amount of coarse feed. A dairy farm is primarily a live-stock farm and the amount of roughage grown is really the one factor which limits the amount of live stock that can be kept on the farm. We have recently had figures made public which substantiate markedly the time-worn statement that live stock is the bulwark of agriculture in Canada. One needs only to refer to the recent results of farm survey in Oxford County, Ontario, to see that to a far greater extent than upon grain crops the labor income of a farmer depends upon quality and numbers of live stock he is able to raise. It is for this reason then, that when planning a system or systems of rotation for a dairy farm, one must ever keep in mind the dairy cow and her position of fundamental importance in the farm scheme. With this as a start it is easy to arrive at the conclusion that roughage must form the basis of the rotation, just as it is the basis of the feed of dairy cows. By roughage I mean silage, clover, mixed grain and roots, in order of importance. I am not in favor of growing large acreages of grain on dairy farms, for the reason given above, namely, that every additional field of grain limits the amount of live stock that can be raised, because it leaves that much less room for roughage. We take the ground here that the dairy farmer can buy fertilizers more cheaply in the form of cottonseed meal, gluten feed and oil cake than in the form of artificial fertilizers. This is not to say anything against the use of artificial fertilizers and there are many cases where their use will prove profitable, but the first consideration should be economy. That is only good business. Once the roughage is provided for, it stands to reason that as much grain should then be grown as possible.

"An ideal rotation to my mind would be a three year rotation of hoed crops, grain and clover, corn being grown to the extent of from 20 to 25 per cent. of the whole area, having a few acres in the hoed crop area for roots and potatoes, or, if desired, for mixed grain, for hay or green feed, to be followed by after harvest cultivation. The prize winning farm in Quebec some time ago was cropped so that over 25 per cent. of the area was in corn, but very frequently this acreage would be too much so that 25 per cent. may be taken as the limit for the average dairy farm. Generally, however, an ideal standard rotation for the whole farm is very hard to achieve. Very often there are only certain portions of the farm where roots do well and it is, moreover, usually poor business to put the back acres of the farm into the same rotation as the fields nearer the barn. Farmers usually like to have the root field somewhere near the barn and for very good business reasons too, because the field is then handy enough so

that one can put in an hour or two there before the fields are dry enough for drawing in, with the minimum waste of time in changing work.

### Separate Rotation for the Back Acres.

"We have found it necessary here to adopt a separate rotation for the back part of the farm so as to reduce labor costs and we grow only those crops that can be produced with a minimum of labor. Pasture crops fit in well in this part of the farm, and hay crops also; and I am of the opinion that there are only a comparatively few farms where a single rotation can be applied to all fields. We find that a six or seven-year rotation works out very well for the back acres, and it would work out equally well for a great many other farms where it is not possible or practicable to grow so much corn. I would suggest 2 years of grain, 2 of hay and 2 of pasture for this rotation. If dairy pasture is plowed up and followed with oats the next year, a fair crop should be secured. Then an application of from 12 to 15 tons of barnyard manure should pave the way for a heavy crop of mixed grain, such as peas and oats. This may be used either for hay or grain. If the land is particularly strong it may not be wise to seed down to clover because the latter would not come along under such a heavy crop and another year of grain should then be added. This being the case, the peas and oats will come off early enough to leave opportunity for after harvest cultivation. The next year, for the third crop of grain, the field should be clean, a good grain crop should be expected and the seeding of clover should stand every chance of coming through nicely. If the land is not too strong, as already mentioned, only two crops of grain instead of three would increase the relative amount of roughage and reduce the labor cost. It will be noticed that manure is applied to this rotation only once during the six or seven years. If it is necessary to supplement the regular manuring previous to the mixed grain crop, this can be done by topdressing for the second crop of hay. I like to seed land that is in good shape, but believe it is possible to carry this idea too far."

As a supplement to the very practical remarks just quoted from Professor Barton, we quote also the following paragraphs from a recent monthly bulletin of the Ohio Agricultural Experiment Station on the same subject:

### Effect of Continuous Culture.

"The full plant-feeding capacity of the soil can only be secured through crop rotation, because different crops have different capacities for utilizing the different elementary substances required for their growth. For example, out of the same soil an acre of clover will take about five times as much lime as would an acre of corn, and more than ten times as much as would an acre of wheat. From this fact it would be expected that clover would suffer from lime deficiency sooner than corn or wheat and this is precisely what the long-continued experiments at the Pennsylvania and Ohio experiment stations have shown. The same principle applies to the other essential elements. At the Ohio Experiment Station, corn, oats and wheat have each been grown continuously on the same land on the one hand, and in rotation with each other and with clover and timothy on the other for twenty-five years, each crop being grown every season. Taking the first and last five-year periods the average annual yields on continuously unfertilized land have been as follows:

### Effect of Continuous Culture and Rotation of Crops

	Average Yield per acre.			
	First 5 Years		Last 5 Years	
	Con- tinuous.	Rota- tion	Con- tinuous	Rota- tion
Corn.....	26 3	31 9	9 1	28 0
Oats.....	28 2	30 9	20 4	45 3
Wheat.....	10 1	9 3	8 4	16 9

"During the first five years the differences in yield between the continuously-grown crops and those grown in rotation were small and may have been partly due to differences in soil; but during the last period the yields of the rotated crops have been from two to three times as large as those from the crops grown continuously.

"Part of the land in these experiments has been dressed with barnyard manure, which has been applied to the crops grown continuously at the rate of five tons per acre every year, or twenty-five tons for each five-year period, and to those grown in rotation at the rate of four tons per acre each on corn and wheat, or eight tons every five years. The outcome has been that the per acre for the first five years and thirty bushels for the last five, while the rotated corn averaged thirty-nine bushels for the first five years and forty-five bushels for the last five. In other words, the continuously-

grown corn shows a loss of thirteen bushels per acre for the last five years as compared with the first, although receiving twenty-five tons of manure during each period, while with one-third that quantity of manure the rotated corn makes a gain of six bushels per acre for the past period, as compared with the first.

"The continuously-grown oats have averaged thirty-five bushels per acre during the first period as against thirty-seven bushels during the last, a gain of two bushels, while the rotated crops averaged thirty-two bushels during the first period and forty-eight bushels during the last, a gain of sixteen bushels. In the case of the oats, however, the manure was applied directly to the continuously-grown crops, while the rotated crops got only what the corn had left, no manure being applied directly to the oats grown in rotation.

"The continuously-grown wheat averaged sixteen bushels per acre during the first period and twenty-three and a half bushels during the last, while the rotated wheat averaged eleven and a half bushels during the first period and twenty-eight bushels during the last. In each case the continuously-grown crops gave larger yields than those grown in rotation during the first five years, but after that the outcome was reversed, and the rotated crops have finished the twenty-five-year race far in the lead.

"Other parts of the land in this experiment received chemical fertilizers instead of manure, and with a similar outcome, showing that while the yields, of the smaller grains at least, may be maintained under continuous cropping by liberal use of fertilizers or manure, the cost of doing so is very much greater than when the same crops are grown in rotation with clover. In these experiments the clover has contributed nitrogen to the rotated crops; but at the Illinois Station, in so simple a rotation as that of corn and oats grown alternately, the corn following oats has given ten per cent. larger yields than the corn following corn.

### Purchased Feeds Valuable for Fertility.

"In the management of the dairy farm the system of cropping will be determined by latitude, soil adaptation and other conditions. Throughout the territory in which corn may be grown successfully the silo is being increasingly employed, a fact which is shown very conspicuously as one travels through the dairy region of Wisconsin. (Exactly the same is true in Canadian dairy sections.—Ed.) Corn is not only better adapted than any other crop for preservation in the silo, but it may be grown for silage in regions where the season is too short to fully mature the grain. But corn very soon begins to diminish in yield when grown continuously on the same land. Moreover, corn alone is not an economical feeding-stuff; so that both for quantity of yield and for effectiveness of that which is produced there must be a rotation on the dairy farm, as well as on the grain farm, in which some of the leguminous crops shall be regularly grown.

"Of late years there has been a tendency to substitute silage for soiling crops as a summer feed for dairy cattle, because of the facts that more feed per acre can be produced in corn than in any other crop, and that less labor is involved in the handling of silage than in that of soiling crops. The dairyman who is willing to be at the additional labor involved in the soiling system may have in a mixture of rye and vetch a green feed to begin on very early in the spring; this to be followed by a mixture of oats and Canada peas, supplemented by alfalfa, red clover and orchard grass; alfalfa again, corn and finishing with rape, thus making a succession beginning before the last of the spring frosts and extending until after the autumn frosts have begun, and which will fulfil every requirement of crop rotation and of furnishing a constant succession of well-balanced feeds.

"But whether the farm is run for silage or for soiling it must be remembered that dairying, when the milk is sold off the farm, is more exhaustive of soil fertility than any other form of live stock husbandry, and that unless the drain of phosphorus and calcium be met by the restoration of these elements in purchased feeds or fertilizers the time will come, sooner or later, when the land will fail to respond to the demands made upon it. The milk from an average cow will carry away from the farm in a year practically as much phosphorus as will be found in twenty bushels of wheat or thirty bushels of corn, considering the grain only, and as much calcium as would be found in two hundred and fifty bushels of corn. For phosphorus exhaustion, therefore, we may compute one cow as equal to an acre of corn or wheat, and for lime exhaustion as equal to twelve acres of wheat or corn. This calculation, it must be understood, is based on the assumption that on the one hand all the manure produced is carefully saved and returned to the land, and on the other, that all the straw and stover are returned. This point is dwelt upon because it has been so generally assumed that dairy farming promotes the maintenance of fertility,

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when the fact is that if the dairy farmer depends wholly upon his own farm for his feeds and purchases no fertilizing materials he will exhaust the fertility of his soil as certainly, and almost if not quite as rapidly, as the grain farmer."

## HORTICULTURE.

In growing beans in the home garden earliness is a factor. Some risk of frost is, therefore, worth while.

Spraying for oyster shell bark louse is much more important than many people seem to think. This orchard pest will kill trees just as well as San Jose scale, but it takes longer.

Be sure the spray outfit is in good shape before starting in. It may save many vexatious delays. Moreover, don't skip any more sprays than you are actually forced to.

No time should be lost in getting early cabbage plants in the field when the time arrives. If the plants have been well hardened they should stand some severe cold in the field—as much as ten degrees below freezing.

Asparagus beds should not be cut before the third year, and then only for three or four weeks. Older beds are sometimes cut for as long as 8 or 9 weeks, although 6 or 7 weeks is the usual period. Cutting should cease whenever the shoots begin to show weakness.

A strong one-year-old crown is superior to older crowns for asparagus. The richest soils are necessary to grow good crowns in one season, however, and seed should be sown in the spring as soon as the ground can be prepared. Thinning is frequently necessary to prevent the production of weak plants.

At the Illinois experiment station no marked difference was observed in the growth of trees propagated from robust scions and those propagated from scions of small diameter. It was found that there was no difference for propagating purposes between buds of large size and those of small size. Neither does it matter apparently from what situation on the tree the buds are taken.

A study of the wholesale prices and receipts of apples on the Boston market for the past 36 years shows that the last ten-year period shows a slight decrease in receipts over the previous period. Most varieties show a decrease in price for the first three periods, but with a marked increase during the last ten years. More than half the apples are received during October and November, and receipts are heaviest in November and highest in June.

At the Missouri experiment station it was found, when conducting fertilizer experiments on eight crops of lettuce and four crops of tomatoes and cucumbers, that "acid phosphate, the only commercial fertilizer which at present can be procured at reasonable prices, when used alone, gave a very consistent increase on the lettuce crops in every case, except where mulched with straw. Similar results were secured with tomatoes and cucumbers.

### Grading of Potatoes and Onions.

EDITOR "THE FARMER'S ADVOCATE":

Of recent years a great deal of consideration has been given to the question of onion and potato grading. Many large marketing organizations have recommended that steps be taken to have legislation passed which will render compulsory the grading of these commodities. Individual growers, as well as wholesale dealers, have made similar recommendations. During the four years of war, however, the Dominion Department of Agriculture, to whom these suggestions were made, deemed it wiser to direct every effort towards increasing the production of vegetables in order to save wheat, rather than do anything which might have a tendency to interfere with production. For this reason the question of compulsory grading has been left in abeyance.

About a year ago optional potato grading laws were put into effect, and were enforced by the Dominion Fruit Branch during the past season. These were satisfactory as far as they went, but as they affected only shippers who graded their potatoes No. 1 or No. 2 and did not affect those who preferred to market ungraded stock, the benefits resulting from the system were of necessity limited. With the cessation of hostilities, and with all lines of commerce and industry endeavoring to adjust themselves to the present era of reconstruction, the question has again presented itself and must now be carefully considered on its merits.

Looking at the matter in a general way, primary consideration should be given to the benefits which would result from legislation compelling growers and shippers of potatoes and onions to grade these commodities in accordance with Government standards. The greatest of these benefits would probably be the mutual understanding which would be created between buyer and seller. In the past there have been many instances of cars of vegetables being refused at destinations on account of declining markets; the result has been that the shipper, often far removed from the consignee, has been obliged to accept a lower price in order to dispose of his goods without further difficulty. There have been probably as many instances in which consignees have received goods of inferior quality, and

have been obliged to enter into extensive negotiations in order to effect a satisfactory adjustment. These and similar difficulties would be greatly lessened by a system of compulsory grading subject to Government inspection.

The marketing of very small and inferior potatoes and onions would also be prevented and a large quantity suitable for stock feed, which should never leave the farm, would thereby be kept out of our large consuming centres. In this connection it is important to note, however, that requests have been made for provision, in the wording of the necessary legislation, for the marketing of new potatoes during the months of July and August. There is a considerable demand for these potatoes, which are smaller in size than would be permissible in graded stock. Compulsory grading would also do much to aid Canadian shippers in foreign mar-

benefit to all concerned, will increase in value with each succeeding year.

Before any steps are taken in the direction of legislative measures, and before definite grades are defined, the views of representatives from all provinces will be obtained, and every consideration given to the whole question from every standpoint.

C. W. BAXTER, FRUIT COMMISSIONER.  
Department of Agriculture, Ottawa.

### The New Strawberry Planting.

The strawberry is one of the most cosmopolitan of fruits, both as to its general popularity for table use and its climatic adaptations. Like all crops that need considerable hoeing and cultivating, its chief disadvantage lies in the amount of labor necessary to ensure the best growth of plants and control weeds. On the other hand, the strawberry is easily cultivated, requires no unusual skill to produce good crops, and when good crops are produced they usually show more than average profit. This is especially true at this time, for the reason that the acreage under all small fruits has fluctuated very markedly during the last few years, with a general downward tendency, so that prices have been unusually good. Of course, one must not forget that labor, boxes, etc., have also risen in price to a very great degree, but we believe it to be pretty generally true that so situated as to get what strawberries have been a very profitable crop.

Soils for successful strawberry growing may be of widely varying type, if varieties are properly chosen and if drainage and fertility are good. However, where possible to secure it, a sandy loam is best, and it should be warm. Strawberries can be grown on low-lying land but such land is inclined to be cold and exposed to frosts. Moreover, earliness is not so likely to be secured. A southern slope is conducive to earliness, but will not necessarily produce the greatest quantity, nor the longest picking season, due to greater exposure to warm, drying winds. The earliness of the crops can be regulated to a certain extent at least by the grower, if a winter mulch of straw or strawy manure is used and not removed for some time longer than it would naturally be, or until the plants begin to suffer from lack of sunlight. Whatever soil and location is chosen, care should be given to the matter of drainage and moisture in the soil. Strawberries need large quantities of water, especially during the harvesting season which is often dry; and soils should, therefore, be of such a nature as to hold no surplus water which will prevent early growth in the spring, but will, at the same time, hold water for the ripening fruit.

Spring planting is recognized as most desirable, and where a commercial field is contemplated a year's preparation, especially if the land has been in sod, will be of great advantage in putting the soil in condition and freeing the land from weeds by the cultivation of some hoed crop. White grub is a very serious strawberry pest, and is usually much worse in land that has recently been in sod. It is on account of this serious evil that sod lands that have been down longer than one year are not recommended. Manuring for strawberries can be very heavy, but it is much better if the land is in a natural state of high fertility than if very large quantities of manure are applied especially for the strawberry crop. In such cases the manure should be applied in the fall so that it will be well rotted by spring. Manure should be well incorporated into the soil by planting time, and land should be in as fine a state of tilth as it is practicable to get it.

Fields are usually marked out with a marker, and the plants set by a man and a boy, or by men working in pairs. It is, of course, not necessary to mark deeply, but the rows should be straight and well defined. The distance of planting varies according to the ideas of



A Three-acre Potato Field on the Farm of Oswald Attwater, Timiskaming.

where growers have been so situated as to get what strawberries have been a very profitable crop.

In order to obtain an expression of opinion upon the subject of compulsory grading, the Dominion Fruit Branch has communicated with practically all the leading shippers, associations and wholesale dealers in Canada, pointing out to them the possibility of legislation being introduced. The replies received have been many, and the expression of opinion has been practically unanimous in favor of a compulsory grading



A Tree That Needs Feeding.

Trees must be well fed and vigorous to produce good crops of fruit.

system. The proportion of dissension has been only about two per cent, and this small minority is probably influenced by purely local conditions. It is, therefore, quite apparent that the introduction of compulsory grading would meet with general approval in all parts of the country.

It is interesting, in this connection, to refer briefly to the history of the Fruit Marks Act, which was introduced into Canada at a time when fruit packing was probably at its worst stage. During the past eighteen years the improvement in the grading and packing of Canadian fruit has been very marked, and at the present time the enforcement of the Fruit Marks Act consists largely of maintaining the high standard of grades which have been effected since the original introduction of these laws. It must, therefore, be expected that the grading of potatoes and onions, while of immediate



growers, but is usually from three to four feet between the rows. This may depend somewhat on both soil and variety as well, because where the matted row is used—and this is the common commercial system—some soils and varieties will make very much heavier and wider rows than others, so that more space must necessarily be allowed. However, it is, we consider, good practice to aim at the largest possible number of rows and not have them so far apart. Strawberries are usually much finer from the outside of the row. The width of the rows can also be regulated somewhat by widening the distance between plants in the row from eighteen inches, formerly a very common distance, to twenty-four or thirty inches. If the field is marked out both ways the plants will be set in rows both ways, and this will permit of cross cultivation during the early part of the season. Anything which will decrease the amount of hand labor necessary will naturally tend to add to the profitability of the crop. A very common distance latterly is about forty inches between rows, and plants twenty-four inches in the row.

Something should be said, perhaps, for the system of planting strawberries in hills. This is especially true in regard to plantings made in the home garden, but we are inclined to believe that commercial growers have more or less slavishly committed themselves to the matted row. The advantage of hill planting lies in the increased yields that can be obtained and its disadvantage in the increase in labor required. Only a very few commercial growers have tried the hill system in Canada, but some at least have found it highly successful. It may be, perhaps, that intensive hill planting would only be warranted in the case of small growers or market gardeners living adjacent to good market towns and cities, on whose farms a great deal of labor is used on small acreages, but it does seem to us that hill planting has merits that have not been sufficiently investigated. Certainly, in the home garden, where quality need not be sacrificed in any way for quantity, strawberries in hills should be the method followed, provided that the runners are kept cut off and the ground well fed and cultivated. Hills 12 to 18 inches apart each way, in good soil, will produce a surprisingly large amount of fruit of high quality.

Whatever the method of planting, only the best plants should be used. Young plants, but not necessarily the youngest, should be chosen; old plants can be picked out by the fact that the roots have darkened and have lost their vigor. Extremely young plants, formed at the last of the previous season have not developed a sufficiently strong root system to be used with the best success. A strong crown and vigorous, healthy root is the best recommendation a strawberry plant can have. After being dug, the plants should not be allowed to wilt, but should be set at once or at the earliest possible moment after removing all but two or three leaves, and shortening the roots from a quarter to a third.

Varieties of strawberries are very numerous, but the chief varieties found in commercial plantings are comparatively few. Glen Mary, Parson's Beauty, Bederwood, Senator Dunlop, Williams and Sample, are the most common; while Warfield, Splendid, Buster, Joe, Pacomoke and Brandywine are also found in varying degrees. Williams is the great favorite in the Niagara District, where strawberries are grown in largest quantities. It is a medium late variety, a good shipper and canner, hardy and a good plant maker, but has a white or green top which is very conspicuous in the condition the variety is usually marketed. Senator Dunlop is still a great favorite on account of its quality and moderate earliness, but it has lost some of its popularity and, in our opinion, some of its size, on ordinary soils. It is still, however, a splendid variety for the home garden where it is given good care. Glen Mary vies with Williams perhaps for popularity. Grown on sandy soils, it reaches a degree of size and lusciousness that makes it hard to beat as a mid-season table variety. We have heard some complaints as to it having a white tip like Williams, but this is not a general defect. Parson's Beauty is a coming variety, we believe, because it has productiveness, color, shipping quality and good flavor to commend it. It is also a variety that can be successfully grown on clay loam or loamy soils. The four varieties mentioned above are all perfect or self-fertile varieties. That is to say, their flowers possess both male and female parts, both stamens and pistils, and are thus able to bring about fertilization, and consequent fruit formation of their own accord. Other varieties such as Warfield and Sample are imperfect, possessing only pistils, the female parts, and require to be grown alongside some perfect variety to ensure the setting of fruit. This is an important point when choosing a variety. Most reliable nurserymen carry several varieties of strawberries, and many growers in the strawberry districts make a specialty of selling plants as well.

### Seed Sowing and Early Care of Vegetables.

EDITOR "THE FARMER'S ADVOCATE":

The time of sowing the seed and the early care of vegetables are very important factors in the successful growing of them. The seed of some kinds of vegetables will germinate at a temperature, and under certain conditions of moisture at which other seeds will not germinate and will sometimes rot.

Seeds of beets, carrots, lettuce, onions, parsnips, peas, radishes, kohlrabi, garden cress, salsify, spinach, parsley and leeks can be sown as soon as the ground is dry enough in the spring so that it will work well. The seeds germinate at relatively low temperatures,

and the plant will stand considerable frost without serious injury. Other vegetables such as cabbage, cauliflower and celery will also stand frost, but these are usually started in a hot-bed in order to save time in the field. Vegetables which require higher temperatures than the above in order to grow well and which are injured by light frosts are beans, corn, cucumbers, melons, potatoes and squash.

Seed of late cabbage is not sown until late in May but it will endure frost, and seed of Swede turnip should be sown late when required for the table. In order to obtain plants subject to light frosts, which are well advanced before being set out and to save considerable time the field, melons, egg-plants, peppers and tomatoes are usually started in hot-beds. Frequently lack of germination of seed is blamed on the quality of the seed, whereas it may be due to the way the seed is planted or to the rotting of the seed in the ground when certain kinds of seed have been sown too early. Small vegetable seeds are often planted much too deeply. For the smaller seeds one-quarter of an inch for the smallest to one-half of an inch for those a little larger is deep enough. If planted much deeper the seed may germinate, but the shoot does not reach the surface of the ground and the tiny plant dies. Peas, corn and beans are planted about two inches deep. In very loose soils, the surface of which dries down more than those fairly compact, slightly deeper planting may be necessary.

When the seed has germinated great care should be taken to ventilate hot-beds carefully. When the young plants come up, the frame should be kept sufficiently aired by raising the back or higher part of the sash to prevent the plants from getting spindly or weakly, when they are apt to damp off. When young plants are grown in a window in a house they are often very thick in the pot and, if in the sun and with the surface soil wet, they are very liable to damp off or scald. They should be thinned out and transplanted as soon as possible. Great care should be taken when ventilating a hot-bed when the wind is high in cold weather, as cold wind blowing directly on the plants will injure them. A board should be put at the end of the sash to break the force of the wind.

Plants which have been growing in a hot-bed or cold frame or in the house should be exposed to the open air for several days before they are set in the field, protecting them as usual at night, as if set in the field without hardening off in this way they are much more liable to be injured in cold or windy weather.—Experimental Farms Notes.

## POULTRY.

Holding eggs for incubation purposes is a necessary evil to be practiced as little as possible.

If eggs must be held for hatching, they should be kept at a temperature of between 55 and 65 degrees F.

There is a splendid market for our eggs in Great Britain, but it is the farm flock that will have to supply it.

Washing hatching eggs increases evaporation and, therefore, is not good practice, especially with artificial incubation.

There is a very slight advantage in weight of chicks hatched under hens, as compared with those hatched in incubators.

Don't let anyone fool you into believing that it is possible to tell whether an egg will hatch a pullet or a cockerel by its shape. The sexes come about fifty-fifty regardless of shape.

As a rule the majority of chicks that are alive at the end of four weeks from hatching, will live to maturity, as this period is considered the most critical in the chick's life from the standpoint of epidemics of disease.

Don't forget that to get early and profitable winter layers, all the chicks should be hatched out this month. You can't expect pullets to lay when eggs are high in price unless they are given a chance to mature first.

Eggs held for hatching should be turned daily to prevent the destruction of the tiny embryo, which steadily pushes upward and comes in contact with the shell membrane where it sticks unless the egg is turned.

### Brooding and Rearing Chicks.

Some conditions necessary for successful breeding are: a compartment which is under fairly accurate temperature control and which has a steady supply of fresh air, dryness, adequate space for the chicks, and provision for the admission of sunlight. There should also be protection from fire and against chick enemies and the place should be easy to disinfect. Some kind of heater is necessary to provide heat for the warm air compartment which is usually called a hover but there should also be a cooler place just outside where the temperature is considerably less than the temperature of the chicks' body. This is necessary to keep up vigor. Ventilation is of course, implied if a supply of pure, fresh air is to be maintained.

In cases where artificial brooders are used care should be taken to use only good grade kerosene and lamps should be closely watched. Fires are especially likely to occur in warm weather and although brooders are all fitted with temperature regulators, these are not

infallible. Frequent cleaning and trimming of the lamps is necessary and in hot weather during May the lamp should be turned down in the morning and up again in the evening. In fact the Poultry Department, O. A. C., Guelph, advises against the use of lamp brooders after the end of May.

A great many people prefer to raise even incubator chicks with broody hens because they find greater difficulty in operating artificial brooders than incubators. The following paragraphs are quoted from Bulletin 247, Ontario Department of Agriculture:

"Where it is intended to use broody hens to rear incubator chicks, the best plan is to give the hen two or three eggs out of the incubator about the eighteenth day. When the hatch in the machine is completed, take fifteen chicks and give them to the hen at night. Little or no difficulty will be experienced in getting a hen to take them even if there be more than one color represented. Seldom will she take them satisfactorily if given to her in the day time. Hens which are to be used for rearing chickens should be well dusted with good insect powder before starting. There is possibly no more potent cause of mortality in hen-hatched chickens than lice.

"If the brooder can be placed in a small portable house it is a good plan, as the brooder is thus protected from stormy, cold winds in early spring; also from the heat later on. The house protects the chicks from the weather better than a coop would, and serves as a roosting coop after they become too large to stay in the brooder. This coop can be closed at night so as to keep out all animals that might destroy the chicks. The wire front is necessary to supply an abundance of air. The movable front is a great convenience when the hen is running at large during the day. The coop is two feet high in front, fifteen inches high at the back and is two feet wide by three feet in length. The wire portion is one foot in width.

"In brooding chicks artificially one of the most difficult features to control is the temperature. We try to keep the temperature of the brooder between 95 and 100 degrees (chick level) during the first week. A good guide is to have the brooder just warm enough so that at night the chicks will sit around the outside edges of the hover with their heads sticking out through the curtain surrounding it. Be careful not to get the brooder too hot nor yet too cold, as either extreme is serious and affects the vitality of the chicks. This is very important especially during the first two weeks. After the first week the temperature is gradually lowered, generally speaking about one degree a day. It is well to remember that when chicks are put in the brooder, every fifteen chicks will raise the temperature of the brooder about one degree.

"It is advisable to start the lamp of the brooder about twenty-four hours before the chicks are put in. The floor should be covered with clover chaff or other clean litter. Musty or mouldy litter or feed should never be used about the brooder or pan in which young chicks are to be placed. Lukewarm water is put in the brooder for drink before the chicks are taken from the machine. It is advisable to supply some fine grit or coarse sand, preferably of a bright, shiny appearance."

### A Colony House for Chicken Rearing.

Poultry houses are of two general types, movable and permanent, and before building a house of any type it is wise to carefully consider what is needed, and then plan very carefully before building. Permanent houses are those built on a solid foundation, while movable houses, or portable colony houses as they are generally called, are necessarily small so that they can be moved readily from place to place on the farm by merely hitching a team of horses or one horse to them as the case may be. Portable or movable houses rest on runner sills that slide along over the ground just as the runners on a stone boat.

One can easily see that it is of great advantage to have one or more of these small colony houses, capable of being moved from place to place. It is thus possible to provide free range in amount only limited by the size of the farm, and fresh ground is to be secured by no more effort than a few minutes' work with a team. During the summer, colony houses of this type are particularly valuable as the fowls can be given the opportunity to follow fresh ground wherever it is turned up and by fitting the chickens into a crop rotation in this manner, they will gather up fairly large quantities of waste grain from the harvest fields and will destroy many insects, as well as doing their part in distributing fertility to the soil they are working on. The latter may not seem an important consideration, but the statement has been made, and we give it here for what it may be worth, that the droppings from fifty fowls will keep an acre of ground in a high state of fertility. Another estimate is to the effect that a hundred fowls running at large on an acre of ground for the summer six months, should add to its fertility the equivalent of at least 200 pounds of sulphate of ammonia, 100 pounds of high-grade acid phosphate, and 60 pounds of kaimit. These advantages of a movable house are very real, and are particularly so for the rearing of young stock during the summer. Often suitable green feed is lacking at certain times near the barn or buildings, and it is a matter of very great convenience to be able to move the birds from place to place.

Some large poultry plants use portable houses for laying stock, to avoid making the land foul by giving new range land every year. More hens per acre can also be taken care of than with permanent houses. However, for laying stock there is no reason why the

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permanent house should not prove the most satisfactory if it is properly located, leaving the portable house as best suited to growing stock that needs an abundance of free range and to the pullets in the fall. One point that needs watching when portable colony houses are used is the question of over-crowding. Once started, the young stock grows very rapidly and, unless watched carefully, over-crowding will result to the detriment of vigor. Where the farm possesses an orchard, a portable house is a splendid thing and the orchard is usually just the place for it. It can be drawn along the edge and the growing stock will have an abundance of shade, a very necessary thing during the hot summer weather. In addition to the advantages enumerated above, the outlay for these small houses is much less than for larger and permanent ones; and although permanent houses are desirable for the winter laying months, the colony house can, if necessary, be drawn up to the farmyard and used all winter.

A very cheap but serviceable house of this type can be built of two piano boxes, or it may be built in more conventional style of ordinary materials at reasonably small cost. A portable house 6 x 8 feet is a sensible size for farm conditions, and will accommodate one hundred chickens up to broiler age. It should have a board floor to be quite satisfactory, and two of these houses are quite ample where no more than 150 to 200 chickens are raised annually. Very young chicks can be put in a portable house if a good serviceable hover is provided and by enclosing a small space outside with wire netting, the flock can always be kept under control. Later, wire netting around the house will hold them until they are two or three weeks old, when they can be given free range. The hover can easily be replaced by perches when the chickens get old enough to roost.

## FARM BULLETIN.

### Canada Will Spend 350 Millions This Year on War Account.

Only one or two things of any importance have transpired in the House of Commons during the past week. Most important of these was the motion of the Acting Prime Minister in favor of a resolution to provide a sum of \$350,000,000 in addition to the estimate for the fiscal year 1919-20.

"The money is to be provided for (a) the defence and security of Canada; (b) the conduct of naval and military operations in or beyond Canada and demobilization of Canadian forces; (c) promoting of trade and industry and transportation facilities therefor; (d) the carrying out of any measure deemed necessary or advisable by the Governor-in-Council in consequence of the war, and (e) payments made or expenditure incurred during the fiscal year ending March 31, 1919, for purposes mentioned in the War Appropriation Act 1918, and in excess of the amount authorized by the said Act." The Governor-in-Council is also empowered to raise by way of loan such sums of money as are required for the purpose of making any payment authorized by any Act founded on these resolutions, and the principal raised by way of loan under this Act as well as interest shall be chargeable on the consolidated revenue fund. Sir Thomas White placed before the House a summary showing the total war expenditures by departments and commissions during the period beginning 1914-15 and ending 1918-19. The war expenditures for the year just closed, March 31, is approximately \$400,000,000. This amount, however, is likely to be materially increased because of increased payments which Canada may have to make to the Imperial Government for the upkeep and maintenance of our forces at the front. Formerly, a rate of six shillings per day per man was agreed upon to cover all supplies, equipment and ammunition used by Canadian units. That arrangement held good up to September, 1917, when it was found that the expenditure of ammunition was so far in excess of that met with in other wars that the Imperial Government suggested that the six shillings should be increased to nine shillings and four pence. Even this, however, has been found to be insufficient, and something in the nature of arbitration is now going on between the Imperial Government and the Overseas Dominions, the Auditor-General for Canada having left for London with a firm of chartered accountants to represent the Canadian Government in the enquiry. Sir Thomas White estimates that the estimated expenditure of the Department of Militia and Defence will be \$91,000,000 for Overseas account and \$184,000,000 in Canada, other departments, including agriculture, interior, justice, inland revenue, etc., amounting to \$21,000,000. The balance of the \$350,000,000 will, according to the Acting Prime Minister, "be used for the purpose of providing credits which it will be necessary for Canada to provide in connection with the financing of our export trade, Canada will have to continue to provide dollar credits for the purchase of many of our foodstuffs and manufactured products. The United States has been obliged to take the same course and upon a much larger scale. The ordinary commercial and financial methods by reason of the machinery of international credits and exchange having been thrown out of gear by the war are no longer effectual for the purpose of enabling us to carry on our international trade."

Sir Thomas went on to explain that owing to the break down in international exchange between Europe and America there has not been a free exchange market in New York for the last two years. The Imperial Government has maintained sterling exchange on an artificial basis by "pegging" it at \$1.76. Very large sums of money had to be provided as dollar credits in New York for the purpose of holding exchange to this figure. Necessarily, therefore, imports were restricted by Great Britain and continental Europe so as to limit the amount they had to provide in order to hold up exchange. This brought about the creation of an Allied Purchasing Commission and as an instance of inter-Allied buying the Wheat Export Company was the sole purchaser of wheat and flour for the Imperial Government in Canada. Many of the restrictions imposed during the war remain good to-day; as, for instance, wheat, flour and beef, and until recently bacon also. Credits to provide for the sale of our agricultural and manufacturing products can only be provided by means of credits in Canada for Great Britain and other Governments. The indebtedness of Great Britain to Canada to date is about \$200,000,000, not taking into account the extra charge which we shall have to pay for ammunition. "In addition to what the Government has done in the way of providing credits in Canada for Great Britain, the banks of Canada have also substantially helped the Imperial Government by making advances for the purpose of purchasing grain and other Canadian products during the past three years," said Sir Thomas.

"When the war came to an end we thought it highly desirable to offer credit, not only to Great Britain but to other European countries as well, to finance purchases which they might make in the Dominion. So far the French Government has not felt that it required Canadian credit. We entered into negotiations with Belgium with the result that a credit of \$25,000,000 has been arranged for under agreement. An agreement was also entered into with the Roumanian Government for a credit of \$25,000,000. There is also a \$25,000,000 credit to Greece. With regard to the European countries of one-fifth of these credits will be for agricultural products, one-fifth for raw material, and three-fifths for manufactured products." We did not understand Sir Thomas to say, however, that this arrangement held good with regard to the purchase of wheat, flour and beef by Great Britain. Referring to the policy of providing money for credits, Sir Thomas said that what we are doing to-day we shall not be able to continue to do. Just as soon as free markets are obtained, credits will not be necessary, and retrenchment must be the order of the day as soon as we get through the present trying period. He further said that Canada has much to be grateful for in what Great Britain has done in a financial way in order to enable her to purchase to the utmost of her power in Canada.

On Monday, April 14, W. F. Nickle, Kingston, moved an address to His Majesty the King praying that He refrain from conferring any titles upon Canadian citizens. The motion had no reference to professional or vocational appellations as regards persons serving in the military or naval service, or those engaged in the administration of justice. Mr. Nickle repeated largely his speech made at the last session of Parliament on the same subject, when, as will be remembered, Sir Robert Borden peremptorily stopped the discussion by declaring that the motion would be considered as a want of confidence motion. Mr. Nickle discussed the question very fully and reviewed the history of the various orders of a chivalrous nature created from time to time by British monarchs. Following Mr. Nickle, a rather protracted discussion was carried on in which quite a few members expressed their disapproval of titles, especially of the hereditary variety, in Canada. F. F. Pardee, Lambton West, perhaps voiced the opinion of the majority of the members both in regard to the matter of titles and Sir Robert Borden's action last session. He said: "My own opinion is that titles are not good for the country, and I have very grave doubts whether they are good for the persons upon whom they are bestowed. It is indisputable that the vast majority of the people are bitterly opposed to titles being handed out. It was in May last that the question of titles came up in this House and we had the very extraordinary spectacle of the Prime Minister, upon a private member's resolution, suddenly taking to himself the right to say that that resolution should be treated as a want of confidence motion, and that did the resolution carry he would feel it essential that his Government should resign and go to the country. A general election in May, 1918, would have been an absolute calamity. I was returned on the question of conscription. At that time conscription had not been carried out, and had I voted against the Government on this subject, and had the Government been defeated, it would have meant the destruction of business, and it would have meant that I was not carrying out the mandate of my constituents. Therefore it was that I absolutely sunk my own convictions and that I stood by the Government. I do not consider that such is necessary to-day, but I do consider that so far as this country is concerned we must come to one form of Government, and one only, and that is the party system."

Sir Thomas White pointed out that the recommendation of persons for honors was common to both political parties when in power, and further stated that Sir Wilfrid Laurier, in 1902, and Sir Robert Borden, in March 1918, had both endeavored to control the disposition of titles in Canada, and that the latter, in an Order-in-Council issued March 1918, said: "The Prime Minister is firmly of the opinion that the creation or continuance of hereditary titles in Canada is entirely incompatible with the ideals of democracy as they had

developed in this country," and further said, "the hereditary peerage as an institution can find neither historic justification nor scope for usefulness in a State structure and social tradition such as that which now exists in Canada." During and since the last session of the House, representations have passed between the Canadian and Imperial Government on this subject with the result that in the future no hereditary title of honor will be conferred upon a subject of His Majesty ordinarily resident in Canada, nor will any honor or titular distinction be conferred upon a Canadian citizen except with the approval or upon the advice of the Prime Minister of Canada, military honors excepted.

After a great deal of discussion, in which quotations from holy writ were thrown about most promiscuously, and in which most of the men who have no titles urged that none be granted to anyone else, Sir Thomas White moved in amendment that a special committee of the House be appointed to consider and report upon the question of honors, titular distinctions and decorations, both civil and military, upon Canadian citizens. By a vote of 71 to 64 the amendment of the Acting Prime Minister was passed, and a committee consisting of Messrs. Nickle, Green, Peck, Buchanan, Clark (Red Deer), Thomson (Qu' Appelle), Cowan, Richardson, Whidden, Nesbitt, Middlebro, Pardee, Cockshutt, Murphy, McCoig, Ross, Ames, McMaster, Lemieux, Robb, Fielding, Elkin, Copp, McCurdy, Sinclair (Guysborough), was appointed.

The other matter of importance discussed was a Bill to provide for the incorporation of the Canadian National Railway Company under which the railways, works and undertakings of the companies comprised in the Canadian Northern System may be consolidated, and together with the Canadian Government railways, may be operated as a national railway system. Hon. J. D. Reid, Minister of Railways and Canals, undoubtedly has the honor of having constructed the longest sentence in the history of the English language. Someone who has taken the trouble to work it out discovered that it contained 1,300 words, 71 commas, 33 semi-colons, 2 parentheses, and one lone period. A very long discussion followed the moving of this resolution, but it was finally passed and the Bill read the first time. F. S. Cahill, Pontiac, roused the ire of the Minister during the discussion by referring somewhat disparagingly to D. B. Hanna, President of the Canadian Northern Railway System. The Minister said: "I say that D. B. Hanna is an honest man, one of the straightest men in Canada, and if the honorable member will repeat over his own signature in the newspapers to-morrow morning what he has said here to-night about graft going on in connection with the Canadian Northern Railway Company, I am more than satisfied he will get all the information he wants, and will have no more trouble in so far as making statements of this kind is concerned. The honorable member has insinuated that the members of this Board were appointed for political reasons. Two members of that Board were employees of the Canadian Northern, and I would like to see any man in this House or out of it make any statement against the character or reputation of those two officials. It is unfortunately a privilege of Parliament that a member can reflect in this House upon the honor and reputation of an outside citizen and he cannot be brought to book for his accusations. I repeat that these men against whom imputations have been made are honest and upright men. What will kill public ownership in the future, no matter whether it is Mr. Hanna or any other man whom we appoint, is the action of members of Parliament in reflecting on their honesty and character as the honorable member for Pontiac has done. All I ask him to do as a man of honor, which I believe he is, is to state in the public press to-morrow what he has said here to-night, and I will take a chance as to what will happen."

For the most part the House is still marking time and may be expected to do so until the budget speech is made. The really interesting part of the session will begin then, and the budget debate may be expected to last fully as long as the debate on the speech from the Throne. Sir Thomas White has promised that a week or ten days' notice will be given before he makes the budget speech, so that members may have plenty of opportunity to prepare their ideas with regard to the future fiscal policy of Canada. During this debate we may expect the majority of the members to take part, and it is almost certain that nearly every Western member will make a speech of some kind. The West, of course, is clamoring for a lowering of the tariff wall, and while farmers in Eastern Canada may be counted upon to follow them in this demand, for a considerable distance at least, they are unfortunate in having no members in the House who carry a mandate to this effect, as do quite a few members from the West. Out of fifty-seven members from the four Western Provinces, about thirty-six can be counted on to stand for low tariff, and of the remainder some few may also adopt the same attitude. These Western men have met their Western Cabinet Ministers and told them what they are expected to do in the way of securing tariff reform. Moreover, it is perhaps only reasonable to expect that the Western low-tariff men will have a minimum reduction which they will be prepared to accept. What this will be no one can say accurately at present, unless it be the Western men themselves, but, generally speaking, they may be expected to ask for free implements and a very marked reduction in the tariff on woolsens, cottons and leather goods in addition to the removal of the 7½ per cent. surtax.

The House adjourned on Wednesday, April 16, for the Easter holidays, to resume again on Tuesday, the 22nd. A large number of Western men went home on Friday, the 11th, and a full attendance of the House cannot be expected until toward the last of the month.



# Toronto, Montreal, Buffalo, and Other Leading Markets

Week Ending April 17.

## Receipts and Market Tops

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

	CATTLE						CALVES					
	Receipts		Top Price Good Steers (1,000-1,200)				Receipts		Top Price Good Calves			
	Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Same Week	Week Ending	
Toronto (Union Stock Yards)	4,047	5,857	7,676	\$15.50	\$13.25	\$15.75	1,858	2,141	1,793	\$17.00	\$16.50	\$18.00
Montreal (Pt. St. Charles)	547	788	488	15.75	13.25	16.00	3,737	3,083	2,932	14.00	12.00	14.25
Montreal (East End)	750	610	614	15.75	13.25	16.00	1,750	2,484	2,478	14.00	12.00	14.25
Winnipeg	2,546	1,406	2,700	15.00	14.00	15.00	66	63	83	15.00	15.00	14.50
Calgary	1,663	1,122	1,601	14.50	12.25	14.00						
Edmonton	496	240	562	13.00	11.45	13.00	14	27	65	10.50		10.25

	HOGS						SHEEP					
	Receipts		Top Price Selects				Receipts		Top Price Good Lambs			
	Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Same Week	Week Ending	
Toronto (Union Stock Yards)	7,552	5,830	7,870	\$21.50	\$20.50	\$21.25	423	78	579	\$22.00	\$21.00	\$22.00
Montreal (Pt. St. Charles)	2,018	1,274	1,223	21.25	21.00	21.00	127	28	88	16.00	*14.00	16.00
Montreal (East End)	875	777	896	21.25	21.00	21.00	100	25	83	16.00	*14.00	16.00
Winnipeg	2,906	4,406	5,283	20.50	19.75	20.25	20	8	356			15.50
Calgary	1,502	2,492	1,880	19.75	20.50	20.50	370	100	432	13.00		13.00
Edmonton	860	734	726	20.50	20.00	20.50	78		104	13.00		13.00

\*Each

### Market Comments.

#### Toronto (Union Stock Yards).

Cattle trading was very slow during the week, and prices received a setback, ranging from 50 cents to \$1 per hundred. Receipts were twenty-five hundred head less than those of a week ago, and although buying was very slow at the decline, most of the stock was moved to the scales before the close of the week. The weakness on the American markets, together with the proximity of the Jewish and Easter holidays, was responsible for the decline in price. No choice, heavy cattle were on sale, and quotations for the majority of the weights offered had a range of \$14.50 to \$15 per hundred. Of steers weighing from ten to twelve hundred pounds, a few head averaging eleven hundred and fifty pounds sold at \$15 per hundred, which was the top of the market for that class of stock. Other sales of extra good stock were made from \$14.75 to \$14.95 per hundred, and included a straight load of ten hundred and fifty pounds average, weighed up at \$14.60 per hundred. Most of the sales of good quality steers were made from \$14 to \$14.50 per hundred, while steers of medium quality within these weights sold from \$13 to \$13.75. Handy-weight steers and heifers of ten hundred pounds and under were in better demand than other classes of stock, and were not subject to as severe cuts as were some of the other grades. A few head of nine hundred and fifty pounds average sold at \$14.50 per hundred, which was about equal to the top prices of last week, while several loads, weighing from nine hundred and fifty to nine hundred and eight pounds per animal, sold at \$14.25; most of the sales were however, made from \$13 to \$13.75. Cows were in fair demand, but bulls moved slowly. A number of fat cows were sold at prices ranging from \$12 to \$13 per hundred, one cow realized \$14.50, while the majority of the good cows moved from \$11.25 to \$12 per hundred. A few choice bulls sold at \$11.50 per hundred, and the majority at \$11, and under. There was a fair movement in stockers and feeders, and several hundred head were shipped to country points during the week. For breeder feeders weighing nine hundred pounds and up, \$13.50 per hundred was paid, while choice breeder stockers sold up to \$12.50. Calf receipts were heavy and the quality of the offering was good. As the Jewish buyers were not operating, the market for calves declined \$1 to \$1.50 per hundred early in the week. The greater part of this decline was, however, recovered on Tuesday and Wednesday, when choice calves moved within a range of \$15 to \$17 per hundred, and medium stock from \$12 to \$14.

The lamb and sheep market was unchanged, although there was a strong undertone to trading all week. Choice yearlings sold as high as \$22 per hundred, choice light sheep up to \$15, while spring lambs met a good inquiry at a range of \$5 to \$15 each.

The hog market advanced another 25 cents during the week. Hog prices are now the highest in the history of the Toronto trade. Sales were made at \$20.50 f.o.b., which is equal to \$21.50, fed and watered.

CLASSIFICATION	No.	TORONTO (Union Stock Yards)				MONTREAL (Pt. St. Charles)			
		Avg. Price	Price Range	Bulk Sales	Top Price	No.	Avg. Price	Price Range	Top Price
STEERS heavy finished	73	\$15.50	\$15.00-\$16.00		\$16.00				
STEERS good 1,000-1,200	394	14.72	13.75-15.25		15.50	32	15.25	14.50-15.50	15.75
STEERS common 700-1,000	46	12.76	12.50-13.50		11.00	56	13.50	13.50-	14.50
STEERS good 700-1,000	898	13.45	12.75-14.00		14.50	42	10.50	9.50-11.00	12.50
STEERS common 700-1,000	364	11.36	10.75-12.25		12.50	31	13.00	10.00-13.50	14.00
HEIFERS good	698	13.46	13.00-14.00		14.50	31	10.25	10.00-11.50	11.50
HEIFERS fair	189	12.14	11.25-12.50		12.50	36	8.00	7.00-9.00	9.00
HEIFERS common	29	10.50	9.50-11.00		11.00	38	11.50	10.50-12.00	14.00
COWS good	352	11.38	10.50-12.00		13.00	105	8.25	7.00-10.00	11.00
COWS common	506	9.67	8.50-10.25		10.50	9	11.50		13.50
BULLS good	64	10.93	10.00-11.50		11.75	54	8.50	7.50-9.00	10.00
BULLS common	55	9.44	8.50-10.00		10.50	105	6.00	5.00-7.00	7.00
CANNERS & CUTTERS	117	6.50	6.00-7.00		7.00	8			
OXEN									
CALVES veal	1,858	14.50	13.00-16.00		17.00	3,737	11.50	10.50-12.50	14.50
CALVES grass									
STOCKERS good 450-800	41	11.50	11.00-12.50		12.50				
STOCKERS fair	112	10.71	10.00-11.25		11.25				
FEEDERS good 800-1,000	88	13.25	12.75-13.50		13.50				
FEEDERS fair	21	12.57	12.00-13.00		13.00				
HOGS selects	7,122	21.42	21.00-21.50		21.50	1,727	21.00	20.75-21.25	21.25
HOGS heavies	112	21.26	21.25-21.50		21.50	11	19.75	19.00-20.00	20.00
HOGS (fed and watered) lights	160	19.27	19.00-19.50		19.50	245	19.10	19.00-19.25	19.25
HOGS sows	147	18.74	18.25-19.50		19.50	24	18.50	18.50-	18.50
HOGS stags	11	16.29	16.25-17.50		17.50	11	15.75	15.25-16.00	16.50
LAMBS good	200	20.57	19.00-22.00		22.00	37	16.00	16.00	16.00
LAMBS common	41	16.84	15.50-18.00		18.00	13	15.00	15.00	15.00
SHEEP heavy	102	10.85	10.00-12.00		12.00	57	13.00	13.00-	13.00
SHEEP light	71	13.50	12.00-15.00		15.00	20	11.50	11.00-12.00	12.00
SHEEP common	9	8.00	7.00-9.00		10.00				

Of the disposition from the Yards for the week ending April 10, Canadian packing houses purchased 837 calves, 4,906 butcher cattle, 7,960 hogs and 399 lambs. Local butchers purchased 681 calves, 543 butcher cattle, 60 stockers, 318 hogs and 193 lambs. Canadian shipments were made up of 37 calves, 85 cannery and cutters, 209 stockers and 307 feeders. Shipments to United States points consisted of 214 calves, and 926 butcher cattle.

The total receipts from January 1 to April 10, inclusive, were 93,446 cattle, 12,351 calves, 101,970 hogs and 26,098 sheep; compared with 68,007 cattle, 13,229 calves, 114,431 hogs and 10,320 sheep, received during the corresponding period of 1918.

#### Montreal.

Owing to heavy purchases on the Yards during the previous week, and also to the nearness of the Easter season, all classes of killing cattle were practically ignored by the packing houses, and as a consequence, a large number of cattle remained unsold after a week of listless trading. While the market was off about 75 cents per hundred on cattle of butcher quality, sales prices do not wholly indicate that reduction. Cattle of finished quality, however, would not be moved at values

higher than those prevailing last week for cattle of only fair quality. There were a few loads of very good cattle offered, and of these, one load consisting of twenty-five head was weighed up at \$15.75 per hundred. Nine head averaging nine hundred and seventy-five pounds sold at \$14.50, and eight head averaging a little better than nine hundred and eighty sold at a similar figure. A few head weighing slightly over ten hundred pounds also sold at \$14.50. Choice butcher cows sold well, but milch cows were hard to move. A number of good killing cows sold from \$13.50 to \$14 per hundred, and good handling cows from \$10 to \$11.50. Common cows were slow sellers, within a range of \$7 to \$8 per hundred. One bull weighing fourteen hundred and ninety pounds sold at \$13.50 per hundred, one weighing ten hundred pounds at \$13, while most of the sales were made from \$7.50 to \$9. Calves sold remarkably well, despite the extremely heavy receipts, there being in the neighborhood of fifty-five hundred calves on the two markets. An odd sale was made at \$14 per hundred, a large number changed hands from \$10.50 to \$12.50, and very few sold below \$10. The quality of the offering was good.

Hardly enough sheep and lambs were

offered to make a market, and most of the sheep received were of breeding quality, and on through billing to points in Ontario. The market was quoted as steady to strong, with lambs selling from \$12 to \$15 per head, and sheep from \$11 to \$13 per hundred.

About twenty-one hundred hogs were on the two markets, a slight increase over the offerings during the previous week. Despite the bearish tone of the market at the previous week's close, trading was strong, and prices a shade higher during the week. Selects sold generally from \$21 to \$21.25 per hundred, off car weights, while quite a few sales were made at \$21.50. Demand was keen and the market closed very firm.

PT. ST. CHARLES.—Of the disposition from the Yards for the week ending April 10, Canadian packing houses and local butchers purchased 2,932 calves, 58 cannery and cutters, 59 bulls, 355 butcher cattle, 1,223 hogs and 88 lambs. There were no shipments to United States points during the week.

The total receipts from January 1 to April 10, inclusive, were 9,881 cattle, 14,240 calves, 17,294 hogs and 5,196 sheep; compared with 8,971 cattle, 10,642 calves, 18,683 hogs and 5,065 sheep.

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Capital Authorized  
Capital paid up  
Reserve Funds  
Total Assets

### HEAD OFFICE

Branches throughout  
of the Dominion

### ACCOUNTS OF

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received during the  
of 1918.

EAST END.—Of the  
Yards for the week  
Canadian packing  
butchers purchased  
butcher cattle, 81  
Canadian shipment  
calves, 17 butcher  
Shipments to United  
States points consist  
of 110 calves.  
The total receipts  
April 10, inclusive,  
8,802 calves, 9,722  
hogs, and 5,196  
compared with 8,4  
10,876 hogs and  
during the correspond

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Cattle.—Cattle  
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On females, excepti  
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seventy-five lower,  
observing holidays,  
steady, demand be  
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lower. A good, str  
on feeders, eight hu  
good quality, hittin  
\$12.50. Milk cows  
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eighty to ninety  
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up to \$12.50 to \$14  
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or so. Offerings fo  
5,975 head, as again  
previous week, and  
head for the corres  
ago. Quotations:  
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prime weights, \$17 t  
\$16 to \$16.50; plain  
to \$15; coarse and  
\$11.  
Shipping Steers,  
heavy, \$16 to \$17.25  
to \$14.75; medium  
common and plain, \$  
Butcher Steers  
to prime, \$15.50 to \$  
\$15 to \$16; best ha  
fair to good, \$12.50  
common, \$11 to \$12.  
Cows and Heifers,  
\$13.50 to \$14.50; go  
\$11.50 to \$13.00; fa  
\$10.50 to \$11; light  
very fancy fat cow  
best heavy fat cow  
butcher cows, \$9



Markets

Department of Agriculture Live Stock Intelligence, Division

Table with columns: Same Week, 1918, Ending Apr. 10, 1919. Rows for Good Calves with prices ranging from \$12.00 to \$18.00.

Table with columns: Same Week, 1918, Ending Apr. 10, 1919. Rows for Good Lambs with prices ranging from \$14.00 to \$22.00.

REAL (Charles) Price Range Top Price Bulk Sales

Table with columns: Same Week, 1918, Ending Apr. 10, 1919. Row for 50-15.50 with price 15.75.

Table with columns: Same Week, 1918, Ending Apr. 10, 1919. Rows for 50-14.50 and 50-11.00 with prices 14.50 and 12.50.

Table with columns: Same Week, 1918, Ending Apr. 10, 1919. Rows for 00-13.50 and 00-11.50 with prices 14.00 and 11.50.

Table with columns: Same Week, 1918, Ending Apr. 10, 1919. Row for 00-9.00 with price 9.00.

Table with columns: Same Week, 1918, Ending Apr. 10, 1919. Rows for 50-12.00 and 00-10.00 with prices 14.00 and 11.00.

Table with columns: Same Week, 1918, Ending Apr. 10, 1919. Rows for 50-9.00 and 00-7.00 with prices 13.50 and 7.00.

Table with columns: Same Week, 1918, Ending Apr. 10, 1919. Row for 50-12.50 with price 14.50.

Table with columns: Same Week, 1918, Ending Apr. 10, 1919. Rows for 50-21.25 and 00-20.00 with prices 21.25 and 20.00.

Table with columns: Same Week, 1918, Ending Apr. 10, 1919. Rows for 00-19.25 and 00-18.50 with prices 19.25 and 18.50.

Table with columns: Same Week, 1918, Ending Apr. 10, 1919. Row for 50-16.00 with price 16.50.

Table with columns: Same Week, 1918, Ending Apr. 10, 1919. Rows for 00-16.00 and 00-15.00 with prices 16.00 and 15.00.

Table with columns: Same Week, 1918, Ending Apr. 10, 1919. Row for 00-13.00 with price 13.00.

Table with columns: Same Week, 1918, Ending Apr. 10, 1919. Row for 00-12.00 with price 12.00.

ket, and most of the of breeding quality, to points in Ontario.

noted as steady to selling from \$12 to \$13

hundred hogs were, a slight increase during the previous bearish tone of the previous week's close, and prices a shade week. Selects sold \$21.25 per hundred, quite a few sales \$20.00. Demand was closed very firm.

Of the disposition week ending April g houses and local 2,932 calves, 58 9 bulls, 355 butcher 1 88 lambs. There United States points

From January 1 to were 9,881 cattle, 4 hogs and 5,196 8,971 cattle, 10,642 and 5,065 sheep,

THE ROYAL BANK OF CANADA

Capital Authorized - - \$ 25,000,000
Capital paid up - - - 14,000,000
Reserve Funds - - - 15,500,000
Total Assets - - - 412,000,000

HEAD OFFICE: MONTREAL

Branches throughout every Province of the Dominion of Canada.

ACCOUNTS OF FARMERS INVITED. SALE NOTES COLLECTED

SAVINGS DEPARTMENT AT ALL BRANCHES

received during the corresponding period of 1918.

EAST END.—Of the disposition from the Yards for the week ending April 10, Canadian packing houses and local butchers purchased 2,221 calves, 597 butcher cattle, 819 hogs and 83 lambs. Canadian shipments were made up of 147 calves, 17 butcher cattle, and 77 hogs. Shipment to United States points consisted of 110 calves.

The total receipts from January 1 to April 10, inclusive, were 12,022 cattle, 8,802 calves, 9,722 hogs and 5,653 sheep; compared with 8,445 cattle, 9,776 calves, 10,876 hogs and 4,823 sheep, received during the corresponding period of 1918.

Buffalo.

Cattle.—Cattle values showed a heavy decline at Buffalo last week, the result of the last week in Lent and the fact that the Federal Government has substituted poultry for beef for the army, during the summer months. Prices opened a full half dollar lower than for the previous week and the close of the week found steers, running from ten to thirteen hundred selling a full dollar lower, and at the close of the week around twenty-five cars went over unsold. It was the worst week on steers the trade here has witnessed in some months, and the conditions are equally as bad at other markets, according to reports of shippers who were on the Buffalo market this week and who had marketed steers in the West. On females, excepting some heavy, goodly fat cows, which ruled fully a half to seventy-five lower, by reason of the Jews observing holidays, prices looked about steady, demand being very strong for young grazing cows running in price from \$7.50 to \$8.25. Canners showed about steady prices. Bulls of all classes were lower. A good, strong market was had on feeders, eight hundred pound kinds of good quality, hitting in around \$12 to \$12.50. Milk cows of all grades found about steady sale. Canadians were rather plentiful this week, there being around eighty to ninety cars and nothing very good, though one bunch of better than thirteen-hundred-pound steers sold up to \$17.25, with best heavy fat cows landing up to \$12.50 to \$13.50, but they were fancy. There is nothing very encouraging for the steer trade for the next week or so. Offerings for the week totaled 5,975 head, as against 5,725 head for the previous week, and compared with 3,900 head for the corresponding week a year ago. Quotations:

Shipping Steers, Natives.—Choice to prime weighty, \$17 to \$18; fair to good, \$16 to \$16.50; plain and medium, \$13 to \$15; coarse and common, \$10.50 to \$11. Shipping Steers, Canadians.—Best heavy, \$16 to \$17.25; fair to good, \$13.50 to \$14.75; medium weight, \$12 to \$15; common and plain, \$10.75 to \$11. Butchering Steers.—Yearlings, choice to prime, \$15.50 to \$16.50; choice heavy, \$15 to \$16; best handy, \$14.50 to \$15; fair to good, \$12.50 to \$14; light and common, \$11 to \$12.50. Cows and Heifers.—Best heavy heifers, \$13.50 to \$14.50; good butchering heifers, \$11.50 to \$13.00; fair butchering heifers \$10.50 to \$11; light common, \$8 to \$9; very fancy fat cows, \$12.50 to \$13.50; best heavy fat cows, \$9 to \$10; good butchering cows, \$9 to \$10; medium to

fair, \$7.75 to \$8.50; cutters, \$6 to \$6.50; canners, \$5.25 to \$5.50.

Bulls.—Best heavy, \$11 to \$12; good butchering, \$10 to \$10.25; sausage, \$8 to \$9; light bulls, \$7.50 to \$8.

Stockers and Feeders.—Best feeders, \$11.50 to \$12.50; common to fair, \$10 to \$11; best stockers, \$11 to \$12; fair to good, \$9.25 to \$9.75; common, \$8.75 to \$9.

Milchers and Springers.—Good to best, small lots, \$100 to \$135; in carloads, \$90 to \$100; medium to fair, small lots, \$80 to \$85; in carloads, \$70 to \$75; common, \$50 to \$55.

Hogs.—Prices jumped to the highest level of the year the first half of last week, but after Wednesday the outside demand was light and values were on the decline. Monday best grades sold at \$20.60, few heavies \$20.75, with pigs landing at \$19.50; Tuesday good hogs sold 10 to 15 cents higher, while a quarter advance was noted on pigs, and Wednesday, bulk of the good hogs brought \$21.10, one deck reached \$21.25, and pigs sold largely at \$20. Thursday's trade was steady to a dime lower than Wednesday, and Friday values went off a quarter. This brought good hogs down to \$20.75 to \$20.85, and pigs \$19.50 to \$19.75. Roughs ranged from \$18 to \$18.50, and stags \$15 down. The past week's receipts were 24,100 head, being against 22,746 head for the week before, and 22,100 head for the same week a year ago.

Sheep and Lambs.—Values showed a break the first part of last week, but some of the decline was regained before the week was out. Monday the best wool lambs sold largely at \$19.65, and on Thursday and Friday they ranged up to \$20. Bulk of the offerings were clipped and prices on these stood around \$3 per cwt., under the woolled grades. Monday best shorn lambs brought from \$16.50 to \$16.75, one deck made \$16.85; Tuesday and Wednesday top was \$16.90; Thursday one bunch reached \$17.15, and Friday the bulk landed at \$17. Cull shorn lambs ranged from \$13.50 down, light common skins going as low as \$8. Shorn wethers sold the past week from \$13.25 to \$13.50, and top for clipped ewes was \$12.50. For the past week receipts were 15,200 head, being against 18,859 head for the week before, and 13,900 head for the same week a year ago.

Calves.—Last week started with top veals selling at \$17, and the next two days the bulk brought \$17.50. Thursday prices were 50 cents lower, majority going at \$17, and Friday it was a slow trade, with bulk landing at \$16.50. Light in-between calves in full deck loads sold around \$14 and \$14.50, and cull grades ranged from \$13.50 down. The past week's receipts were 6,600 head, as compared with 7,430 head for the week before, and 5,450 head for the same week a year ago.

Toronto.

Receipts at the Union Stock Yards, West Toronto, on Monday, April 21, consisted of 61 cars, 627 cattle, 351 calves, 1,857 hogs, 71 sheep and lambs. Trade slow. Steers and heifers 25c. to 50c. higher; top for loads, \$14.75 for 18 head averaging 1,050 pounds each. Cows and bulls, 25c. to 50c. higher; stockers and feeders, steady. Sheep, lambs and calves, steady. Hogs higher, f.o.b. selling at \$20.70 to \$21.

Breadstuffs.

Wheat.—Ontario f.o.b. shipping points (according to freights). No. 1 winter, per car lot, \$2.14 to \$2.20; No. 2 winter, per car lot, \$2.11 to \$2.19; No. 3 winter, per car lot, \$2.07 to \$2.15; No. 1 spring, per car lot, \$2.09 to \$2.17; No. 2 spring, per car lot, \$2.06 to \$2.14; No. 3 spring, per car lot, \$2.02 to \$2.10. Manitoba wheat, (in store, Fort William)—No. 1 northern, \$2.24½; No. 2 northern, \$2.21½; No. 3 northern, \$2.17½; No. 4 wheat, \$2.11½.

Oats.—Manitoba (in store, Fort William), No. 2 C. W., 71c.; No. 3 C. W., 67½c.; extra No. 1 feed, 68c.; No. 1 feed, 66c.; No. 2 feed, 62½c.

Oats.—Ontario, according to freights outside; No. 2 white, 70c. to 72c.; No. 3 white, 68c. to 70c.

Corn.—American, (track, Toronto, prompt shipment), No. 3 yellow, \$1.80, nominal; No. 4 yellow, \$1.77, nominal.

Barley (according to freights outside)—malt, 95c. to \$1.

Rye (according to freights outside)—No. 2, \$1.60.

Peas (according to freights outside)—No. 2, \$1.95, nominal.

Prompt Returns From Shipments



THE MERCHANTS BANK

Head Office: Montreal OF CANADA Established 1864. With its 107 Branches in Ontario, 34 Branches in Quebec, 1 Branch in New Brunswick, 2 Branches in Nova Scotia, 25 Branches in Manitoba, 34 Branches in Saskatchewan, 65 Branches in Alberta and 8 Branches in British Columbia serves Rural Canada most effectively. WRITE OR CALL AT NEAREST BRANCH

When you ship 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.

It saves time and possible loss.

Buckwheat (according to freights outside)—No. 2, \$1.

Flour.—Ontario (prompt shipment) Government Standard, \$9.65 to \$9.75; Montreal and Toronto, Manitoba, Government Standard, \$10.75 to \$11 (Toronto).

Hay and Millfeed.

Hay.—No. 1 per ton, car lots, \$24 to \$26; mixed, per ton, \$22 to \$23.

Straw.—Car lots, per ton, \$10 to \$11. Bran.—Per ton, \$42 to \$46; shorts, per ton, \$44 to \$46; good feed flour, per bag, \$2.70 to \$3.

Hides and Wool.

City Hides.—City butcher hides, green, flats, 18c.; calf skins, green, flats, 30c.; veal kip, 20c.; horse hides, city take-off, \$6 to \$7; sheep, \$3 to \$4.

Country Markets.—Beef hides, flat, cured, 18c. to 20c.; green, 16c. to 17c.; deacon and bob calf, \$2 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 \$4; horse hair, farmers' stock, \$28.

Tallow.—City rendered, solids, in barrels, 8c. to 9c.; country solids, in barrels, No. 1, 6c. to 8c.; cakes, No. 1, 7c. to 9c.

Wool.—Unwashed fleece wool as to quality, fine, 40c. to 55c. Washed wool, fine, 70c. to 75c.

Country Produce.

Butter.—Prices again advanced slightly; quoted as follows on the wholesales: Creamery, fresh-made lb. squares, 66c. per lb.; creamery cut solids, 65c. per lb.; dairy, 53c. to 55c. per lb.

Oleomargarine.—Kept stationary in price, selling at 33c. to 34c. per lb.

Eggs.—New-laid eggs also advanced slightly on the wholesales, selling at 47c. to 48c. per dozen, with selects in cartons bringing 52c. per dozen.

Cheese.—Cheese kept quite firm, selling as follows: wholesale, year-old Stiltons, per lb., 35c.; September at 31c. per lb.; new, 29c. to 29½c. per lb.

Honey.—There is no demand for honey, 5, 10 and 60-lb. pails being quoted at 23c. to 25c. per lb.

Maple Syrup.—Shipments are coming in fairly freely, selling as follows: \$15.75 per case of ten 8½-lb. tins; \$14 per case of 24 wine quarts; five Imperial gallon tins at \$2.35 per gallon.

Poultry.—The first spring chickens for this season came in Thursday; M. P. Mallon having a shipment of thirty, averaging 1½ lbs. each, for which he paid 65c. per lb. live weight, and sold them at 75c. per lb. dressed, practically the same price. The following being quoted for live weight to the producer: chickens, crate fed, 35c. per lb.; chickens, ordinary fed, 30c. per lb.; hens under 4½ lbs., 30c. per lb.; hens, 4½ to 6 lbs., 33c. per lb.; hens, over 6 lbs., 34c. per lb.; roosters, 25c. per lb.; ducks, 35c. per lb.

Wholesale Fruits and Vegetables.

Receipts were heavy in imported fruits and vegetables during the past week, with prices keeping firm on most offerings and advancing on some; domestic vegetables are becoming quite scarce and are firm in price.

Potatoes advanced, Ontarios selling at \$1.75 to \$1.85 per bag; New Brunswick Irish Cobbler seed potatoes bringing \$2.50 per bag.

Beets and parsnips kept stationary at 90c. to \$1 per bag.

Carrots were very firm at \$1.25 to \$1.50 per bag.

Cabbage was practically off the market, small quantity offered bringing \$3 to \$4.50 per barrel.

Onions kept stationary at \$2.50 to \$3 per 75 lbs., and \$3.50 to \$4 per 100 lbs.

Turnips advanced slightly, selling at 75c. to 85c. per bag.

Montreal.

Horses.—Dealers report that buyers showed very little interest in the horse market during the past week and few animals were purchased. The range of prices was steady. Heavy draft horses, weighing from 1,500 to 1,700 lbs. were quoted at \$250 to \$300 each; light draft weighing from 1,400 to 1,500 lbs., \$200 to \$250 each; light horses, \$125 to \$175 each; culls, \$50 to \$75 each and fine carriage and saddle animals \$175 to \$250 each.

Dressed Hogs and Provisions.—The market for dressed hogs was firm and the range of prices was slightly higher with fresh-killed abattoir stock selling at 28½c. to 29c. per lb. Smoked and cured meats held steady, but there was a firm undertone to the market with light hams selling at 38c. per lb.; medium weights, 12 to 15 lbs. each, at 36 to 37c. and heavies at 34c. to 35c. Breakfast bacon was quoted at 42c. to 43c.; Windsor selected bacon 45c. to 46c., and Windsor boneless 47c. to 48c. Lard was in good demand at 31½c. to 32½c. for pure leaf. Barreled pork was steady at \$54 a barrel for Canadian short cut; \$52 for short cut fat backs; \$45 for mess pork and \$43 for bean pork.

Poultry.—Some live poultry arrived and was purchased for the Jewish Passover. Fat hens sold as high as 42c. per lb. In cold storage poultry turkeys were 46c. to 48c. per lb.; chickens, 38c. to 46c.; fowls, 32c. to 37c.; ducks, 38c. to 43c.; geese, 29c. to 31c., according to quality.

Potatoes.—The tone of the market for potatoes has been rather firmer of late, owing to supplies being slightly lighter. Quebec whites were quoted at \$1.90 to \$2, ex-store, for 90-lb. bags. There was some agitation to alter the weight from 90-lbs. to 80-lbs. per bag, and the matter will be taken to Ottawa.

Maple Products. Supplies of maple syrup were fairly large, but the price was unusually high, being in the vicinity of \$2 per 13-lb. tin and \$1.60 per 8½-lb. tin. Maple syrup was steady at 22c. to 24c. per lb. with some bringing more.

Eggs.—The market was firm and there was no disposition towards price adjustment, in spite of the fact that production is large. Prices showed a wide range, it having been reported that from 42 to 45c. was paid in the country to shippers, f.o.b. Retail stores were selling new-laid eggs at 55c.

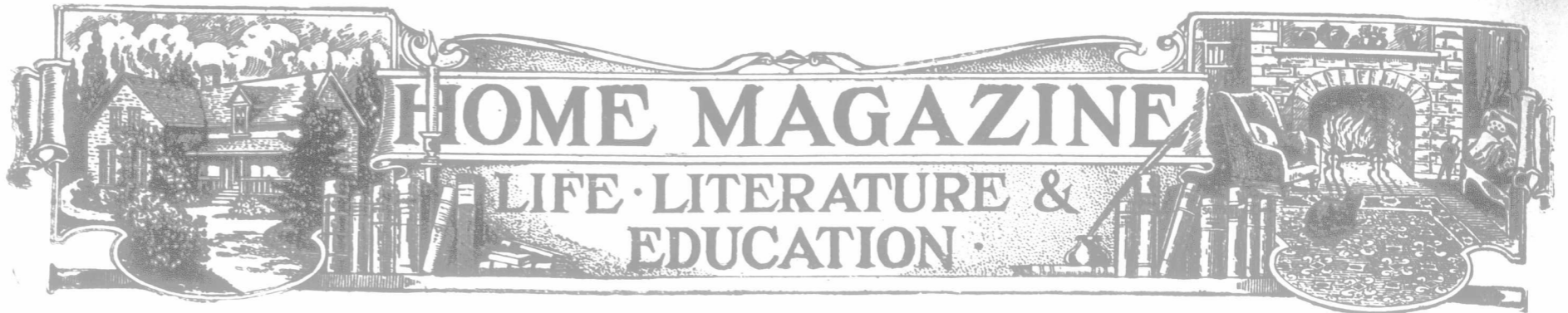
Butter.—There was very little increase in the supply of butter and there was an active demand for everything offering and prices were higher than they have been at any time during the past winter. Creamery ranged from 64c. to 65c. per lb. in solid packages. The outlook is for yet higher prices.

Cheese.—Prices were unchanged with the Commission quoting 25c. for No. 1 cheese; 24½c. for No. 2 cheese and 24c. for No. 3.

Grain.—No. 2 Canadian Western oats were quoted at 85c. per bushel, car lots, ex-store. No. 3 and extra No. 1 feed, 82c.; No. 1 feed, 79c.; No. 2 feed, 76c. Ontario No. 2 white, 84c.; No. 2 white, 81½c. Barley was steady with car lots of No. 3 Canadian Western quoted at \$1.20; No. 4, \$1.18; extra No. 3 Ontario, \$1.18.

Continued on page 839.





### A Rainy Day.

BY L. H. BAILEY.

The soft, gray rain comes slowly down,  
Settling the mist on marshes brown,  
Closing the world on wood and hill,  
Drifting the fog down vale and rill;  
The weed stalks bend with pearly drops,  
The grasses hang their misty tops,  
The clean leaves drip with shiny spheres  
And fence-rails run with pleasant tears.

Away with care! I walk to-day  
In meadows wet and forests gray;—  
'Neath heavy trees with branches low,  
'Cross splashy fields where wild things  
grow.

Past shining reeds in knee-deep tarns,  
By soaking crops and black-wet barns,  
On mossy stones in dripping nooks,  
Up raining pools and brimming brooks  
With waterfalls and cascadills  
Fed by the new-born grassy rills;—  
And then circle home across the lots  
Thru all the soft and watery spots.

Away with care! I walk to-day  
In meadows wet and forests gray.  
—From "Wind and Weather", published  
by Charles Scribner's Sons.

### Reconstruction.

On the Side Roads and Concessions.

BY I. B. W.

In many respects the world is entering upon a new era. Much that was old and decadent has been broken down by the influx of a more democratic spirit and higher ideals. Autocracy has been weighed in the balance and found wanting, and Tennyson's prediction is about to come true:

"Till the war-drums throbb'd no longer,  
and the battle-flags were furl'd,  
In the Parliament of man, the Federa-  
tion of the world."

However, one must not look for the complete passing of the old order of things and the inrush of the new all at once. It will take time. Readjustment needs be gradual to be secure. Rome was not built in a day, nor will the ideals for which our soldiers fought and died be achieved overnight. In order to build up or reconstruct the community, province, county, or empire requires the united effort and thought of all classes of people. No one class, cult, profession, or trade holds a monopoly on ideas, suggestions, or plans for the reconstruction which is to make the world better than it was in the past. It requires the co-operation of all and the weaving of the best thoughts and plans into a fabric without flaws, and one which will stand the wear of time. Are we prepared to sink our little prejudices, our opinions and ideas, for the benefit of the whole state, or will the individual stand out and demand what he or she thinks is right, regardless of the effect on the masses? The future alone will tell how well we have learned to forgive and forget and to work together towards a common goal, a better Canada—a better world. The result will depend upon the action of the men and women on the side-roads and concessions, as well as of those living on Wall Street. The individual may be insignificant, but numerous individuals with a common purpose become a powerful force for good or ill.

Reconstruction on the war-torn fields of Belgium and Flanders embodies more than reconstruction in Canada. There the debris, the aftermath of war, must be cleared away before the foundation for the new structure can be laid. The people have learned to depend upon their neighbors for strength, and undoubtedly in the new era now ushered in will pull together towards a common goal. Here we have a structure already under way, but during the years since the foundation

was laid it has suffered many contortions, and to-day is badly warped in many places. A remodelling is required, and this is, in many respects, more difficult than building anew. "Every man for himself" appears to have been the idea imbedded in every man's thought; capital has been made out of the other man's necessity. The present seems to be an opportune time to change the old order of things and to practice the golden rule—"Do unto others as you would that others should do unto you." If this had always been adhered to there would not be the friction between nations, between capital and labor, between employer and employees, between neighbors, between father and son, that exists. Families would not to-day be living in hovels; there would be less class and race antagonism. Let us profit by the mistakes of the past and work for the betterment of our country.

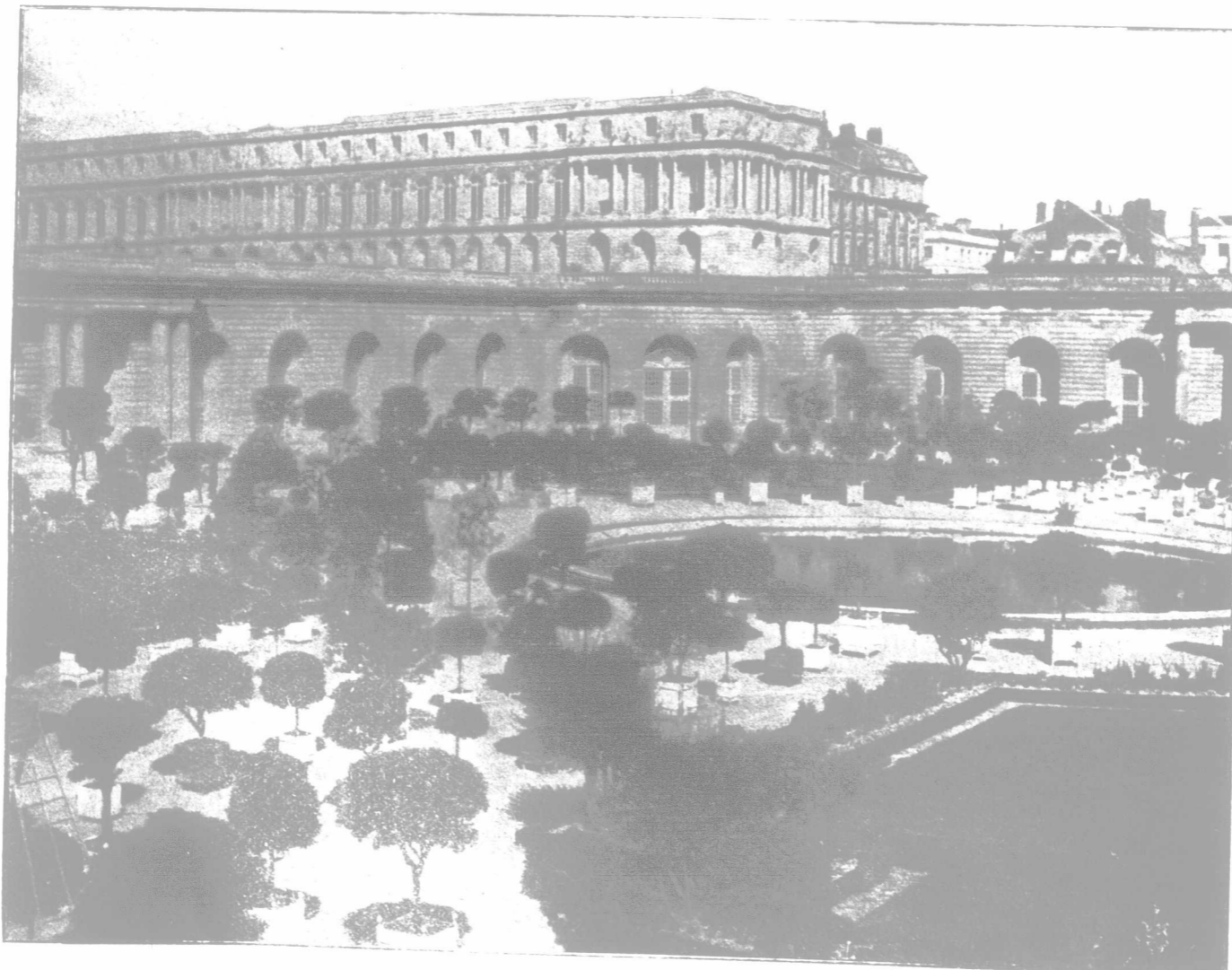
Canada is essentially an agricultural country with vast areas capable of producing the finest of wheat and of raising stock second to none. Owing to lack of representative organization, tillers of the soil have for many years not received their just dues. Prices of produce raised were low, and the farmer was—and in many respects is yet—at the mercy of the dealers, packers, etc. Farm produce is the only product placed on the market for which the producer has no say in the price received. The farmer is forced to take the price offered, and this price is not always such as to give him wages, let alone profit. Low prices, long hours, few home conveniences and the attitude of the city man to the farm folk has resulted in an exodus from farm to city, there to swell the demand for food while at the same time reducing the supply. Food prices have soared high as compared with prices ten years ago, but compared with the cost of production the price is not yet high enough to permit the farmer

and his family to receive wages equivalent to those paid in towns and cities. Organization is being effected, and the farmer's voice will be heard in our legislative assemblies more than in the past. It requires representation of occupation or business according to the numbers engaged in such in order. If manufacturing were in the ascendancy then they would be entitled to more of their class than the farmers. However, in Canada where agriculture is first, it is essential that more real farmers sit in Parliament, and it is encouraging to see steps to this end being taken. Agricultural produce last year was valued at many millions more than manufactured goods. It is generally admitted that Canada's future economic and financial strength depends upon agricultural development. Therefore, it is important that everything possible be done to put farming on a sound business basis as regards production and marketing.

To hold the young men and women on the land the returns must be as remunerative as in the city. This does not necessarily mean higher prices of produce to the consumer, but it does necessitate the farmer getting a square deal from the manufacturers, transportation companies, middlemen, etc., and that he plan his work so as to get maximum returns for the labor performed. On many farms there are leaks which might be stopped, and steps saved by a little planning. A study might also be made of the farm, in order to ascertain what that particular soil will produce to best advantage. To continue sowing a crop which at best gives but small returns is poor business, if a more remunerative crop can be grown. It is imperative that the individual farmer make a closer study of his business and eliminate waste of time, efforts and land so far as is advisable. It is possible but improbable for some years at least for farmers to be so organized as to be in a position to set the price on all their produce. Owing to the uncertainty of production, it would be difficult to set a fair price over a given area that would be fair to all, as some farms are more productive than others, and the elements are kinder in some districts than in others. Organization is one of the chief cornerstones on which the farmer must build for the future. It will not be all smooth sailing, as we have not learned to give and take as we should. There is yet too much jealousy and envy in our natures to allow us to co-operate amiably. These things, however, can be lived down if we set our minds to it. In numbers there is strength, but agriculturists have not yet been broken to team work as well as the men of some of the other trades and businesses.

Throughout the country there is land which once was covered with forests, and as woodland would return a good revenue. However, men wanting to farm and not knowing soil conditions were permitted to purchase this land from the Crown or real estate dealer, but after the forests were removed and the stumps cleared it was found that after all the hard manual labor of clearing land and erecting buildings, the soil was unfitted for the growing of cereals and grass crops. These farms are now abandoned and the owners, in many cases, bankrupt and discouraged. The buildings falling into ruins and the barren fields are monuments to the folly of ever clearing the land for cultivation. An annual revenue could have been gathered from timber. Such places now give opportunity for reforestation, and in twenty or thirty years the now practically waste land will, if set to trees, yield a profitable crop. The Government might well make a survey of new lands offered for settlement and ascertain whether or not it is desirable to clear the forests, and to learn what crops the soil is capable of producing. The prospective farmer would then not waste time, money and labor blindly.

At the present time there is considerable friction between capital and labor.



The Palace at Versailles.

Engraving by E. H. Wood & E. H. Wood

This has reports of business or naturally wealth is the feels that so Many firms conditions u and the wag increased in the cost of l profit-sharin employees accruing fro system more doubtedly be realize that they do to i firm. On th ployees who in their dem flesh from t good deal o country. Wl to say. The greater co-op labor. Ther business or pr reign. In Eur has been ma the establish all reports su Then, too, s deal more th employer or



This has possibly been accentuated by reports of fortunes being piled up in one business or another. The laboring man naturally concludes that much of the wealth is the result of his labor, and he feels that some of it is coming to him. Many firms have greatly improved the conditions under which their men work, and the wages of the past few years have increased in proportion to the increase in the cost of living. Some firms adopt the profit-sharing plan in order that their employees may share in the profits accruing from their labor. Under this system more and better work will undoubtedly be done, as the employees will realize that they will benefit by what they do to increase the business for the firm. On the other hand, there are employees who are somewhat unreasonable in their demands and seek the pound of flesh from their employer. There is a good deal of unrest throughout the country. Where it will end is difficult to say. The solution seems to be in greater co-operation between capital and labor. There must be a head in every business or profession, or else chaos would reign. In European countries an endeavor has been made by the employees to run the establishments themselves, but from all reports such has not been successful. Then, too, some labor men want a good deal more than they earn, and blame the employer or capitalist if their jobs are

taken from them. It is necessary that both labor and capital be reasonable and deal justly with each other. This applies to agriculture as well as to manufacturing concerns, if the industries are to grow and flourish as they should.

Difficulties arise between neighbors, between communities and between nations because of failure to forgive and forget slight differences. If we are building for a better community and a better Canada in which to live, it is necessary that there be a close fraternity among men. No man can live unto himself. Class distinction should be more or less dispensed with, as in many regards "Jack" is as good as his master. Many of the men toiling for others to-day would possibly have been leaders had they been given the opportunities of an education and training in their youth. Environment and circumstances determine to a large degree what a man will develop into. Of course, some men have sufficient will-power and grit to raise in spite of handicaps thrown in their way. Every boy and every girl should have the advantage of a practical education. This is being made possible throughout Canada by our colleges and technical schools. The future of the country will, to a large degree, depend upon the quality of men turned out from these institutions of learning. At one time a college was looked upon as a place for the rich man's son, but

to-day the halls are open to everyone desirous of securing an education. It is setting the ideals and molding the opinions of a large number of the people in the country, either directly or indirectly. The influence spreads far and wide, of our schools and colleges and, too, largely sets, the ideals of Canada's future citizens. Our educational policy should be such as will make good citizens of the cosmopolitan class of people of this young country. The leaders must plan and work for the future rather than the present only. On how well the foundation is laid will depend the structure to be reared in years to come. A narrow, short-sighted policy of administration at the present time would be detrimental to the growth and development of the country on a sound basis. It is necessary that capital and labor, the city and county, get together in planning for the future.

### Travel Notes.

#### Miss Bennett Discourses on Jam and Other Things.

BY HELEN A. RUSSELL.

IT happened one winter when I was working at the Red Cross in Lausanne. There was an urgent call sent out for clothing for the destitute Serbs.

My dear, you've no idea what ridiculous

things were sent in. Some of the contributors seemed to think that Serbia was a sun-baked country straddling the equator. I remember one day a huge package arrived from a rich Brazilian family. They evidently thought the climate of Serbia was similar to that of Brazil, for they sent thin muslin gowns and blouses and beads, and even fans. Think of sending fans to the freezing Serbians in the dead of winter!! Well, one can excuse those half-educated "macaques" (South Americans) for making mistakes in European geography, and for sending gauze instead of wool, but when it comes to an English person, and a university man at that, it is the limit of ridiculousness, to coin a word for the occasion.

I happened to open the Englishman's bundle myself, and it nearly killed me. It contained a white linen suit, very much soiled, with dabs of green paint all down one side—he had evidently had a misadventure with a painter's pot; fifteen neckties, three straw hats, two pairs of tennis shoes, some summer underwear, and—a pair of enormously long black trousers.

Pinned to these trousers was a sealed envelope marked "important."

It was addressed to the person who opened the package. So I opened it. It contained a note giving the history of the trousers and directions for their disposal.

"These trousers," read the note, "belonged to Mr. Reginald Warrington-Barnes, B.A., Oxon."

"These trousers were worn by Mr. Reginald Warrington-Barnes at the funeral of King Edward VII."

"These trousers were also worn by Mr. Reginald Warrington-Barnes at the Coronation of King George at Westminster Abbey. These trousers were worn *inside* the Abbey by a guest, not *outside* by a mere spectator. On this great historic occasion the Duke of Norfolk was pleased to compliment the wearer—Mr. Reginald Warrington-Barnes, on the fine fit and appearance of these trousers."

"These trousers must be given to an English Tommy. He must be made acquainted with their historical value, and also with the fact that they were made for and worn by Mr. Reginald Warrington-Barnes, B.A., Oxon."

I think the poor man must have been a bit cracked. It's the only explanation. Madame Dufour who had charge of the department, suggested that the trousers be sent to the museum in Lausanne.

They were of such an extraordinary length that no ordinary Tommy could wear them without tucks.

I have been haunted ever since by the idea that they belonged to an eccentric Englishman I met in Berne the first winter of the war—on account of the length of the legs, you know. We never knew his name. He was always called "the Englishman." He was an educated man but freaky. A tall, gaunt creature, with narrow shoulders, and enormous feet. He smoked cigarettes continually, and left a circle of ashes and matches around his chair wherever he happened to be—in the salon, or in the lobby. It didn't make any difference to him apparently, he never seemed to know *where* he was. The maids were furious, because they had to follow him up with a broom and dust-pan.

Most extraordinary creature! He wore "hand-me-downs" which looked as if they had never been either brushed or pressed. And he reeked so of tobacco, that some sensitive people couldn't stay in the same room with him. He was short-sighted and wore nose-glasses with a long, black ribbon, which was always getting tangled up on his coat-buttons, and he walked with his head poked forward as if he were peering into a cave. Although he smoked so much, he seemed to be always running short of matches, and would suddenly stop talking and begin clawing around in his pockets in search of one.

He usually had three or four English papers with him, and when he had finished reading them, instead of folding them up he crushed them into a wad and stuck them inside the front of his coat. He used to come into the dining-room sometimes all puffed out like a fat man, and then when he sat down and unbuttoned his coat, down would fall all these crumpled papers, which seemed to surprise him very much. Most absent-minded creature! But tremendously entertaining at times. Had been everywhere in creation. I used to talk to him—or rather, listen



The Hall of Mirrors.

In this hall, in the palace at Versailles—a suburb of Paris—the Peace Treaty will be signed. Photo by Underwood & Underwood.

family to receive wages equivalent  
paid in towns and cities. Organi-  
being effected, and the farmer's  
will be heard in our legislative  
es more than in the past. It re-  
representation of occupation or  
according to the numbers en-  
such in order. If manufacturing  
the ascendancy then they would  
d to more of their class than the  
However, in Canada where  
re is first, it is essential that more  
ers sit in Parliament, and it is  
ing to see steps to this end being  
agricultural produce last year  
ed at many millions more than  
ured goods. It is generally  
that Canada's future economic  
cial strength depends upon agri-  
development. Therefore, it is  
that everything possible be  
ut farming on a sound business  
regards production and marketing.  
ne young men and women on the  
returns must be as remunerative  
city. This does not necessarily  
er prices of produce to the con-  
t it does necessitate the farmer  
square deal from the manufac-  
nsportation companies, middle-  
and that he plan his work so  
maximum returns for the labor  
. On many farms there are  
ch might be stopped, and steps  
little planning. A study might  
ide of the farm, in order to  
hat that particular soil will  
best advantage. It is possible but  
e for some years at least for  
be so organized as to be in a  
set the price on all their pro-  
ing to the uncertainty of pro-  
would be difficult to set a fair  
a given area that would be fair  
me farms are more productive  
s, and the elements are kinder  
stricts than in others. Organi-  
ne of the chief cornerstones on  
farmer must build for the future.  
be all smooth sailing, as we  
arned to give and take as we  
ere is yet too much jealousy  
n our natures to allow us to  
amiably. These things, how-  
lived down if we set our minds  
umbers there is strength, but  
ts have not yet been broken  
k as well as the men of some  
trades and businesses.  
ut the country there is land  
was covered with forests, and  
would return a good revenue.  
men wanting to farm and not  
conditions were permitted to  
is land from the Crown or real-  
er, but after the forests were  
d the stumps cleared it was  
after all the hard manual  
ring land and erecting build-  
was unfitted for the growing  
d grass crops. These farms  
andoned and the owners, in  
bankrupt and discouraged,  
gs falling into ruins and the  
are monuments to the folly  
ing the land for cultivation.  
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m timber. Such places now  
nity for reforestation, and in  
irty years the now practically  
will, if set to trees, yield a  
pp. The Government might  
survey of new lands offered  
at and ascertain whether or  
able to clear the forests, and  
t crops the soil is capable of  
the prospective farmer would  
ste time, money and labor

sent time there is consid-  
between capital and labor.



to him, a great deal, because I didn't mind the odor of tobacco.

When he monologued, he used to slip down in the chair, till he almost sat on his shoulder blades, his knees were higher than his head, and his feet stuck out like sign-boards. And he never looked at the person to whom he was talking. No. He usually fixed his eyes on the ceiling as if the person addressed was up there. And he had the most extraordinary and confusing way of leaping from one subject to another. His mind seemed to work by hops.

On evening after ten minutes of absolute silence, during which time he was smoking furiously, he suddenly stopped puffing and asked me, via the ceiling, if I did not think dress-coats without tails were horribly inartistic.

My dear, I dropped three stitches—I was knitting socks at the time—and gazed at him with my mouth wide open. But he didn't see me; he didn't even wait for an answer. He said that in his opinion a man without tails looked absurd. He said that Edward VII was considered to be a man of exquisite taste in the matter of dress, but he thought he had made a great blunder when he introduced the Tuxedo. He had nursed a grudge against him ever since. He said he thought the Tuxedo was a sartorial sin; that he had never worn one, and he never would wear one. Once, he said, when he was in England, he had attended a very swell dinner where he was the only gentleman present without tails.

"Don't you think," he asked me suddenly, transferring his gaze from the ceiling to my face, "that a man looks better 'in tails?'"

My dear, I nearly choked to death on the spot trying to swallow a laugh, but I managed to mumble out something to the effect that I had never seriously considered the subject, but that I thought there was something to say in favor of the Tuxedo—one could at least tell a guest from a waiter, which was sometimes very difficult when they were all "in tails."

"Yes, yes," he said, "quite so—quite so."

Then he relapsed into silence, his eyes again on the ceiling.

But in a few minutes he became very agitated, fumbling in his front pockets one after the other, despairingly. Then he uncoiled his long legs, stood up, and began an exhaustive search in all his other pockets, finding at least what he was looking for—a match—in one of his tail pockets.

But he had nothing to strike it on, having lost the scratcher. He had the careless habit of filling his pocket with loose matches, and tearing off the scratch part of the box and putting it in his vest pocket.

For several minutes he stood there like a hesitating Hamlet, his face a study of despair.

And all the time there was a box of matches and an ash-tray on the table beside him, but he never observed them till I pointed them out to him.

"Ah! quite so, quite so," he said, sitting down and lighting a fresh cigarette. And then, what do you think he asked me?

He said: "Do you remember the name of Mahomet's first wife?"

His mind certainly took a big hop that time.

My dear, the more I think of that man, the more certain I am that he was the original owner of those trousers—that he was no less distinguished a person than Reginald Warrington-Barnes, B.A., Oxon.

But a bit touched in the upper story.

A bricklayer was laying bricks on the third story of an unfinished house, and unfortunately dropped a brick on the head of a colored man who was mixing mortar down below.

The bricklayer, his heart in his mouth, craned over the parapet. He thought he had killed the poor colored man. But the latter looked up at him with a good-natured and forgiving grin.

"Hey, what you doin', white man?" he shouted. "You made me bite mah tongue."

# Hope's Quite Hour.

## Sow in Hope.

Let us not be weary in well doing: for in due season we shall reap, if we faint not.—Gal. 6:9.

The farmer planted a seed,  
A little, dry, black seed;  
And off he went to other work;  
For the farmer was never known to shirk,  
And cared for what had need.

The night came with its dew,  
The cool and silent dew;  
The dawn came, and the day,  
And the farmer worked away  
At labors not a few.

Home from his work one day,  
One glowing summer day,  
His children showed him a perfect flower;  
It had burst in bloom that very hour,  
How, I cannot say.

But I know if the smallest seed  
In the soil of love be cast,  
Both day and night will do their part,  
And the sower who works with a trusting heart  
Will find the flower at last.

MARY F. BUTTS.

I am spending a few days in the country—the air is chilly with April rain, but the hope and promise of new life is thrilling everywhere. How can anyone get discouraged when dry sticks and bare earth—like Aaron's rod, which he laid up before the Lord—are forgetting the sadness of their winter stagnation and beginning life over again with the enthusiastic gladness of childhood? "The farmer planted a seed"—yes, the farmers have planted millions and millions of seeds. They have sacrificed their seed-grain willingly and hopefully, knowing that each seed will decay in the damp earth (where it is covered out of sight) but that the sacrifice will not be wasted.

Those noble young lives, which flamed up to God from the fiery altar in Europe, have been sacrificed but not wasted. When our Lord—the Great Sower—was about to sacrifice His young life to save the world, He said: "The hour is come, that the Son of man should be glorified." Then He went on to explain that this glory must be won through sacrifice; for, if a grain of wheat does not lay down its life, it abides alone, but if it falls into the ground and dies it bringeth forth much fruit.

Many in these days are rejoicing as the troop-ships and troop-trains come racing home. Of course we rejoice with them!—just a few minutes ago I was greeting the brothers who are trying to drown the memory of past horrors in the present joy. But some, like Christ, have laid their bodies like seed-grain in the earth—have died to save their fellows. Not in heartbroken despair, but in sure and certain hope, we may think of them. The world has not lost the flower of young manhood. The family of God—here and in the upper rooms of His house—is one family still. The seed-grain is not mourned over as "lost" when it is out of sight. It is doing a greater work than it could ever do in the granary. So our Lord, when speaking of the corn of wheat which is glorified in the hour of its death, goes on to declare the great secret of real glory: "He that loveth his life in this world shall keep it unto life eternal." And yet He was troubled—being a real Man—and pleaded: "Father, save me from this hour," then His soul triumphed over the pain and He exclaimed almost exultingly: "But for this cause came I unto this hour."

The Sacrifice was not made uselessly—indeed!—but the great cause of Love uplifted death into sacrifice.

"God is not mocked"; said St. Paul to the Galatian Christians, and He does not mock those who have laid their lives trustfully in His hand. "Whatsoever a man soweth, that shall he also reap; let us not be weary in well-doing: for in due season we shall reap, if we faint not."

When a little child is given some magical little seeds, and told that if buried in the ground they will change into flowers and vegetables, he is in a great hurry to work

the miracle. The seeds are swiftly planted and thoroughly watered. Next morning the unexperienced gardener is eagerly looking for green plants. By the time a week has passed he has grown discouraged. Faith and hope so strong at first—have vanished. Perhaps he digs up the seeds, to see if they are growing—and so interferes with the great miracle which God is secretly working. Perhaps he forgets the seeds altogether, and the glory comes as a wonderful surprise.

We smile at his impatience and tell him he must wait to see the results of his sowing; but we are often just as impatient when the seeds we have tried to sow show no outward sign of life. We think our prayers have not been answered, when the answer is not instantly visible to our shortsighted vision. Often the seed has sprung up without our knowledge. Always we should be thanking God for giving the increase, instead of faithlessly thinking that He has failed to work with and through us.

Think of the way seeds of kindness have sprung up and grown into great organizations which benefit many thousands of people. Since I began to write this a splendid young fellow called to see me. He only got home this morning, after having been a prisoner in Germany for two years. When I asked about the food conditions he said simply: "Of course we should have starved to death except for the Red Cross supplies."

Many women have toiled faithfully and hopefully, sending off those supplies without seeing any result of their untiring zeal—the labor of love will bring in a harvest beyond their highest hopes.

There are numberless societies and churches working cheerily to help the poor, the sick and the handicapped. The nations are roused to the necessity of doing more than avoid war. They want to be actively helpful—as the members of a body are all working for the good of the whole body. How swiftly a great disaster—such as the explosion which wrecked Halifax—calls out the instant and practical expression of helpful comradeship from the ends of the earth, as well as from near neighbors.

Where did all this spirit of helpfulness spring from? The Great Sower planted it, and has patiently waited for blossom and fruit to spring from His sowing. Jesus lived and loved, and the beauty of that Life of perfect selflessness has captivated the hearts of men. We can't be satisfied to live for our own selfish interests when we see a life of shining beauty. God stoops tenderly to clasp hands with man, and men catch the inspiration of God's Idea of Love and reach out to clasp hands with their brothers.

Let us sow good seed of kind thoughts, words and deeds; planting them every day without a fear that we are wasting time and strength. God is pledged to bring a rich harvest out of such a generous sowing.

There is a story of a dear old lady who never travelled without a bag of flower seeds. She threw handfuls of seeds out of the car windows, without waiting to see the flowers that sprang up along her path. She knew God could work the miracle of reproduction, and so she left results to Him. We are all sowing seeds as we move swiftly through this stage of our journey. Let us be careful to sow faith instead of distrust, to sow kindness instead of selfish indifference, to sow smiles instead of gloomy frowns, gladness instead of grumbling discontent—the seeds of peace, so that "the next war" may be choked by wholesome fruits of brotherliness. We are all sowing seeds of Peace or War! Which do we want? If Peace, then let us sow seeds of fellowship and give up unkind fault finding.

"To be alive in such an age—  
To live to it,  
To give to it!  
What if thy lips have drunk the lies?  
Fling forth thy sorrow to the wind—  
And link thy hope with human kind.  
The passion of a larger claim  
Will put thy petty grief to shame.  
Breathe the world thought, do the world deed."

Blind, lonely of thy brother's need,  
And what they weep, and what they weep?  
Look at the work, the times reveal!  
Oye, thanks with all thy flaming heart—  
To see, but believe in a part,  
Courage and seed of thy heritage—  
To live, in such an age?"

DORA FARRINGTON.

# The Fashions.

## How to Order Patterns.

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

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

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

2772-2799—Ladies' Costume.  
Waist 2772 Cut in 7 sizes: 34, 36, 38, 40, 42, 44, and 46 inches bust measure. Skirt 2799 Cut in 7 sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. A medium size will require about 5 1/2 yards of 40 inch material. Width of skirt at lower edge is about 1 3/4 yards. TWO separate patterns 10 cents FOR EACH pattern.

2797—Girls' Dress.  
Cut in 4 sizes: 8, 10, 12 and 14 years. Size 12 requires 4 yards of 40-inch material. Price, 10 cents.



2779—Ladies' Dress.  
Cut in 4 sizes: 34, 36, 38, 40, 42, 44, and 46 inches bust measure. Width at top of skirt is 36 inches. Price 10 cents.

2786—Ladies' Dress.  
Cut in 7 sizes: 34, 36, 38, 40, 42, 44, and 46 inches bust measure. Width at top of skirt is 36 inches. Price, 10 cents.

2509—Ladies' Dress.  
Cut in 6 sizes: 34, 36, 38, 40, 42, 44 inches bust measure. Width at top of skirt is 36 inches. Price 10 cents.

2775—Girls' Dress.  
Cut in 4 sizes: 8, 10, 12 and 14 years. Size 8 will require 4 yards of 40-inch material. Price, 10 cents.

2800—Ladies' Dress.  
Cut in 7 sizes: 34, 36, 38, 40, 42, 44, and 46 inches bust measure. Width of skirt at lower edge is about 1 3/4 yards. Price, 10 cents.

2777—Ladies' Dress.  
Cut in 7 sizes: 34, 36, 38, 40, 42, 44, and 46 inches bust measure. Width of skirt at lower edge is about 1 3/4 yards. Price, 10 cents.

2473—Drum Skirt.  
Cut in 3 sizes: 34, 36, 38 inches bust measure. Price, 10 cents.



The Fashions.

How to Order Patterns. by number, giving age or...

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2779—Ladies' House Dress. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 will require 5 1/2 yards of 36-inch material. Width at lower edge is about 2 1/4 yards. Price 10 cents.

2786—Ladies' Waist. Cut in 7 sizes: 36, 38, 40, 42, 44, 46 and 48 inches bust measure. Size 38 requires 2 5/8 yards of 36-inch material. Price, 10 cents.

2509—Ladies' Dress. Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Size 38 requires 7 5/8 yards of 44-inch material. The skirt measures about 2 yards at the foot. Price 10 cents.

2775—Girls' Dress. Cut in 4 sizes: 4, 6, 8 and 10 years. Size 8 will require 3 5/8 yards of 36-inch material. Price, 10 cents.

2800—A Comfortable Breakfast Costume. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 4 5/8 yards of 38 inch material. Width of skirt at lower edge, is about 2 yards. Price, 10 cents.

2777—Ladies' Skirt. Cut in 7 sizes: 24, 26, 28, 30, 32, 34 and 36 inches waist measure. Size 24 requires 3 yards of 36-inch material. The skirt measures about 2 1/2 yards at the foot, with plaits extended. Price, 10 cents.

2173—Dress for Misses and Small Women. Cut in 3 sizes: 16, 18 and 20 years. Size 18 will require 5 3/4 yards of 36-inch material. The skirt measures 2 yards at the foot. Price, 10 cents.

2373—Girls Dress. Cut in 5 sizes: 4, 6, 8, 10 and 12 years. Size 12 requires 3 3/4 yards of 44-inch material for the dress with jacket. The jacket alone will require 1 1/2 yards. Price, 10 cents.

2532—Ladies' "Cover All" Apron. Cut in 4 sizes: Small, 32-34; Medium, 36-38; Large, 40-42; and Extra Large, 44-46 inches bust measure. Size Medium requires 5 1/2 yards of 36-inch material. Price 10 cents.

2765—Ladies' Negligee. Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Size 38 requires 3 1/2 yards of 36 inch material. Price 10 cents.

2619—A Splendid "All Through the Day" Dress. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 4 3/4 yards of 44-inch material. Width of skirt at lower edge is about 2 1/2 yards. To make collar and skirt of contrasting material 44 inches wide, will require 2 1/2 yards. Price, 10 cents.

2757—Girl's Dress. Cut in 3 sizes: 12, 14 and 16 years. Size 16 will require 4 7/8 yards of 36 inch material. Price 10 cents.

2739—Ladies' House Dress. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 7 1/2 yards of 27 inch material. Width of skirt is about 2 1/2 yards at the foot, with plaits drawn out. Price, 10 cents.

2768—Ladies' Corset Cover. Cut in 4 sizes: Small, 32-34; Medium, 36-38; Large, 40-42; and Extra Large, 44-46 inches bust measure. Size 38 requires 1 3/8 yards of 36-inch material. Price, 10 cents.

2773—Girls' Dress with Guimpe. Cut in 4 sizes: 6, 8, 10 and 12 years. Size 10 will require 1 5/8 yards for the guimpe, and 2 5/8 yards for the dress, of 27-inch material. Price, 10 cents.

2778—Misses' One-Piece Dress. Cut in 3 sizes: 16, 18 and 20 years. Size 18 will require 4 yards of 44-inch material. Width at lower edge is about 1 7/8 yards. Price, 10 cents.

2798—Girls' Pajamas. Cut in 5 sizes: 4, 6, 8, 10 and 12 years. Size 10 will require 3 1/4 yards of 36-inch material. Price, 10 cents.

2421—Ladies' Apron. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 6 yards of 36-inch material. Price, 10 cents.

2531—Girls' Dress. Cut in 5 sizes: 6, 8, 10 and 12 years. Size 12 requires 3 1/4 yards of 44-inch material. Price, 10 cents.

2782-2784.—Ladies' Costume. Waist 2782 Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Skirt 2784 Cut in 6 sizes: 22, 24, 26, 28, 30 and 32 inches waist measure. It will require 7 yards of 44 inch material to make the dress for a medium size. The skirt measures about 1 1/2 yards at the foot. TWO separate patterns, 10 cents FOR EACH pattern.

2794.—A Pretty Boudoir Set. Cut in 4 sizes: Small, 32-34; Medium, 36-38; Large, 40-42 and Extra Large, 44-46 inches bust measure. A Medium

size will require 3 1/4 yards of 32-inch material for the sack, and 1/2 yard for the cap. Price, 10 cents.

2785.—An "Easy to Make" Apron. Cut in 4 sizes: Small, 32-34; Medium, 36-38; Large, 40-42; and Extra Large, 44-46 inches bust measure. Size Medium requires 3 3/4 yards of 36-inch material. Price, 10 cents.

2819.—Child's Dress. Cut in 3 sizes: 2, 4 and 6 years. Size 4 requires 2 3/4 yards of 36 inch material. Price, 10 cents.

2816.—A Pretty Frock. Cut in 4 sizes: 14, 16, 18 and 20 years. Size 18 will require 6 1/4 yards of 27-inch material. The skirt measure about 2 yards at the foot, with plaits drawn out. Price, 10 cents.

2813.—Girls' Dress. Cut in 5 Sizes: 2, 4, 6, 8 and 10 years. Size 6 will require 2 3/4 yards of 36-inch material. Price 10 cents.

2806.—Ladies' Apron. Cut in 4 sizes: Small, 32-34; Medium, 36-38; Large, 40-42 and Extra Large, 44-46 inches bust measure. Size Medium requires 4 3/4 yards of 36-inch material. Price, 10 cents.

2807.—Boy's Suit. Cut in 5 sizes: 3, 4, 5, 6 and 8 years. Size 4 will require 2 1/4 yards of 40-inch material. Price, 10 cents.

2809. Ladies' Dress. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 will require 6 yards of 44-inch material. Width of skirt at lower edge, is about 2 yards, with plaits extended. Price, 10 cents.

2808.—Girls' Dress. Cut in 4 sizes: 6, 8, 10 and 12 years. Size 8 requires 3 1/2 yards of 27-inch material for the dress, and 3/4 yard for the bolero. Price 10 cents.

2802.—Ladies' House Dress. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 will require 6 yards of 36-inch material. The dress measures about 2 1/2 yards at the foot. Price 10 cents.

The Windrow.

During 1819—one hundred years ago—were born Walt Whitman, James Russell Lowell, Julia Ward Howe, J. G. Holland, Susan Warner and Charles A. Dana. At that time were in their childhood or early youth, Emerson, Thoreau, Whittier, Longfellow, Alcott, Hawthorne, and Miss Stowe.

It is to Canada's everlasting credit that she was first in the field with plans and proposals for helping soldiers maimed and otherwise injured in the war to earn their living and become self-reliant. The establishment of Vocational Training Schools has been one of the first results. It is to be hoped that the career of the soldiers will be followed when they have left these schools, and that every effort will be made by everyone who knows these men to enable them to "get along" well with the work they have chosen.

The Plight of Essen.

In addition to the idleness caused by strikes at the mines in that region, the effects of the war have created at Essen one of the most impressive transformation scenes in Europe. The Krupp works there, which were formerly the world's greatest producers of military engines, are now all but abandoned. Miles of furnaces and workshops are deserted. In one corner of the vast establishment workmen are repairing cannon so as to make them acceptable to the Allies to whom they are to be surrendered, and that is all. During the war these works turned out 40,000 cannon, and for a considerable time produced 2,500,000 shells a month. Now nothing of the sort is being manufactured there. Doubtless it will be possible to resume industries of a peaceful kind. Before the war the vast bulk of the output of the Krupp works was non-military, consisting of railroad rails, car wheels and similar things. Moreover, it is pointed out that such work was more profitable than military work. The general manager reports that dividends of the corporation were 7 per cent in 1912, 10 per cent in 1913, 11 per cent in 1914, 12 per cent, early in the war and 10 per cent, later and now nothing.—The Independent.





## Spoiled Cakes Cost Money

Flour, eggs, milk, butter and sugar are high in price. A spoiled cake or batch of biscuits costs money.

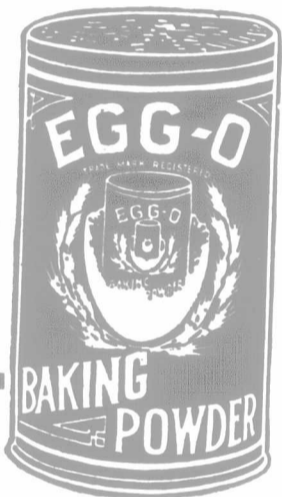
To make sure of baking success use pure, strong, *double-acting*

# EGG-O Baking Powder

The heavy Government Standard flours need the strength of Egg-O to make a light baking. Egg-O has two actions. It rises in the mixing bowl when cold water or milk is added and continues to rise in the heat of the oven, thus making a light cake doubly certain.

You can use sweet milk, sour milk, buttermilk or water with Egg-O—a different and better baking powder.

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## Our Serial Story.

### The Forging of the Pikes. A Romance Based on the Rebellion of 1837.

Serial rights secured by The Farmer's Advocate and Home Magazine.

#### CHAPTER XX.

#### The Way the Wind Blows.

November 15th, 1837.

THIS afternoon I am writing my journal in the little office of the apothecary shop, the reason being that in the first place all the other work which Uncle Joe left me has been done, and in the second that the day is so stormy no one is coming in. Through the window I can see the sleet and snow coming down in a steady drive, lashed at times by the wind so that it beats against the glass like a shower of hail-stones. No wonder the streets are quite deserted.

For my own part I am very glad of the storm, for there is much that I wish to set down in my book, the chronicling of events having become a sort of diversion to me, so that I miss it, if I am long hindered from it, as I would any other employment or source of comfort. Both of these my journal has become to me. In writing the occurrences that have given me joy I live them over again, while in recording those that have given me sorrow I seem to find relief such as one might find in pouring out one's woes to a dear friend.

To-day I have so much to tell that I scarcely know where to begin, and yet I must proceed somewhat in order.

To begin with since last writing, just three days ago, I have had two surprises,—but of that in due time.

There is a chap next door whose name is Clinkenbocker. He is substituting for a few months for the clockmaker, who has gone home to the Old Country on a prolonged matter of business, and although for upwards of three weeks we have spent our days so near that we have run into each other at every turn, we have had but little to do with each other until yesterday.

At first sight of him I thought of a sea lion, which I once saw slithering about and "honking" without ceasing in a tank at a travelling circus, and to me, ever since, he has been "The Sea Lion," so much so that I have been in mortal terror of accosting him some morning with "Good morning Mr. Sea Lion," or calling to him "Say, Sea Lion, will you give me the right time of day?"

He has a big head with beetling brows, beneath which his eyes look out at you in curious fashion, and his moustaches are so heavy and long that they droop down in a curve right below his choker.

At first I tried to be friendly with him, as is the custom of us plain folk from the country, but it was soon enough clear to me that he regarded me with either dislike or suspicion, and I did not find out the reason until yesterday.

"Good morning, Mr.—er — Clinkenbocker," I would say to him.

"Morning, sir," he would snarl, and immediately dive into his shop among his clocks and watches.

"Good luck to you, sir, is the swimming fine?" I would fain have called to him many a time, but then reflected that he would have lost the point of my joke. I do declare, however, that the fellow's fishiness got so on my subconsciousness that I would not have been surprised any day if I had heard him "honk."

Well, yesterday evening, after supper, I returned as usual to the apothecary

shop, and was about to shut up for the night when there came a tapping at our back door. I opened it and there stood the Sea Lion.

"Are you about through, sir?" he said, in his deep growling voice.

"Just going to shut up," I said.

"Is there anything I can do for you?"

It seemed to me that he looked friendlier than usual, and in his countenance there seemed to be a gleam of something that looked perilously like animation.

"Yes," he replied, abruptly. "I'd like you to step into my workshop for a few minutes."

With my eye I measured him up and down, and a good, thick stocky specimen he was. "What's up now, old fellow?" I said to myself. "Well, here goes! I guess I can look out for my skin as well as you can for yours."

So in I went.

The place was very dimly lighted with but a single tallow candle, and at first I saw nothing but the little speck of red flame in the midst of a jungle of ticking clocks, short and tall. Then from the long dark shadows of them someone stood up, taller and taller, and at the next breath I had taken one bound across the shop, sending a lot of loose wheels and clattering from something that I bumped against.

It was The Schoolmaster. "Highly—tightly!" he exclaimed, and then he thumped me on the back and nearly wrung my hand off, and I swear I could have hugged him.

"Where did you come from?—When did you get here?—How are they all at home?" I asked, all in a breath.

"Slowly, boy, slowly!" he laughed, "One at a time—I came straight from the Corners, at least as straight as the very bad roads would allow. I got here an hour ago. They are all perfectly well at home, and I am the bearer of a letter to you.—There," taking it out of his pocket, "sit down and read it."—Which I did without stopping to make apology, finding it filled with all the little home happenings that I most wished to hear about, and ended with the few words of love that I well know how to measure.

While I read The Schoolmaster and Clinkenbocker conversed in a low tone, and when I had at last finished they both turned to me. The Schoolmaster with a glad smile, the Sea Lion with a twinkle beneath his bushy eyebrows that promised to develop into one with proper coddling.

"And you were here a whole hour!" I said, somewhat reproachfully.

"You'll forgive me," said The Schoolmaster, "when I tell you that it was only a few minutes ago that I learned you were next door. I asked the way to your Uncle's and my friend here had a chance to tell me you were nearer to me than I had thought."

"You saw father and mother?"

"Of course.—Just before I left. When I have time to turn out my carpet bag I'll get you some warm socks from your mother, and give you all her warnings about what you are to do in case you take cold."

I laughed, and then I thought of Barry. "There's no especial news?" I asked.

"None at all,—no, nothing in particular. I've been trying to get Jimmie and Hannah to come down to The Corners for the winter, but there's difficulty of course, about housing the oxen and the cow and pigs and hens. . . Red Jock's fine—working long and late these days. . . Big Bill's drinking harder than ever.—You didn't know Nick Deveril had married his housekeeper did you?—A wild old charivari the boys gave him! He's so mad over it they say he's going to move away soon. There's some talk of Big Bill renting the tavern—in which case 'Good-bye Bill.' Too bad, too! There's some good in the fellow if only he'd leave the drink alone."

"And what about old Hank," I demanded. "What's he doing these days?"

"Why, bless my soul, how did I forget Hank?—Why he's in fine fettle. I've a letter from him too—a whole roll—so I put it in my carpet-bag. He's fine, fine! But busy,—very busy! He's been helping with the drillings, you know. A born soldier, that boy! Takes to it like a duck to water!"

"A born orator, too," I added, "Hank's got a head on him, hasn't he?"

The Schoolmaster nodded, in his quick way. "A fine head! A fine head! There's a boy that's going to get to the

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I glanced at the Sea Lion, but he was  
sitting with his hands clasped over his  
stomach and his eyes on the floor, as  
motionless as an iceberg on the edge  
of the Polar Sea and about as  
expressive. "He must be 'one of us,'  
I said to myself and then I must have  
drawn down my brows in perplexity, for  
I felt, at that moment, as if, somehow  
I had deserted the ship. And yet, I  
consoled myself with thinking, I had done  
but as everyone had wished me to do.

The Schoolmaster laughed, evidently  
misinterpreting my scowl.

"Oh, Clinkenbocker's all right," he  
said, "You needn't look so fierce."  
At which I made haste to disclaim.  
"I wasn't thinking of him, I was wonder-  
ing whether I should have stayed at  
home with the boys."

The Schoolmaster waved his hand  
genially. "Not at all! Not at all! You're  
just where you ought to be. If things  
come to a head one of these days, as  
we expect, you can easily throw your-  
self in where you can be of use."

"You think, then—" I began.  
But he cut me off—"Oh, something  
's bound to happen, before long either."

He glanced at our Companion, and  
my glance followed. The Sea Lion had  
straightened up, and was sitting with his  
hands on his knees, chin protruding and  
eyes glaring a bit.

"Do you know," laughed The School-  
master, "my friend, here, had put you  
down for a dyed-in-the-wool Tory.—  
Naturally, of course."

The glare relaxed to a twinkle and the  
long drooping moustaches twitched. And  
then the Sea Lion held out his—flapper—  
which I shook with right good will.  
But never a word did he say.

"He tells me," went on The School-  
master, "that the town never was in  
better shape for being frightened out of  
its seven senses, and that he imagines  
the Lieutenant-Governor may be in-  
timidated, although so far he has shown  
no sign of fear and is very stubborn,—  
more stubborn than ever."

"Stubborn's the devil!" came in a  
deep growl from behind the moustaches,  
so suddenly that I almost jumped.

"I was out at the Garrison, not long  
ago," I said. "And certainly there were  
very few soldiers there. As you know  
the troops are all in Kingston."

The Schoolmaster nodded, and I  
swear that I began to feel most un-  
comfortable, being a spy appealing not  
at all to my notion, so that I began to  
wonder just how much I might say  
without being traitorous to my new  
friends, while still remaining faithful  
to the old. Thus came to me, strangely  
enough, perhaps, for the very first time,  
a realization of the position in which I  
had placed myself, and Hank's words on  
that June day in the mill flashed back to  
me, "Look out lest you sit down between  
two stools."

For a few moments so confused was  
I, in trying to place myself, that I quite  
lost track of the conversation, and heard  
not a word The Schoolmaster was saying,  
although I knew that his voice was going  
on. Then my mind seemed to clear  
itself. "If the worst comes to the worst,"  
it said to me, "throw yourself in on the  
side of principle. Remember, 'The great-  
est good to the greatest number? Act  
on the square and you will be all right.'"  
Yet I hoped that The Schoolmaster  
would not put me in an embarrassing  
position.

I need not have feared, however,  
for before long I could perceive that he  
was careful to ask me no questions at all.

"Clinkenbocker tells me, he was  
saying, when I came back to myself,  
"that the young men continue to drill  
under Colonel FitzGibbon."

"That they do," I replied. "More  
than once I have been invited to join  
them, and have had to tell them I am  
a Reformer. One of them asked me  
"what blank difference that made so long  
as I intended to stand up for my country  
and the British crown?" That looks to  
me to have some reason in it."

Again The Schoolmaster laughed. "So  
you've had to confess up to being a Re-  
former.—Well, an open confession is good  
for the soul."

"Of course," I said, "one can't be  
totally discredited for that, even among  
the Tories, so long as such men as Rolph,  
Baldwin, Morrison and Bidwell are in

the place." Their loyalty, at least, is  
unquestionable."

"Grand men! Every one!" exclaimed  
The Schoolmaster.  
"Best in the land!" growled the Sea  
Lion.

"You know," I said, hesitating, then  
thinking no harm could be done one way  
or another, "that the Government and  
all this place knows all about the  
drillings?"

The Schoolmaster moved a bit un-  
easily, and coughed.

"Yes," he said, "I have heard so.  
I have even heard—don't ask me how  
—that the purport of the turkey and  
pigeon matches is well known, and that  
Sir Francis Bond Head and his advisers  
make merry over the whole matter,  
thinking the preparations all a mere  
bluff for political purposes."

"And are they not?" I asked, rather  
sharply, looking at The Schoolmaster,  
but conscious of a quick shuffle on the  
part of the Sea Lion.

"I do not need to tell you, Alan,"  
replied The Schoolmaster, slowly, "that  
actual fighting will only be resorted to  
as a very last resort."

"Of course," I assented, "I have heard  
that often enough," and then I glanced at  
the Sea Lion. He was leaning towards me  
and his eyes seemed fairly to gleam in  
the half-gloom.

"You're with us?" he asked, booming  
the words out in a muffled roar.

"I have never been against you," I  
said, but The Schoolmaster took the  
words from me.

"I told you before, Clinkenbocker,"  
he said, "that you could trust him or  
any of his name as you could your own  
soul."

The Lion grunted, and sank back  
into his chair again.

I turned to The Schoolmaster.  
"And now tell me the news," I said.  
"You know I have been hearing only the  
other side for the past three weeks."

"Why," The Schoolmaster said, pulling  
at the long black wisp of hair that al-  
ways hangs over his forehead, "Where  
shall I begin? Did you know that Mac-  
kenzie left for the North about the end  
of the first week in November?"

"I did not know."

"Of course up Yonge street is the very  
centre of the movement," he went on.  
"Lount, Matthews, Gorham and others  
have been very busy there. In fact  
the greater part of the—the delegation  
—is expected to come from there. In  
the West, too, as you know, Dr. Dun-  
combe has been most energetic. I  
believe, too, there is some talk of having  
Colonel Van Egmond assist actively."

"Colonel Van Egmond!" I exclaimed  
remembering well the kindly gentleman  
who visited us last spring.

"Yes. He's an old man, but he has  
military tactics down to a science.—We  
have to be prepared for possibilities,  
you see.—Besides, his very name lends,  
lends—prestige—to the demonstration.  
Just as the names of Doctors Rolph and  
Morrison do. I hear that Mackenzie  
has been able to use their authority up  
North."

With that I got up and began to pace  
the floor.

"And I have heard," I said, feeling  
myself on thin ice indeed, that Doctor  
Rolph and Doctor Morrison do not wish  
to connect themselves with the move-  
ment in any way."

"All Tory talk!" growled the Lion.

"No doubt," acquiesced The School-  
master. "There are no more steadfast  
opponents of the unjust domination  
of the Family Compact in this country,  
than those same gentlemen whom you  
named a few minutes ago as being the  
upholders of the dignity of the Reform  
party—the real patriots of this Canada."

Then he turned to the Sea Lion.

"By the way, Clinkenbocker, what did  
you do with those Swift's almanacs?"

The Sea Lion got up and moved about  
among the clocks until he found the book-  
lets, which he handed to me.

"Gives 'em the devil!" he growled,  
with satisfaction.

"Let me see them," said The School-  
master. "Here, read this. It sets forth  
pretty well exactly what's what, what's  
needed, and what we're after."

And I read:

"The control of the whole revenue to  
be in the people's representatives; the  
Legislative Council to be elective; the  
representatives in the House of Assembly  
to be as equally proportioned as possible;  
the Executive Government to incur a real



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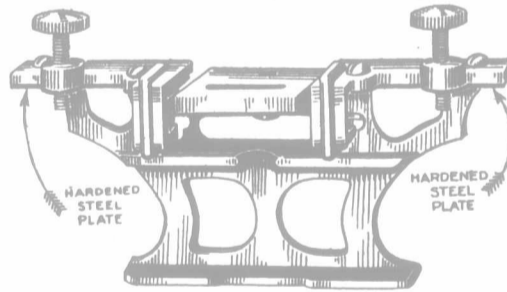
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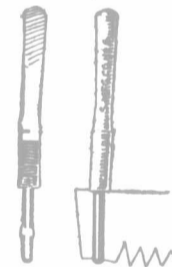
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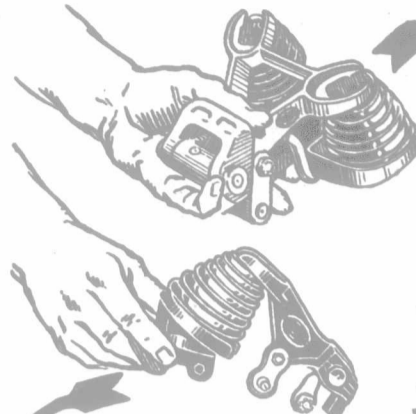
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If you order 25 bushels of corn, or more, we will allow a reduction of 25c. per bushel.

Government Standard..... Bus. 7.25	<b>MANGEL SEEDS</b>
No. 2 Timothy..... 7.25	Prizetaker, Giant Half Sugar, Yellow Intermediate, Yellow Leviathan, Mammoth Long Red, A1 seed, Germination, 112 to 160 per cent. Price, 60c per lb. Postpaid, 65c. per lb. 25 lbs. or more at 50c. per lb.
No. 2 Alfalfa (Ontario Variegated) (No. 1 for purity)..... 27.00	<b>SWEDE TURNIPS</b>
Alfalfa Scarified \$1.00 Bushel extra.	Prizetaker, Canadian Gem, Lord Derby. Price \$1.00 lb., Postpaid, \$1.10 lb. 25 lbs. or more at 80c. per lb.

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responsibility; the law of primogeniture to be abolished; the Judiciary to be independent; the military to be in strict subordination to the civil authorities; equal rights to the several members of the community; every vestige of Church-and State Union to be done away; the lands and all the revenues of the country to be under control of the country; education to be widely, carefully and impartially diffused; to these may be added the choice of our own Governor."

"I daresay this is all very good," I said, handing the Almanac back to The Schoolmaster. "Although part of it I do not understand very well. I'll be glad to keep the book to study it better, if Mr. Clinkenbocker will permit me."

He growled assent, then picked up the other booklet, labelled 1834 and turned over the pages. "Read that," he said, and so I read again:

"The backwoodsman, while he lays the axe to the root of the oak in the forests of Canada should never forget that a base basswood is growing in this, his native land, which if not speedily girdled will throw its dark shadows over the country and blast his best exertions. Look up, reader, and you will see the branches"—and here followed the names of nearly every prominent Tory family in Toronto, which it is not necessary here to set down. "The farmer toils," the paragraph ended, "the merchant toils, the labourer toils, and the Family Compact reap the fruit of their exertions."

This last I read aloud.

"Gives 'em the devil!" reiterated Clinkenbocker.

"Rather personal, that," commented The Schoolmaster, "but personalities seem to be the fashion in the Colonial Press these days. There's more truth than nonsense in it though. You know now, Alan, who are the men who are amassing wealth in this country. They toil not neither do they spin, and yet Solomon in all his glory—Well, you know all about it now, Alan."

"Who gets out this 'Patrick Swift's Almanac?' I asked.

"Why, Mackenzie, of course. That's very well known," replied The Schoolmaster, then, glancing about, "By Jove, Clinkenbocker, here a round dozen of your clocks tell me it is eleven of the night, and you haven't even asked me if I have a mouth on me."

The Sea Lion got up with alacrity. "Fact! I forgot," he explained, simply, and then he trundled about and brought beer and bread from a cupboard, and a great ham on a platter from which he cut huge slices; laying everything on a table decorated by clocks along the back.

"Pull up," he commanded, and then we set to and made havoc with the viands, the talk, meanwhile, returning to the affairs at home, than which no other topic just then could be so interesting to me.

After that I went with the Schoolmaster to The Sun Tavern where he was staying for the night, going about, to make the walk a little longer, past Doel's brewery, which stands a little behind John Doel's house, and which I never pass without looking at it with curious interest since it has been there that so many secret meetings of Mackenzie's followers have taken place.

Elliott's tavern, "The Sun," I looked at also with renewed interest as we approached it, the Schoolmaster having recounted to me the manner in which the "Declaration of Independence of Upper Canada" was here drawn up, and adopted afterwards at a meeting at the brewery. Doctor Rolph, it appears, was to some degree a party to the first drafting of the paper, which called chiefly for meetings to discuss the remedy of grievances, as has since been done. The Tavern by the way, is not one of the fashionable stopping places in the town, but is a comfortable, though ugly, square building, clap-boarded and painted white, with the sign-board, which indicates its name, swinging before the door.

"Come in," said The Schoolmaster, and I'll find you Hank's budget," so I went in while he went through his carpet-bag, carefully lifting out each article and laying it aside until he had found the little packet.

Upon that I made haste to go home and was at first surprised to find the house quite brilliantly lighted. Then I remembered that Uncle Joe was having

a midnight supper for some of his cronies to which he had been good enough to invite me, but which invitation I had declined, knowing the company to be so much older than I.

As I passed through the hall shouts of "The Queen! The Queen!" were arising from the dining-room, and glancing through the open door as I went up the stairs I could see the men standing with glasses raised high above their heads so that I trembled for the liquor; but of that I have no doubt they took proper care.

"The Family Compact!" I whistled to myself softly, having recognized some of the company. "So the festivities are just beginning!" And then I closed my door and proceeded to devour dear old Hank's letter, which was filled with some sense and a good deal of nonsense, interspersed with a score of questions about "the city" and a few trite remarks on the political situation—for Hank is a born politician. ("Statesman"—I correct myself!)

Notwithstanding the sounds of hilarity from below, I soon fell into a heavy sleep, from which I was awakened at heaven knows what time by Uncle Joe, who came in with a candle, a little dishevelled in his evening dress, and inclined to be talkative. Uncle Joe is not a drinker, as drinkers go, but on occasion he takes enough to loosen his tongue a bit more than necessary.

"So that scurvy rebel Mackenzie's up North again raising the devil!" he said, holding up his candle and looking down at me as I blinked and tried to collect my senses.

"I don't give a continental for Mackenzie," I said. "For heaven's sake go to bed, Uncle Joe! What time is it?"

But he continued on his verbal way unruddled by my desires.

"I only heard of it to-night," he said. "The blank little stir-the-mud ought to be locked up!"

"If there wasn't any mud," I mumbled, "there'd be nothing to stir up," but, fortunately, perhaps, Uncle Joe did not hear me.

"He ought to be locked up!" he repeated, "and every other blank disloyal cur with him!" And then, suddenly he put down the candle and made off down stairs.

I was just about to put out the light when I heard him coming up again, and presently he appeared at my door carrying two wine-glasses, brimming full. I could have died with laughing at the look of him, for I didn't have to go round a corner to see what was coming.

"Here, you young rascalion," he said, "drink to the health of the Queen, God bless her! Drink, you young rascalion, drink!"

And so I sat up in bed and took the glass, and drank with him to the health of the Queen, which I could do with right good will. And an odd enough brace we were, I do say, I with my hair on end, in my night-shirt with red bindings, and he in his rumpled evening dress with his ruffled shirt pulled up over his vest and a wisp of such hair he has left sticking out straight over each ear.

With that he was satisfied and went away, while I, thoroughly awake now, reflected on the evening's occurrences. And then I saw very clearly, and do now see, that the whole trouble in this country comes of lack of common experience and the difficulty of getting a common point of view.

These men in Toronto—"financiers," feathering their own nests, no doubt—are not unkind, personally. They are good fathers and good friends, and the most of them are, in many respect, gentlemen. Nevertheless they seem to possess the fault of thinking that "All's fair" in government, as in "love" and "war". Having had no personal experience out among the working folk on the farms and in the forests, they find it quite impossible to understand and to sympathize and so they act selfishly and even put burdens upon the people that, for many of them, make life a misery. For instance the Assembly last year made appropriations for \$4,000,000 to be spent on roads, harbours, lighthouses, the completion of the Welland Canal and other items—all good things in themselves but which have meant a pressure of taxation that our people are, as yet, ill fitted to bear.—Nor are the contempt-

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*It's a matter of choice!*

# LILY WHITE CORN SYRUP

Some people prefer the white (Lily White) corn syrup for table use; others, the golden, cane-flavored, Crown Brand.

Authorities strongly recommend Lily White for PRESERVING, and candy-making.



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Both are pure food products, nourishing, high in food value and are great helps to household economy.

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The Canada Starch Co. Limited - Montreal

ible methods forgotten, which at that election were resorted to, to secure everywhere members of the Assembly who would be tools in the hands of the Council and the Executive.

Upon the other hand, too many of these men of whom I have spoken think all who arise in condemnation of "the Government" are "rebels", "disloyal", whereas that is a great mistake. There may be a few radical enough to desire "independence," and, for all I know, perhaps Union with the United States, but I am very sure that upon the whole the Reformers are not at all against Britain and are quite as loyal as the Tories, being only against the abuses that have crept into this country, and that are worse than even since Sir Francis Head became our Governor. Even as they drill I am sure that the great majority do not look for actual use of their arms but only for intimidation of the Government so that grievances may be removed.

Of this last, however, I have not been authorized to speak freely.—outside, of course, of my journal.

The Storm still rages, with the sleet still slashing at the pane.

A few moments ago Clinkenbocker brought me a huge mug of beer. Verily we are becoming great cronies!

I force a spice of adventure in his acquaintance.

To be continued.

"What do you think of the Army as far as you have gone?" inquired a sergeant of a newly arrived recruit at camp.

"I don't like it after a while, but just now I think there is too much drilling and no singing around between meals," was the reply.

## Current Events.

The C. P. R. will ask authority to establish and operate services by aircraft.

Two bills modelled after Ontario hydro power legislation have been introduced into the Nova Scotia Legislature.

The Interprovincial Council of Farm Women met in Winnipeg last week, part of the time in joint session with the Canadian Council of Agriculture.

Much interest is being taken in the trans-Atlantic air race for the \$50,000 prize offered by the London Daily Mail. Among the contestants are Harry C. Hawker (Australian), in a Sopwith machine, Capt. Fred. P. Raynham (English) in a Martinsyde biplane, and the big Handley-Page bomber which was originally built to bomb Berlin.

The body of Edith Cavell will be brought from Brussels to England, with full military honors on May 15. After the burial ceremonies in Westminster Cathedral, the interment will take place at Norwich.

Two divisions of Japanese troops have been ordered to Korea to suppress revolutionary uprisings.

The assassin of Liebknecht and Rosa Luxemburg has been arrested.

The German peace delegates have been asked to come to Versailles on April 25, and it is reported that a definite answer by May 15 may be demanded by the Allies. The party will be made up of 200 authorities on the various matters, and the congress will continue from 10

to 15 days. . . Little by little, the many questions under discussion are being disposed of by the Conference, but many still remain. The amount Germany must pay for damage done during the war has been placed at \$2,800,000,000, a little over half the cost of the war to Great Britain alone. France will receive 55 per cent. of the total. It is now reported as settled that the mines in the Saar Valley will become the property of France, and the whole Valley kept under international control for 15 years, when a plebescite will be taken as to what nationality the people will desire to adhere to. In case they go back to Germany, Germany must then buy back the mines with payment in gold. Also, it has been settled that Poland will have a corridor to the Baltic Sea, and that Dantzig will be internationalized. The Adriatic coast dispute between Italy and the Jugo-Slavs, still remains unsettled, as does also the difficult question of placing responsibility and punishment for the war. An interesting piece of news of the week is the announcement that President Wilson will ask Congress to pledge the United States to stand by France in case she is ever attacked by Germany. Another is that the Allies will control 15 of the ocean cables that belonged to Germany. . . In order to combat the hunger danger the four great powers have agreed, on condition that the Bolsheviks cease hostilities, to supply financial aid to Russia, to be expended, and the food distributed by the Commission headed by Nansen, the Norwegian explorer; but Premier Lloyd-George has made it clear that no recognition whatever will be given the Soviet Government. No armies will be sent by the Allies to Russia, but munitions will be supplied to Kolchak, Gen. Denikine and Gen. Kharkoff in their fight against the Bolsheviks. The

Premier states that whereas the Bolsheviks are apparently extending their power Bolshevism itself is on the wane.

On April 15 Premier Lloyd-George, during a two days' visit to England to answer his critics, made a notable speech before Parliament in which, with his characteristic directness he threw down the gauntlet to Lord Northcliffe, who through his many papers, and especially the *Times*, *Daily Mail* and *Evening News*, has of late set out on a campaign to destroy the little Welsh friend of the people. That the fight between the two will be exceedingly bitter is to be expected, and the prospect is creating much excitement in Britain.

## The Dollar Chain

We had thought the "Dollar Chain" almost dead, but that our readers are still determined to stand by our soldiers has been proved by a number of splendid contributions that have tumbled in all of a heap during the past week. In behalf of the blind and maimed, but glorious "Boys" who will be helped by the money, so freely offered, we thank all who have contributed.

The list is as follows:

Contributions from April 4 to April 18:

"Maple Leaf," Women's Institute, West Lambton, Ont., \$60; Fanny Palmer, R. R. 1, Inwood, Ont., \$15; J. H. C., R. 2, Forest, Ont., \$5; Clark's Red Cross Society, R. 3, Ripley, Ont., \$50; "A Willing Workers' Club, Brimsly, Ont., (Ailsa Craig P. O., R. 3), \$5.

Previously acknowledged. \$5,852.50

Total to April 18. \$5,987.50

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



# Nitrate of Soda

Test with Mangels at the Ontario Agricultural College.

Plot No. 2

Acid Phosphate 400 lbs.  
Muriate of Potash 200 lbs.  
Yield per acre 30 tons 1450 lbs.

## John's Confession

"David" he said, "I must confess that I thought you were a fool when you sent away one hundred dollars of your good money for that Nitrate of Soda last spring."

"And when I saw you scattering it on that field afterwards to give the young plants a good start, as you said, it looked to me foolishness with a taint of madness."

"For," I said to myself, "how can any man in his senses believe that a hundred pounds or so of salty looking stuff like that scattered over an acre of ground can do any good?"

"Seeing is believing, however. I have been watching the results closely and I acknowledge now that I was the foolish one. From the very first your crop has gone ahead of mine. Your yield will be twenty more bushels to the acre than mine I should think."



Test with Mangels at the Ontario Agricultural College.

Plot No. 3

Nitrate of Soda 250 lbs.  
Acid Phosphate 400 lbs.  
Muriate of Potash 200 lbs.  
Yield per acre 35 tons 850 lbs.  
Note.—An increase of nearly five tons due entirely to the use of 250 lbs. of Nitrate of Soda.

## David's Reply

"John," David replied, "I have been expecting this speech from you for quite a while past. I know you and the neighbors have many a joke over my fantastic ways of farming. It would be strange if you didn't for I like to do things in my own way—and they are sometimes queer ways."

"I have a confession to make too. I know I was exposing myself to more ridicule if I failed, to say nothing about losing money—and it is far easier to suffer the loss of money than to endure ridicule, as I have learned by experience."

"But I have a great respect for the teachings of Science. All the experimenters agreed that Nitrogen in the form of Nitrate of Soda was the very best thing to use for a backward crop in the spring—and mine, as you know, needed a bit of forcing, as did yours."

"Here certainly is a fine yield—40 or 45 bushels to the acre instead of 20 or 25 I should think, thanks largely to the Nitrate of Soda that I used as a spring top-dressing."

## Advantages of Using Nitrate of Soda

It stimulates the rapid growth and early maturity of most garden crops. It makes plants resistant. Plants made strong by vigorous early growth can better resist drought, attacks of insects and plant diseases.

It increases yields of special crops. It is of great importance in the production of sugar beets, fibre plants, fodder crops and tobacco.

It improves pastures and meadows. Applied as a top-dressing it increases the growth of the grasses and clovers greatly.

Sometimes crops are checked in their spring growth owing to the delayed action of the soil bacteria. The Nitrate keeps the plants growing until the soil is stirred into full life.

It provides the highest-priced ingredient of complete fertilizers. Phosphoric Acid and Potash which are required by plants as well as Nitrogen, are not so costly as the Nitrogen nor are they so often lacking in our soils as is Nitrogen.

It forms basis of fertilizer mixtures. It is estimated that ready-made fertilizers cost from 25 to 35 per cent more than home-made mixtures. The scientific agriculturist will buy his supplies of Nitrate of Soda, Acid-Phosphate and Potash separately and make such mixtures as he knows his soils and crops require.

Nitrate of Soda supplies Nitrogen to plants even more readily than does manure. Backward pastures are stimulated into vigorous

growth. Struggling fall wheat or spring crops are forced to grow; they do not have to wait for the bacteria to unlock the stores of plant foods held in the soil. Trees in the orchards attain a richer leafage. Vegetables in the garden shoot ahead. Lawns are made greener and richer.

A comprehensive report on "Nitrate of Soda, its nature and use in agriculture," has been prepared by the Dominion Department and appeared in this publication two weeks ago. It has been prepared by Frank T. Shutt, M.A.D.Sc., Dominion Chemist, and B. Leslie Emslie, F.C.S., Supervisor of Investigational Work with Fertilizers. Write to-day for a copy of this report. It shows the value of purchasing fertilizers in pure form.

## Price and Instructions for Ordering.

The Nitrate of Soda is stored in Ontario at Brighton, Cobourg, Trenton, Nobel and Sulphide. The Price is \$82.00 per net ton in carload lots, f.o.b. cars at shipping point. The Board reserves the option of selecting the shipping point.

In less than car lots the price will be \$9.00 per bag weighing approximately 200 lbs. each, f.o.b. shipping point. Minimum shipment five bags.

All orders must be sent to Imperial Munitions Board, 56 Church St., Toronto, and each order must be accompanied by a marked cheque or money order for full amount of the purchase. Cheques and money orders should be made out in favor of Imperial Munitions Board, and must be payable at par in Toronto. In ordering please give full shipping directions including your Post Office address, name of railway and of your nearest railway station. All shipments will be made promptly. Freight charges will be collected on delivery.

**Imperial Munitions Board, 56 Church St., Toronto, Ont.**

## The

Rules for Departments: (1) paper only. (2) with communication the real name of the person enclosing a letter. (3) place it in stamp. (4) Allow one answer to question.

DEAR... other upon by Dr. A. T. whose study past the field came upon the in considerable Canada just question may writing the p not the slight upon tempera came up, inc phase in stud

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### 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.

DEAR Ingle Nook Friends.—The other day I was reading a book upon "The Subconscious Mind," by Dr. A. T. Schofield, a medical doctor whose studies have roamed somewhat past the field of medicine only, when I came upon the following passage, which, in consideration of the aliveness in Canada just now of the prohibition question may be of interest to you. In writing the paragraph, Dr. Schofield had not the slightest intention of entering upon temperance propaganda; the subject came up, incidentally, as an interesting phase in study of the brain.

To make the quotation clear it may be necessary to explain that the brain has three parts: 1, the "cortex," or upper brain, which governs all conscious and voluntary action; 2, the "basal ganglia," or mid-brain, which governs our habits, or acquired, reflex actions; and 3, the "medulla," or lower brain, which governs all actions performed unconsciously, whether we will them or not, such as circulation of the blood, digestion, and, to some extent, breathing.

Now for the quotation:

"Alcohol, as pointed out by Dr. Hughlings Jackson and many others, paralyzes the brain from above downwards. If a moderate amount of alcohol only be taken, paralysis does not supervene, but only general excitement of the nerve centres is seen. But if this is exceeded, symptoms of paralysis of the cortex are evident in the loss of voluntary will power and conscious control over actions, consciousness being also lost to a large extent; while at the same time the performance of the most complicated actions, singing well-known songs, or dancing well-known dances, shows the paralysis has not yet extended deeply enough to reach the mid brain or the cerebellum—the small hind brain that governs always unconsciously the equilibrium of the body. Here is an instance of this state:

"A lady engaged to play at a private concert took too much to drink at supper, and the result was, she not only kept on playing too long when she returned to the piano, but whenever her fingers rested on the keys, she started playing like an automatic musical box, and could not be stopped.

"If, now, more alcohol be taken, a complete change takes place. As the paralysis extends lower, it involves the cerebellum; and the upright position, for some time a matter of difficulty, can now no longer be maintained at all, and the victim falls down on the floor. At the same time the mid brain shares the paralysis, and all complicated though unconscious habits cease. The man no longer sings or talks or dances, but is quite still. He is now 'dead drunk,' which means that the whole of the brain is temporarily paralyzed with the exception of the medulla, which still quietly carries on the functions of life, and will continue to do so, because at this stage the man always stops drinking, and for a very curious reason. It is not because he wishes to, for his intelligent will power is long since abolished, while the craving remains; but it is simply because his arm is paralyzed, and he can no longer mechanically carry the poison to his lips. But for this thousands would die of drink every night. Their salvation consists in one simple physiological fact; the arm is paralyzed before the paralysis has had time to reach the medulla. If now, however, some kind friend pours more alcohol down the person's throat, the medulla at last succumbs, and the man is no longer dead drunk, but dead."

A little further on Dr. Schofield remarks quite casually, "Habits formed during life strongly tend to become hereditary. This is clearly seen in the love of strong drink."

If further remark is necessary, I may say that we have in our office a girl who for years has played the organ in the gaol in this city at the Sunday morning services. I have just been talking with her, and she says that ever since prohibition was brought in as a war-measure the number of prisoners in the gaol has

been greatly reduced. That this must be the case elsewhere may be judged from the fact that recently the question came up in the Ontario Legislature as to whether county gaols might not be "consolidated," that is, one made to do duty where two or three were required before, in cases where adjoining counties so agreed, the surplus buildings thus being liberated for other use.

In September women will have a chance to vote on the question. It might be well if lecturers were engaged to go about before the time of voting to give full instruction in regard to marking the ballots. The papers will, no doubt, all give such instruction in good time, but the advantage of having a lecturer is that better opportunity is afforded for immediate asking and answering of questions.

All women voters should see that their names are properly entered on the voters lists. This may be a question that all women's organizations will have to see to. The question came up at the meeting of the Interprovincial Council of Farm Women, at Winnipeg, last week, and it was found that as yet there is much confusion in regard to the matter.

By the way, Quebec, a short time ago, voted in favor of the retention of beer and wines. Prince Edward Island, Nova Scotia, New Brunswick, Manitoba, Saskatchewan and Alberta have been made by vote permanently "dry;" so it is only in Ontario and British Columbia that a referendum will be taken in the fall, when the soldiers are home from overseas.

AND now another suggestion that may be of value to all who love birds, and, at the same time, would like to see our cemeteries kept in better order and made more attractive.

A movement has been started by the Audubon Society in the United States, to convert all the cemeteries of the country into bird-sanctuaries.

Don't you think that a splendid idea? In the cemeteries, if nowhere else, the dear songsters should find peace—peace in which to build their nests, unmolested, and sing their hearts out in sweet songs over the quiet graves of the dead.

So very little effort, too, would be required to do this good thing,—nothing more than the planting of trees, if there are none already, and the putting up of bird-boxes, perhaps, occasionally, some food that the birds like.

It is not hard to bring these little feathered friends about, and, once they have established their homes, they fly far a-field, repaying those who have befriended them not only by the sweetness of their songs, but by eating insects and grubs and weed seeds. The fewer the birds the more difficult the struggle the farmers and fruit-growers must have against all these pests. Were our country filled with birds there would be little need, indeed, for spray-pump and poison.—Not bird-lovers only, affirm this, but the scientists also, who have found out exactly the destruction to insects and weeds that may be brought about in one year by even one little bird.

"But the robins eat my cherries!" says one. Perhaps they do, but if you gather the cherries soon enough the birds will not have time to take off a great many. Besides, they more than make up for the bit of damage they do to the cherry crop by the great good they do otherwise.

It is said that a very good plan to protect one's fruit is to plant wild cherries, elder-berries, etc., about the confines of the orchard. The birds like the wild fruit best. . . . And, just here, comes a suggestion for the proposed sanctuaries. When the trees are being planted in the cemeteries why not number among them such beautiful native trees as the wild bird-cherry and the Juneberry?

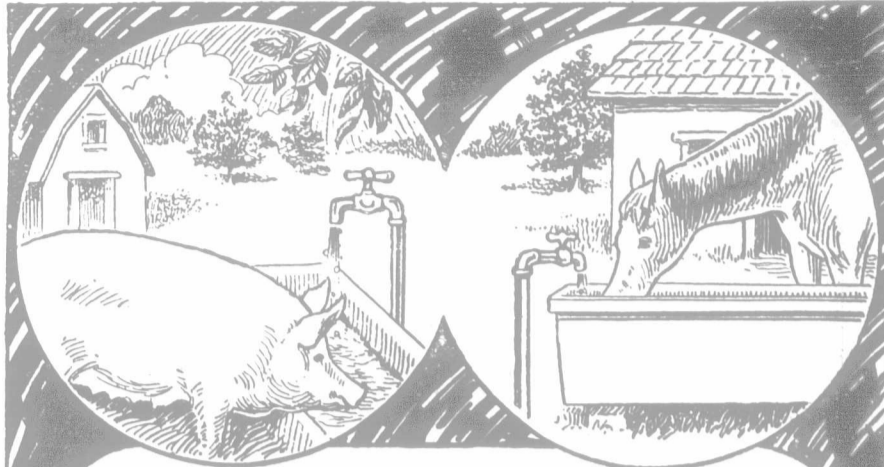
We thank the U. S. Audubon Society for their suggestion.

JUNIA.

#### Needle Points of Thought.

"Success is a habit of doing everything right from the start."—Edward Earle Purinton.

"By nature's great Law of Equal Reaction we can help ourselves only by helping others, and whatever we do to harm others will react to harm us. This is not a dream: it is an absolute fact, and the quicker we all recognize it the better it will be for all of us."—Roger Ward Babson.



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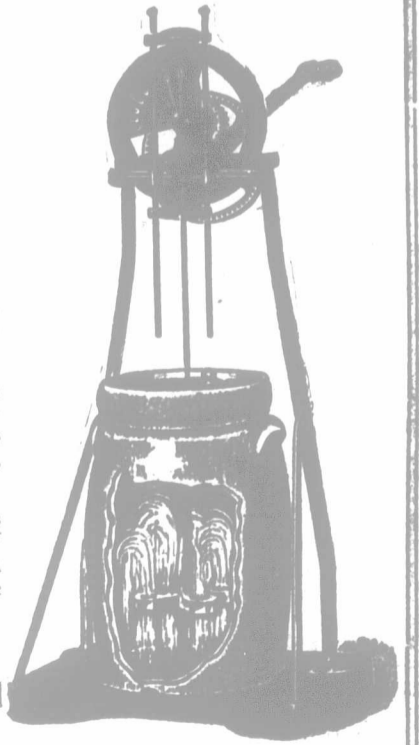
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68 Waterloo St., Stratford, Ont.

## Steel Wagon Wheels

Send for our illustrated circular and price list describing our STEEL WAGON WHEELS. Our wheels are made to fit any size axle or skeln. We quote price delivered to your nearest station, no matter where you live. Satisfied customers in every Province using Cooke Wheels. Will send free, with circular, chart showing how to take measurements correctly, also customers' testimonials. Write to-day.

THE COOKE METAL CO.  
19 West Street      Orillia, Ontario

### June Wedding.

For "Margaret," Carleton Co.

Dear Margaret, there is no set rule for wedding luncheons ("breakfasts," as they are often called). More and more the tendency is to make them simple affairs, for the feeling grows among really nice people that in all show and ostentation there is likely to be a tinge of vulgarity. A pretty way is to have small tables, at which about four people may sit, with a large one for the bridal party and parents of bride and groom. But if it is inconvenient to have the small tables, long ones may be improvised, with the bridal party in the place of honor at a table across one end. I think it is nicer—and less trouble—to have "sit-down" luncheons at a country wedding. Then one can have whatever one likes, exactly as at any other luncheon. There may be clear soup, fowl, vegetable, salad, cake and ice-cream or fruit-salad, with all the pickles, etc., one chooses. Or the soup may be omitted, and instead may be served chicken-salad, sandwiches, thin bread and butter, olives, etc., with the usual sweet course at the end. As people have to come so far to a country wedding, and are likely to be hungry, a good, substantial luncheon seems the right and kindly thing. Of course, in cities where there are sometimes anywhere from one hundred to five hundred guests (although small, private weddings are gaining in favor), tables are out of the question, and so a "buffet luncheon" has been improvised. At this the dining table contains plates of small sandwiches of many kinds, cake cut in small bits, maccaroons, almonds, olives, etc. The guests are served first, wherever they may be, standing or sitting, with the tea or coffee cups,—no plates. When the sandwiches are passed they are laid on the edge of the saucer; that is why they have to be so small. The olives, almonds, and little sweet gherkins are passed with the sandwiches. Afterwards the cups are all taken away and plates of ice-cream or fruit-salad passed, with the cake.

Always the tables are prettily decorated with flowers which may be in season—just enough and not too many, as even too many flowers may smack of vulgarity. It is better to use one kind. In late June a bowl of roses may be on each table, with a few roses and buds placed on the table-cloth besides, and a rose-bud at each place.

Or ox-eye daisies may be placed in the vases, with "daisy-chains," running out in festoons about the centerpiece. Sometimes banks of tulle are fluffed about the centre flower arrangement, or strips of ribbon are extended from the flower-holder to the corners of the tables, or the large table, in case of a buffet luncheon.

The rooms also are festooned and decorated according to one's taste.

Always the wedding-cake is given the place of honor, or, at least two or three storeys of it, which are afterwards given to the bride to take home. But nowadays an extra portion, or the big lower storey, is usually cut beforehand into little bits, so there will be no confusion or breaking up of the cake at the table.

About the tray query.—It is quite immaterial. If there are enough small trays each cup, or three or four cups may be placed on it, with a small jug of cream and bowl of loaf sugar. Otherwise two lumps of sugar may be put on the edge of each saucer and the cups carried about without a tray at all except those used immediately to carry about a cream jug and sugar-bowl if extra sugar should be required. . . . Of course, all this applies only to a buffet luncheon. At a "sit-down" luncheon little jugs of cream and bowls of sugar are placed on the table.

You see, dear Margaret, the less ceremony, and pomp, and nonsense, the better. True ladies and gentlemen never run to pomp, and show, and possible mistakes, but rather to simplicity and naturalness, and the dignity that comes of these things.

Of one thing only must one be anxious regarding a wedding luncheon,—that is that everything be dainty.

If a buffet luncheon is decided upon,—don't forget to put a spoon on each saucer, etc. It's the easiest thing in the world to forget spoons, and it makes such a confusion to have to run about afterwards with them.

### Knowing the Wild Flowers

WHO does not love the wild flowers? And yet comparatively few people can name, even by their common names, more than half a dozen.

Surely we should know our friends better than this, and so to-day we begin to make a few introductions. If you want to make more intimate acquaintance you can find it through any of the many books on wild flowers. Beecroft's *Who's Who Among the Wild Flowers*, Lounsbury's *A Guide to the Wild Flowers*, and Reed's pocket "Guides" may be mentioned as popular books on the subject. For actual botanical study there are many manuals, including that good old standard, Gray's *School and Field Botany*.

*Skunk Cabbage (Spathyema foetida)* needs few words here. Everyone knows it, by its disagreeable odor. Look in marshy places on the very earliest spring days and you will likely find it, especially in the southern portions of Canada. You will recognize it at once by its curious cowered spathe, in its case a green, purple-veined cloak which surrounds and protects the quite inconspicuous flowers



Hepatica.

crowded together inside. Later the great, ovate, veined leaves, which resemble somewhat those of the Day Lily, are quite ornamental.—But odoriferous! Ugh!

*Marsh Marigold (Caltha palustris)*.—Probably you call these flowers "buttercups," but they are not buttercups. The only buttercup that you are very likely to find at this early time has a quite inconspicuous flower. But the marsh marigolds! They blaze over the wet, marshy places and along the edges of sluggish streams in sheets and patches of gold. No one could miss them, with their bright yellow clustered flowers and rounded, shining leaves. By the way, this plant is Shakespeare's "Mary-bud."

*Hepatica, or Liver-Leaf*.—Sweetest of all the very early spring flowers is this, as it nestles beside a log or tree in the woodland. Its delicate white, pink or bluish flowers, often sweetly perfumed, are very dainty, but their buds and stems seem well wrapped up in a furry fuzz, as though to protect them from the cold.

### Seasonable Cookery

*Three Grain Brown Bread*.—Mix together 1 pint rolled oats, 1 pint rolled wheat, 1/2 pint yellow cornmeal, 1/2 pint whole wheat flour and 1 teaspoon salt. Dissolve 1 teaspoon soda in 2 tablespoons warm water. Add 1/2 pint New Orleans molasses. Stir and add this to 1 pint thick, sour milk. Mix all together and steam 4 hours.

*Savory Kidneys*.—Cut the kidneys through the centre and remove the white veins and fat. Wash in cold water and drop into boiling water for 5 minutes, then drain and wipe dry. Cut thin slices of bacon the size of the pieces of kidney. Lay the bacon on the kidney and bake in a moderate oven. Dust with salt and pepper and serve plain, or with a sauce



**Living the Wild Flowers**

Do not love the wild flowers? Let comparatively few people name, even by their common than half a dozen.

Should know our friends better and so to-day we begin to introduce them. If you want more intimate acquaintance through any of the many wild flowers. Beccroft's *Who's Who's the Wild Flowers*, Lounsbury's *Wild Flowers*, and "Guides" may be mentioned books on the subject. For a study there are many finding that good old standard *Field Botany*.

*Sparganium angustifolium* (Spathyema foetida) grows here. Everyone knows its agreeable odor. Look in on the very earliest spring will likely find it, especially portions of Canada. You find it at once by its curious in its case a green, purple which surrounds and protects inconspicuous flowers



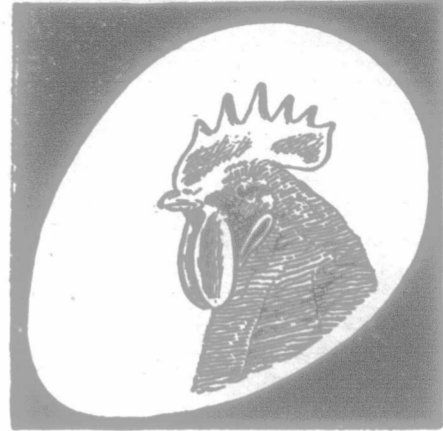
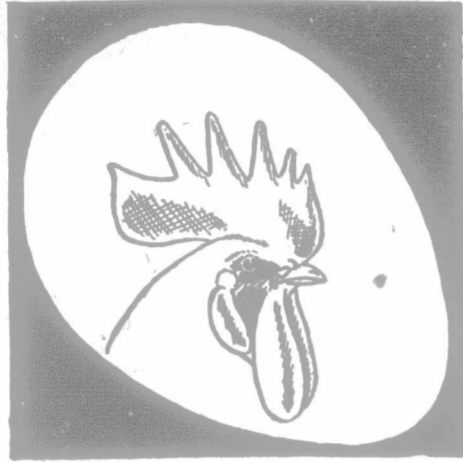
*Spathyema foetida*.

inside. Later the great, leaves, which resemble of the Day Lily, are -But odoriferous! Ugh! (*Caltha palustris*).— these flowers "buttercup" are not buttercups. The that you are very likely early time has a quite over. But the marsh blaze over the wet, along the edges of sheets and patches of miss them, with their clustered flowers and leaves. By the way, peare's "Mary-bud," *Ver-Leaf*.—Sweetest of spring flowers is this, as on a tree in the wood—white, pink or bluish ly perfumed, are very buds and stems seem in a furry fuzz, as them from the cold.

**Recipe Cookery**

**Wheat Bread.**—Mix two cups of oats, 1 pint rolled low cornmeal, 1/2 pint and 1 teaspoon salt. Soda in 2 tablespoons 1/2 pint New Orleans add this to 1 pint Mix all together and

—Cut the kidneys and remove the white in cold water and water for 5 minutes, dry. Cut thin slices the pieces of kidney. kidney and bake in Dust with salt and in, or with a sauce



**A Call for**

**Greater Production**

Great Britain's Need is Canada's Opportunity—Egg and Poultry Export Demand is Unlimited—230,000 Dozen Canadian Eggs were Moved for Export March 12th to 31st—Business was Offering for as Many Cases but Supply was not Available.

**Aim for 100 Laying Hens on Every Canadian Farm**

Pure breeds of laying strains—eggs and meat are the Poultry Producer's objective.

Remove non-producers—do not have any boarders—consult the Government Officers on Flock Improvement Methods.

Only early hatches will give maximum profits—winter eggs give greatest cash returns—have pullets laying in November.

Destroy all unhealthy birds. Disease spreads rapidly, causing heavy loss. Keep houses sanitary. Prevention is the best cure.

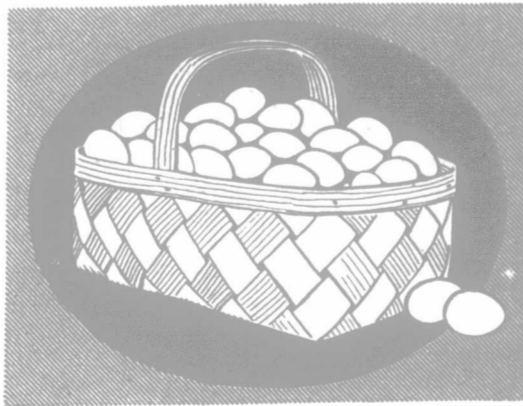
Uniform methods are essential. Hens are creatures of habit. Help them to get the laying habit—it will pay you. Canada is good for poultry. No country in the world is better able to produce eggs and poultry. Climatic conditions are ideal.

Every farm should have 100 laying hens—75,000,000 hens for Canada. This is a possibility and also a probability if you do your share.

**Produce Economically through Flock Improvement**

**Free Literature**

The Department of Agriculture has information for free distribution on all phases of eggs and poultry production and marketing. Candling appliances are also available. Copies of the Egg Regulations under the Live Stock and Live Stock Products Act may be had upon application. Write for these free publications—the service is yours—make use of it.



**Volume, Quality and Co-operation**

Market regularly and frequently—Do not hold eggs; they deteriorate rapidly; bad eggs have no place on the market.

A dirty egg case and dirty fillers cause heavy losses. Quality always commands a premium.

Remove male birds after the breeding season; fertile eggs incubate in the sun's heat.

Keep eggs in dry, cool place. Exposure to heat and contaminating odors should be avoided.

Eat the very small eggs on the farm. Weight is a determining factor in grading.

Train the children to handle the poultry flock and you will have solved the labour problem. Co-operate with other producers in your locality. Volume, quality, and co-operation with standardization and advertising will help the hen to pay our war debt.

**Export Shipments are Protected by Government Inspection**

**Markets Intelligence**

Daily and Weekly Egg and Poultry Markets Reports are issued by the Poultry Division of the Live Stock Branch, Ottawa. These are distributed free on application. A tri-weekly market report service is available in the Western provinces, Winnipeg being the distributing point for Manitoba and Saskatchewan, and Edmonton for Alberta and British Columbia. These reports cover prices prevailing at the large market centres.

**Live Stock Branch**

**Dominion of Canada Department of Agriculture**

OTTAWA

CANADA



## POULTRY AND EGGS

Condensed advertisements will be inserted under this heading at four cents per word each insertion. Each initial counts for one word and figures for two words. Names and addresses are counted. Cash must always accompany the order for any advertisement under this heading. Parties having good pure-bred poultry and eggs for sale will find plenty of customers by using our advertising columns. No advertisement inserted for less than 60 cents.

**AFRICAN GEESSE, INDIAN RUNNER, Muscovy ducks, Guinea, Barred Rocks, Spanish R. I. Reds, White Leghorn, White Wyandotte, Anconas, Campines.** Eggs only. John Annesser, Tilbury, Ontario.

**ANCONAS SINGLE-COMB STRONG AND vigorous.** Two year hens mated to cockerels from trap-nested stock. Eggs \$1.50 per 15, \$7.00 per hundred. W. E. Williams, Clandeboye, Ont.

**BARRED ROCKS, O. A. C. CHOICE FLOCK** of large healthy birds, good layers. Eggs \$1.25 per doz. postpaid. R. L. Easton, Princeton, Ont.

**BEAUTIFUL WHITE ROCKS BEAUTY AND utility combined in one grand breeding strain.** Only worth while hens trap-nested through their pullet year used as breeders. Eggs at \$2.50 for 15. J. A. Butler M. D., Newcastle, Ont.

**BABY CHICKS FOR SALE—BARRED ROCKS, White Wyandotte, Rhode Island Reds and S. C. White Leghorns Barron strain, April delivery \$80 per hundred, May delivery Wyandottes \$28 and Rocks, Reds and Leghorns \$25 per hundred. 98% safe arrival guaranteed. Finest flocks in Canada. Fred J. Hind, Baby Chick Specialist, 1378 Queen St. E., Toronto, Ontario.**

**BRED-TO-SHOW LAYING STRAIN BARRED Rock eggs for hatching.** Write for catalogue. Chas. Barnard, Leamington, Ont.

**BRED-TO-LAY SINGLE-COMB WHITE Leghorn eggs for hatching, fifteen \$1.50, hundred \$7.00, carefully packed. Broken eggs replaced.** Addison H. Baird, Route 1, New Hamburg, Ontario.

**BARRED ROCK EGGS; FIFTEEN, TWO dollars; thirty, three fifty; ten dollars, one hundred; from hens that are bred and barred right and grand layers.** Order from this advertisement. Satisfaction guaranteed. W. Bennett, Box 43, Kingsville, Ont.

**BARRED ROCKS—PARKE'S AND O. A. C.** College bred-to-lay strains. Can supply cockerels. Write your wants. Eggs, \$2 for 15. M. A. Gee, Selkirk, Ont.

**BABY CHICKS AND HATCHING EGGS.** Barred Rocks, White Rocks, White Wyandottes, Golden Wyandottes, Rhode Island Reds and White Leghorns. Pure-bred utility stock. Incubator capacity, 9,000. Satisfaction guaranteed or money refunded. Write for prices. Tay Poultry Farm, Perth, Ontario.

**BARRED PLYMOUTH ROCKS—CHAMPION** Guelph winners; heavy egg production; eggs, \$3.00 per 15. Jno. Fenn, Plattsville, Ont.

**BARRED ROCK COCKERELS FOR SALE AT reduced prices.** Satisfaction guaranteed. Write John Pringle, London, Ont.

**BRED-TO-LAY TOM BARRON WHITE Leghorns and Barred Rocks; one-fifty per setting.** Henry Hooper, 83 Nottingham St., Guelph, Ont.

**BEULAH FARM WHITE WYANDOTTES.** I have more 200 egg ribbons won by my hens at American Egg Laying Contests than all the other White Wyandotte breeders in Ontario combined. Hatching eggs \$3.00 per setting and from hens that laid over 200 eggs \$5.00 per setting. Mating list free. N. Y. McLeod, Stoney Creek, Ontario.

**BRED-TO-LAY WHITE ROCKS, ONE FIFTY** per fifteen, seven fifty per hundred. Large brown eggs. Sam Hastings, Schomberg, Ontario.

**CANADIAN RINGLET BARRED ROCKS—** Trapped daily for 5 years. Send for records. Tested hatching eggs. F. J. Coldham, Box 12, Kingston, Ontario.

**CYPHERS WYCKOFF BRED-TO-LAY S.-C.** White Leghorns, baby chicks and hatching eggs. Catalogue free, giving description and prices. Cooksville Poultry Farm, Cooksville, Ont.

**EGGS—\$2.50 FOR 15—S.-C. BUFF LEGHORN, Ancona, Blue Andalusian, Dark Cornish.** Hugh McKay, 33 Curry Ave., Windsor, Ont.

**EGGS AND DAY-OLD CHICKS FROM extra heavy laying strains of Barred Rocks, White Rocks, Reds, Wyandottes, Orpingtons, Minorcas, White Leghorns, Brown Leghorns, Anconas, Spanish, Pekin Hamburgs, Cornish, etc. Also duck eggs, Pekin, Alsbury, Rouen, Runners, Fawn, pencilled and Pure White. Write for our free mating list. M. Shantz, Ayr, Ont.**

**EGGS—S.-C. W. LEGHORNS, BARRON'S** strain, lay year round, \$2.00 per fifteen. S.-C. Rhode Island Reds, selected winter layers, \$3.00 per fifteen. E. Willson, Aurora, Ontario.

**FOR SEASON 1919 MAMMOTH BRONZE** turkey eggs 50c. each from selected 1918 hens weighing 20 lbs. Miss L. Dixon, Niagara Falls, South, R.R. 2, Ontario.

**FERTILE HATCHING EGGS—TEN YEARS** selective breeding—Rose-comb Rhode Island Reds; bred for size, vigor and production of bred-to-lay strains; fifteen, \$2.00; thirty, \$3.50; eight dollars per hundred. Robert J. Brown, R.R. 2, Cornwall, Ontario.

**FAWN INDIAN RUNNER DUCKS AND single-comb white Leghorns.** The right laying strains, eggs 10 cents each. Hastings Bros., Guelph, R.R. 7, Ont.

**FAIRVIEW S.-C. BROWN LEGHORNS,** Becker strain. Eggs, \$1.00 per 15. Wm. Bunn, Denfield, Ont.

**HEDGE ROW FARM, SINGLE-COMB** Brown Leghorn eggs \$1.50 for 15, out of a beautiful flock. Heavy layers. H. W. Thur, Elora, Ontario.

**LAY-A-Lot S.-C. WHITE LEGHORNS** trap-nested the year through. Only tested hens used as breeders. A laying strain of Barron blood foundations. Eggs at \$2.50 for 15. J. A. Butler M. D., Newcastle, Ontario.

**MINORCA EGGS, BOTH COMB. ONE** fifty per fifteen, also cockerels four dollars each. Fred Reekie, Camperdown, Ontario.

**MAMMOTH BRONZE TURKEY EGGS FOR** sale, can spare a few settings of my winning strain at Guelph in nineteen hundred and sixteen and seventeen I won more prizes than all other exhibitors in Bronze Turkeys. In nineteen hundred and eighteen in six classes, I won five firsts and six seconds. Eggs \$5.50 per nine. Hens mated to first-prize Guelph toms. Geo. Neil, Tara, Ont.

**PURE-BRED ANCONA, SINGLE-COMB** shepherd strain, egg for setting 8c. each. John A. Pollard, Dashwood, R.R. No. 2, Ontario.

**PURE-BRED INDIAN RUNNER DUCKS** great layers. Eggs, one dollar and fifty cents per twelve. K. Brown, St. Mary's, Ont.

**PURE-BRED SINGLE-COMB WHITE LEG-** HORNS, Rose-comb White Wyandottes, bred-to-lay and prizewinning stock. Eggs, \$2.00 per fifteen. Esra Stock, Woodstock, Ont.

**PLYMOUTH ROCK LAYING STRAIN, FROM** Agricultural College—\$1.50 per setting. Mrs. Berry, 52 Queen St., Guelph.

**PURE-BRED ROUEN DUCK EGGS \$1.50** per eleven. A. F. Thornton, Thamesford, Ont.

**REGAL DORCAS WHITE WYANDOTTES,** America's Finest Strain, winners at New York and Boston, splendid layers of dark brown eggs. Official records, 200 to 255 in North American laying contests. Vigorous, matured cockerels, \$4.00 and \$5.00 each. Eggs \$3.00 and \$5.00 per setting. FREE illustrated catalogue. John S. Martin, Port Dover, Ont.

**S.-C. WHITE LEGHORNS, WHITE** Wyandotte. Choice pens of heavy layers mated with cockerels from special egg producing strains. Eggs, two dollars for fifteen. W. H. Carruthers, Bowmanville, Ontario.

**S.-C. WHITE LEGHORNS—230-264-EGG** strain, or O. A. C. Barred Rock eggs, \$1.50 setting; \$8 hundred. Selected egg-producers that cannot be beaten. A. B. C. Dickinson, Port Hope, Ontario.

**S.-C. WHITE LEGHORN, PURE-BRED** barron strain; eggs for hatching \$1.25 per setting. W. Ralph, R.R. No. 1, Etna, Ont.

**SINGLE-COMB WHITE LEGHORNS EGGS** from Tom Barror strain, one fifty per setting. J. E. Honsberger, Dunnville, R.R. 4.

**SILVER GREY DORKING EGGS FROM A** careful selected laying strain. I imported cockerel head of pen, \$2 per 13. W. Shore, Ilderton.

**SINGLE-COMB WHITE LEGHORN BABY** chicks from our celebrated laying strain, for sale. Utility Poultry Farm, G. O. Aldridge, Mgr., Lt. Col. T. G. Delamere, Prop., Stratford, Ont.

**S.-C. WHITE LEGHORNS, BARRON STRAIN,** bred-to-lay eggs for hatching \$1.50 per 15. W. S. Fergusson, Plattsville, Ontario.

**TURKEYS AND GEESSE—WE HAVE THIS** spring 40 healthy Bronze turkey hens, mated to husky young toms. Eggs in season, \$5.00 per 10. 30 choice Toulouse geese, also well mated; eggs now ready, \$4.50 per 9. Few toms and ganders on sale. Everything in pure-bred land and water fowls. Write us first. Stamps for early reply. Yamaska Poultry Farms, St. Hyacinthe, Que.

**WHITE WYANDOTTE EGGS FOR HATCH-** ING, heavy layers and prize winners. Two to five dollars per setting. Stock for sale. J. McCaffrey, Newmarket, Ont.

**WHITE WYANDOTTES, BRED FOR TYPE,** size, vigor, and production. Eggs for hatching \$2.00 per 15. Frank Morrison, Jordan, Ont.

**WHITE WYANDOTTE EGGS FROM** winners of silver cups, with egg record, \$2.50 per setting. A. F. Waddell, Stratford, Ont.

**YEARLY TRAPPED BARRED ROCKS** hatching eggs, fifteen, two dollars; thirty, three fifty; records and mating list free. W. J. Johnston, Drawer 246, Meaford, Ontario.

### Prevent Chick Bowel Trouble Raise All You Hatch

How to avoid loss, how to successfully raise baby chicks and just what to feed them, together with a host of valuable information to poultry raisers, contained in new 16-page bulletin written by Professor Quisenberry, Box 7010, Leavenworth, Kansas, said to be the best authority on poultry in the country. This bulletin mailed free. Write at once to my address.

### BABY CHICKS

Barred Rocks, White Wyandottes, White Leghorns Bred-to-lay from Parks, Poorman's and Barron's strains. These are known as America's best. Prices on Application. Special prices to Farmers' clubs and others in lots of 300 and over.

### LUCKNOW HATCHERY

LUCKNOW - ONTARIO

### Want and For Sale

Advertisements will be inserted under this heading, such as Farm Properties, Help and Situations Wanted and Pet Stock. TERMS—Four 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 60 cents.

**"DAIRYMEN WANTED MUST BE GOOD** milkers at Speedwell Hospital, Speedwell, Guelph Ontario"

**FLEMISH GIANT RABBITS FOUR MONTHS** old, two dollars each. Choice breeding stock. Trevor McLennan, Beaverton, Ontario.

**MAN TO OPERATE TRUCK OR FURNISH** team to collect cream and produce. State rate expected and references. Box 27, Farmer's Advocate, London, Ont.

**WANTED PRACTICAL FARMER WHO** understands stock and could manage farm, also wife to assist generally. References. Yearly contract. J. Somerville, R.R. No. 4, Bright, Ont.

### Registered Seed Barley

O.A.C. No. 21, in two-bushel sealed bags, \$1.75 per bus., bags included. Government germination, test, 100%. Yield last year, 48 bus. per acre. H. H. HOWELL, R. R. 1, GAINSVILLE, ONT.

of butter, chopped parsley and a little lemon juice.

**"The Best Ham You Ever Ate."**—Taken, with this note, from an old recipe book. Parboil a piece of smoked ham, cut about 2 inches thick, in sweet milk for 20 minutes. Drain and put in a baking-dish. Cover the meat with a paste made of ½ cup brown sugar, a large spoonful of flour, and a teaspoon of mustard, using some of the milk the meat was cooked in to hold the paste together. Use half the paste to cover the one side of the ham, bake half an hour, then turn, spread the rest of the paste on the other side, return to the oven and cook an hour longer, having a slow oven. Pour the remaining milk around the meat before baking through.

**Prune Roll.**—One and one-half cups flour; ½ teaspoon salt; two-thirds cup milk; 2 tablespoons sugar; 1½ teaspoon baking-powder; 3 tablespoons lard; 24 prunes; grated rind of ½ small lemon. Sift together the flour, salt and baking-powder and rub in the lard with the fingers. Add the sugar and mix to a light dough with the milk. Stone the prunes, having previously washed them and soaked them for 12 hours. Roll the dough out into a sheet one-third inch thick and lay the prunes on it. Wet the edges and roll up into a roly-poly. Tie loosely in a cloth, wet and floured, and steam 1½ hours. Serve with hard or lemon sauce.

### The Scrap Bag

#### A Good Gardening Idea.

When working in the garden or doing other dirty work scratch your nails over a piece of soap. This will prevent the earth from getting under them, and when you wash your hands the soap will come out easily. This is especially recommended to those who find they cannot do garden work comfortably with gloves on.

#### Spring Tonic.

The following recipe for old-fashioned root beer is recommended. For each gallon of water to be used take ½ ounce each of hops, and bruised roots of burdock, yellow dock, sarsaparilla, dandelion and spikenard. Boil about 20 minutes and strain while hot. Add 8 or 10 drops of oils of spruce and saffras mixed in equal proportions. When cool enough not to scald the hand, put in 2 or 3 tablespoons yeast, two-thirds of molasses, and ½ lb. white sugar, (to each gallon water). When mixed let stand in a jar with a cloth over it for about 2 hours, then bottle and set in a cool place. This recipe was taken from an old manuscript book belonging to a New England family, in which the beer has been used every spring for over 80 years. The recipe ends in a foot-note thus: "If taken freely by the family it will save many doctor's bills."

#### Economizing Garden Space.

Lettuce and radishes may be sown together; one may plan to put beans between cauliflowers or cabbage, to have celery follow early peas, and to train tomatoes to a fence. Many such expedients will suggest themselves, if the garden plot is small.

#### Pineapple Syrup

Even the skins, cores and parings of pineapple may be used to make a flavoring good for sauces, mince pies, and even for making a delicious hot-weather drink. Boil all in water to cover, then strain, add sugar equal to half the weight, boil again, bottle and seal. To use it as a drink, take equal parts of the syrup and lime juice, then add very cold water and a little more sugar if necessary.

**The Englishman Came Back.**—All who have visited Epsom has seen the big gates on which are perched two stone dogs. An American officer saw them recently for the first time.

He approached a native with a joke on his lips, expecting to see it fall flat, as he believed would be the case. "When do they feed these dogs?" he asked. "Every time they bark," said the Epsomite, and now this particular American is more of an admirer of Englishmen than ever. —Tit-Bits.

"What is the best appetizer you know of?" asked Smith.

"The absence of the price of a meal," replied Jones.

## Markets

Continued from page 817.

\$1.21; No. 3, \$1.20, and sample grades, \$1.10 per bushel, ex-store.

**Flour.**—The market was unchanged with Manitoba, Government standard spring wheat flour, \$11 per barrel, in jute, ex-track, Montreal freights and for city bakers, with 10c. off for spot cash. Ontario flour, \$10.20 to \$10.30 per barrel in new cotton bags. White corn flour and rye flour, \$8.50.

**Millfeed.**—Feed cornmeal was quoted at \$64, including bags, delivered in broken lots. Barley meal, \$56 to \$58; mixed mouille, \$50 to \$52. Dairy feed, \$46; oat middlings, \$44. Car lots of bran, \$44 to \$48, and shorts, \$46 to \$48.

**Baled Hay.**—No. 1 Timothy hay was quoted at \$29 to \$29.50 per ton for car lots of No. 1, ex-track. \$28 to \$28.50 for No. 1 light clover mixed and for No. 2 timothy; \$27 to \$28.50 for No. 2 clover mixed and \$26 to \$26.50 for No. 3 timothy. Hayseed.—Alsike has been exported to the United States and very little is left. The price advanced to 35c. and 40c. per lb., Montreal. Red clover was 50c. to 55c. and timothy 14c. to 18c. per lb.

**Hides.**—Beef hides have advanced another cent and were 18c. a lb. for cows, 16c. for bulls, and 21c. for steers. Veal skins were up to 55c. a lb., while grassers were 22c. Lamb skins were \$3.25 each, and horse hides, \$5 to \$7 each.

### Chicago.

**Hogs.**—Heavy weight, \$20.35 to \$20.55; medium weight, \$20.20 to \$20.50; light weight, \$19.75 to \$20.35; light lights, \$18.50 to \$20; sows, \$18.50 to \$20; pigs, \$16.75 to \$18.75.

**Cattle.**—Cattle compared with a week ago choice and prime steers steady to 25c. higher; others mostly 50c. to 75c. higher; cows and heifers, 50c. to 75c. higher; medium grades showing most advance; canners and cutters, 25c. to 50c. up; best fat bulls, mostly 25c. higher; bolognas steady; in-between butchers' slow; stocker and medium weight feeders, 25c. to 40c. higher; others steady, 25c. higher; calves, \$1 to \$1.50 lower.

### Cheese Markets.

Montreal, finest easterns, 24c. to 25c.; New York, specials, 31½c. to 33c.; average run, 31½c. to 32c.

#### Sale Dates.

May 14, 1919.—Elias Snyder, Burgessville, Ont.—Holsteins.

May 14, 1919.—Jos. Dorrance & Son, R. 5, Seaforth.—Dual-purpose shorthorns.

June 12, 1919.—National Ayrshire Consignment Sale, Springfield, Mass.

June 13, 1919.—New England Ayrshire Club consignment sale, Springfield, Mass.

### Grandson of Ormsby Jane Segis Aaggie at Service.

Holstein breeders who appreciate a good sire should be interested in the advertisement appearing elsewhere in this issue regarding the young herd sire Ormsby Jane Hengerveld King, owned and offered for service by a small syndicate of Durham County breeders. The owners are L. C. Snowden, L. I. Metcalf, J. D. Stevens and R. R. Stevens, all of Bowmanville, and all owners of small but select pure-bred herds. Ormsby Jane Hengerveld King was purchased last year from R. M. Holtby, of Port Perry, Ontario, and the service fee, while it is not announced, is, we understand, exceptionally reasonable for a sire of this breeding. His sire Ormsby Jane King, is a son of Ormsby Jane Segis Aaggie, 46.33 lbs. (The great white heifer), while his dam, Dolly Hengerveld Krondyke, is a 21.75-lb. two-year-old daughter of a 31.30-lb.-bred grandson of Pontiac Korndyke. This breeding combined with his great individuality will, without doubt, place Ormsby Jane Hengerveld King among the most foremost bulls of central Ontario, and breeders wishing to use a high-record bull on a few of their best record cows would do well to make their applications early. The bull is young and being used exclusively in all four herds mentioned, only a very limited number of outside cows can be accepted. Address your requests to any one of the above owners and mention this paper.



**Markets**

Continued from page 817.  
 \$1.20, and sample grades,  
 1, ex-store.  
 market was unchanged  
 a, Government standard  
 flour, \$11 per barrel, in  
 Montreal freights and for  
 th 10c. off for spot cash.  
 \$10.20 to \$10.30 per barrel  
 ags. White corn flour and  
 d cornmeal was quoted  
 g bags, delivered in broken  
 meal, \$56 to \$58; mixed  
 52. Dairy feed, \$46; oat  
 Car lots of bran, \$44 to  
 \$46 to \$48.  
 No. 1 Timothy hay was  
 to \$29.50 per ton for car  
 -track. \$28 to \$28.50 for  
 ver mixed and for No. 2  
 \$28.50 for No. 2 clover  
 \$26.50 for No. 3 timothy.  
 sike has been exported  
 States and very little is  
 advanced to 35c. and 40c.  
 al. Red clover was 50c.  
 y 14c. to 18c. per lb.  
 hides have advanced  
 were 18c. a lb. for cows,  
 and 21c. for steers. Veal  
 55c. a lb., while grassers  
 skins were \$3.25 each,  
 \$5 to \$7 each.

**Chicago.**

weight, \$20.35 to \$20.55;  
 \$20.20 to \$20.50; light  
 o \$20.35; light lights,  
 ws, \$18.50 to \$20; pigs,  
 compared with a week  
 prime steers steady  
 hers mostly 50c. to 75c.  
 eifers, 50c. to 75c. high-  
 s showing most advance;  
 ers, 25c. to 50c. up;  
 ly 25c. higher; bolognas  
 butchers' slow; stocker  
 ht feeders, 25c. to 40c.  
 dy, 25c. higher; calves,

**Markets.**

easterns, 24c. to 25c.;  
 als, 31 3/4c. to 33c.;  
 to 32c.

**Dates.**

Elias Snyder, Burgess-  
 ins.  
 Jos. Dorrance & Son,  
 al-purpose shorthorns.  
 National Ayrshire Con-  
 ngfield, Mass.  
 New England Ayrshire  
 ale, Springfield, Mass.

**Ormsby Jane Segis  
 at Service.**

s who appreciate a  
 be interested in the  
 ring elsewhere in this  
 e young herd sire  
 veld King, owned and  
 y a small syndicate of  
 eeders. The owners  
 L. I. Metcalf, J. D.  
 evens, all of Bowman's  
 s of small but select  
 Ormsby Jane Henger-  
 ased last year from  
 t Perry, Ontario, and  
 it is not announced,  
 ceptionally reason-  
 s breeding. His sire  
 is a son of Ormsby  
 46.33 lbs. (The  
 hile his dam, Dolly  
 ke, is a 21.75-lb.,  
 r of a 31.30-lb.-bred  
 c. Korndyke. This  
 with his great indi-  
 out doubt, place  
 veld King among  
 ls of central Ontario,  
 to use a high-record  
 ir best record cows  
 ce their applications  
 ung and being used  
 r herds mentioned,  
 umber of outside  
 e. Address your re-  
 e above owners and

**Gossip.**

**The Homestead Herd of Ayrshires.**

Many Ayrshire breeders who are read-  
 ers of these columns are already familiar  
 with the high quality of the Homestead  
 herd, owned by MacVicar Bros., of Bel-  
 mont, Ont. As seen recently by a repre-  
 sentative of this paper, they have all the  
 qualifications of a real outstanding com-  
 mercial herd, and just the sort to insure a  
 gilt-edged investment for their owners.  
 The herd at present numbers around 60  
 head, and the six-year-old sire, "Advance  
 of Walnut Lodge," is the chief sire in  
 service. As an individual this bull is one  
 of the smoothest bulls we have seen for  
 some time, and his sire, Advance, was a  
 son of one of the breeds greatest cows,  
 Jean Armour. On his dam's side he is a  
 grandson of that famous sire "Scottie."  
 There are now twenty-five daughters of  
 Advance of Walnut Lodge in the herd,  
 and they with about a dozen R.O.P.  
 mature cows are as pleasing a lot of  
 breeding females as one could wish to  
 find. The more mature cows have nearly  
 all, at some time or other, qualified in  
 the Record of Performance test with  
 records that average 8,000 lbs. of milk  
 in the year for all ages. In summing up  
 this average it is only fair to add once  
 more that the herd is at all times under  
 strictly commercial conditions, and this  
 no doubt is accountable for the health  
 and thriftiness of the herd as seen in the  
 stables recently. The young bulls in the  
 present offering are of practically the  
 same breeding, and include several  
 youngsters that have exceptional promise  
 as herd sire material. For full particu-  
 lars regarding the herd address McVicar  
 Bros., Homestead Farm, Belmont, Ont.

**Some Choicely-Bred Holsteins.**

There are but few herds more for-  
 tunate in the way of a herd sire than the  
 splendid Holstein herd owned by Jos.  
 Peel, of Port Perry, Ontario. Mr. Peel's  
 herd now numbers in the neighborhood of  
 forty head of choicely-bred Holsteins,  
 and the herd sire referred to is the 20 months  
 bull Gipsy Pontiac Cornucopia. Indi-  
 vidualy, we may add, he compares  
 favorably with the strongest bulls of the  
 age seen on the show circuit last year, and  
 in breeding it seems almost sufficient to  
 say that his sire, May Sylvia Pontiac  
 Cornucopia, is a son of May Echo Sylvia's  
 daughter, and K. P. Pontiac Lass' son  
 Spring Farm Pontiac Cornucopia. Then  
 for dam Gipsy Pontiac Cornucopia has  
 that good five-year-old 30.71-lb. cow  
 Gipsy Queen Rhoda. All the calves now  
 arriving in the herd are sired by this  
 royally bred young sire, and, as seen  
 recently by a representative of "Farmer's  
 Advocate," they were a choice lot. In  
 females a very small percentage have  
 what is considered to-day very high  
 records. There are, however, several  
 around 25 lbs. for mature cows, and Alice  
 Tensen Canary, a five-year-old cow, has  
 passed the 30-lb. mark, having made  
 30.22 lbs. of butter last year in 7 days as  
 a four-year-old. As for individuality and  
 type this cow stands well up in the list of  
 Canada's 30-lb. cows, and she also has  
 produced 100 lbs. of milk in one day.  
 She has a two-months bull in the stables  
 that will be retained as the junior herd  
 sire. This calf is sired by Mr. Hardy's  
 "champion" bull, which all will recall as  
 the son of the great May Echo Sylvia.  
 There are few but who will say that Mr.  
 Peel is getting into a breeding herd that  
 has every promise of being one of Ontario's  
 greatest. He is at present offering several  
 young bulls of serviceable age as well as a  
 number of young cows and heifers, the  
 latter of which are bred to Gipsy Pontiac  
 Cornucopia.

**Questions and Answers.**

**Miscellaneous.**

**Material for Foundation.**

How much cement and gravel will it  
 take to put a foundation under a barn  
 30 by 75 feet? Also a stable floor, 32  
 by 35 feet, and a barn floor 13 by 32  
 feet? J. B.  
 Ans.—The first foundation, built 9  
 feet high, 12 inches thick, and the material  
 used in the proportion of one to eight,  
 will require approximately 71 cubic yards  
 of gravel and 60 barrels of cement. The  
 floor of the cow stable will require about  
 17 cubic yards of gravel and 14 1/2 barrels  
 of cement, provided the floor is put down  
 about five inches thick. The barn floor  
 will require about 5 1/2 cubic yards of  
 gravel and four barrels of cement.

# Eat more Candy

"CANDIES are among the attractive and  
 useful forms in which sugar is used as a  
 food."—*Canada Lancet.*

Have you eaten your share of candy to-day?

There is a certain amount due to you, you  
 know—for your system requires it to supply  
 bodily needs.

Eminent authorities on food state that about  
 4 ounces of sugar are required by an adult  
 every twenty-four hours.

Besides sugar, candy contains nuts, fruits,  
 corn syrup, chocolate, some fats such as  
 butter, and flavoring. All these ingredients  
 are recognized as useful foods and essential  
 to the maintenance of good health.

Candy has established itself as a wonderful  
 food product. It is no longer considered a  
 luxury. Men and women everywhere have  
 found it to be an excellent food.

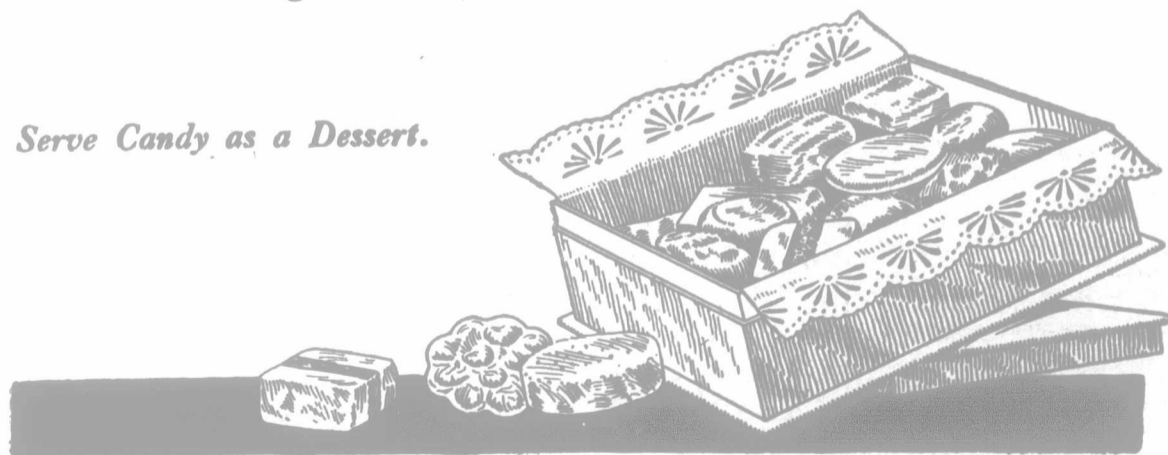
Because of its food value, candy was classified  
 as a necessity for both soldiers and sailors.

While at the Front, General Pershing cabled:  
 "Send candy if you have to omit oatmeal."

There are times each day when you feel the  
 need for something to tone you up and restore  
 your vigor—try candy.

Eat candy in rational quantities and nothing  
 but good can result.

Serve Candy as a Dessert.



THE CONFECTIONERY AND CHOCOLATE INDUSTRIES  
 OF CANADA

"Candy is a Splendid Food"



# "Galt" Galvanized Steel Shingles

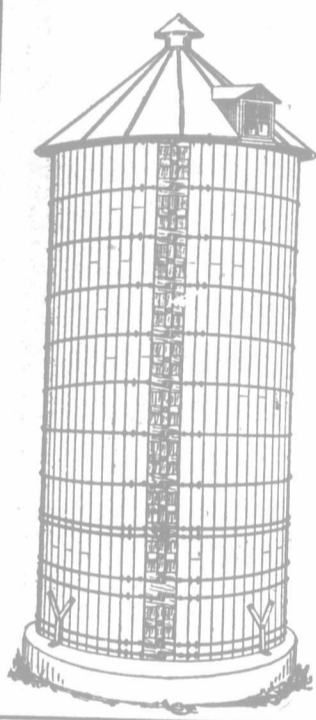


The "GALT" Shingle locks together in such a way that there is no weak point in its entire construction, and it is ornamental as well. It is, therefore, the Ideal Shingle for Dwellings, Churches, Schools, Public Buildings, Barns, etc.

We also manufacture

Corrugated Sheets      Barn Ventilators  
Silo Roofs              Barn Roof Lights

**THE GALT ART METAL COMPANY, LIMITED**  
Galt, Ontario



## TWO SILOS EACH A LEADER IN ITS CLASS

We are now manufacturing two silos to meet the demands and means of every Canadian farmer. Both are wood silos. Experiments prove that cement and tile silos do not preserve silage perfectly—that nothing but wood will do this.

1. **BURLINGTON CABLE BAND SILOS** are the strongest-hooped silos on the market. The hoop, instead of being a solid-iron rod, is a seven-stranded galvanized cable. This cable band is protected by patent No. 168558. We use No. 1 Norway Pine Staves, side and end matched and treated with red preservative.

2. We also make **CRANE THREE WALL SILOS**. They are absolutely the best equipment that can be purchased by you to-day. They are permanent buildings. They preserve silage perfectly, and the cost is moderate.

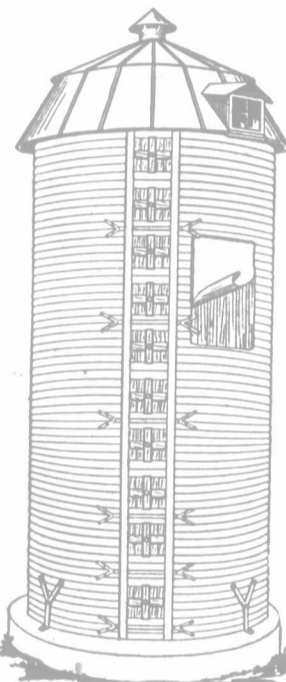
In the **CRANE THREE WALL SILOS** there are three distinct walls. An inner wall of 2"x6" side and end matched staves (same as in Burlington Cable Band Silos). The centre wall is weather and acid-proof felt, similar to Roofing felt. The outer wall is clear B.C. Fir wound spirally from top to bottom of silo, ship-locked and metal protected. No bands required; an absolutely permanent building.

Both of these silos have Continuous Refrigerator Door System and Interchangeable Doors. Let us tell you more about Nicholson Products. We want you to know all about them. Let us send you free complete information. Sold direct from Factory to Farm. Write to-day. Fill in the coupon now.

**The Nicholson Lumber Co., Ltd., Burlington, Ont.**

The NICHOLSON LUMBER COMPANY, Ltd., Burlington, Ont.  
Send me full information on Burlington Cable Band and Three Wall Silos.

NAME.....  
ADDRESS.....



### 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.

#### Horse Radish.

What can be done with wild horse radish?  
G. F.

Ans.—The roots may be ground and used as a relish on the table. If desirous of destroying the patch, about the only way is to thoroughly dig out the roots and then prevent new growth from coming to the surface. It is rather a persistent plant, especially when it is encroaching on the garden soil.

#### Feed for Cattle—Thrush.

1. Which is preferable for fattening cattle, cotton-seed meal or oil cake? Which contains the more fat?  
2. How much cotton-seed meal would you feed a cow or steer weighing 900 lbs.? Is it a good feed for young calves?  
3. What is a good cure for thrush?  
G. P.

Ans.—1. Both are good. Oil cake is considered to be slightly superior to cotton-seed meal for fattening cattle. Cotton-seed meal contains approximately 8.2 per cent. fat, while oil cake will run somewhat less in fat. However, the effect on the animal's system is somewhat better than the cotton-seed meal.  
2. One pound per day would be fair feeding. We would prefer the oil cake for young calves.

# Tires! Tires! Tires!

We can save you \$10 to \$30 on each tire

THIS IS YOUR OPPORTUNITY:

BRAND new tires bearing the name and serial number of one of the largest Canadian manufacturers are offered to you for free inspection—send no money, specify the style of tire you desire, "Clincher" or "Straight Wall"—Plain or Non-Skid. We will ship same to your nearest Express Office—C.O.D.—with all express charges paid. Look these tires over, satisfy yourself that they are as represented—if not, ship them back at our expense.

BUY BY MAIL!

We can afford to make this offer, as we have absolute confidence in the tires, knowing they will give you more mileage value per dollar than any other tire, irrespective of price paid. Don't lose this chance. Order now!

Size	Plain	Non-Skid	Size	Plain	Non-Skid
28x3	\$11.00	\$13.00	36x4	\$26.00	\$29.20
30x3½	13.45	15.45	33x4½	26.50	34.00
32x3½	14.50	16.70	34x4½	27.00	35.00
31x4	20.20	24.25	35x4½	28.00	38.00
32x4	21.40	25.65	36x4½	29.00	39.00
33x4	22.60	27.10	35x5	.....	42.50
34x4	23.40	28.10	37x5	35.00	45.00

Special Value—30x3½ Tubes—Fully Guaranteed, \$2.50 each.

**Security Tire Sales Co.**

516½ Yonge St.  
TORONTO

210 Sherbrooke St. W.  
MONTREAL

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

3. Clean out the cleft in the hoof and remove any diseased parts, and bathe with formalin or use calomel. We have found that filling the cleft with calomel has brought relief.

#### Sharing Estate.

Do half-brothers and sisters share equally with full brothers and sisters in the division of property?  
Ontario.

Ans.—As a general rule, yes.

#### Witness' Fee.

At a recent police court hearing, a man was charged with buying furs without a "fur-buyer's license," and as I had sold fur to this man, I was subpoenaed, as a witness against the accused man. The J. P. told me there was no fee for my appearing as a witness.

1. Am I not entitled to a fee; if so, what is it?

2. What action should I take, or should have taken to get it?  
Ontario.

Ans.—1 and 2. It not being a civil case, but a quasi-criminal one, you were not and are not now in a position to collect a witness' fee.

#### Size of Silo.

1. I have a farm of 18 acres, situated in the centre of a mining district, in close proximity to three towns. I purpose going into the dairy business, and wish to put up a silo large enough to hold sufficient feed to supply 15 cows the year around. The land is rather low-lying with from 3 to 6 inches of muck on top of the clay sub-soil. What size silo should I build?

2. A hires B at so much per day, including board. B lives about a mile and a half from A's house. He comes to the place the night before he is to start work and has his supper; he works three days and then quit, and came back in two days' time in the evening. He has done this three or four times. I figure that he was only entitled to 37 meals, but he got 52. Can I compel him to pay for the extra meals?  
A. S.

Ans.—1. In order to give the 15 cows 30 lbs. of silage per day the year around, it will be necessary to have a silo 12 by 40 feet. Ten acres of corn yielding 10 tons to the acre would about fill the silo. Besides silage the cattle would require hay and grain.

2. Unless there was a definite bargain as to the number of meals which the man was to receive, we doubt if you would be able to collect for the extra meals which he got at your place.

#### Hunting on River.

We own 200 acres of land and river runs through same. River is crooked, shallow in places, with deeper and standing water at other places. It is under contract now to improve river to drain farm lands. It is known as the Maitland River enlargement; and work goes down below us for 2 miles, and up stream for some miles. There is a cement dam across river some 8 or 10 miles below us.

1. Would like to know if it is what is called a navigable river?

2. Can hunters claim right to walk on river bank and hunt game if I forbid them? Can hunters sail on river in boat and shoot game? If I forbid parties from hunting on our own farm and they still continue to come back, can I hold them responsible for trespassing? Where can I find out if hunters have licenses to hunt?  
J. E.

Ans.—No waters can be legally regarded as navigable, unless they are actually capable of being navigated, and we judge, from your description of it, that this river is not a navigable stream. Assuming that it is not and that your lands extend to the middle of it—a matter, as to which, for certainty, it would be necessary to see your title deeds—hunters would have no right to walk on the river bank or elsewhere on your farm, or sail on the river, and hunt and shoot, after your having forbidden them to do so. In the event of their persisting in so trespassing, you could prosecute them as for trespass. You would commence such prosecution by laying an information before a Justice of the Peace.

Licenses to hunt are obtained from the Department of Public Works (Game and Fisheries), Parliament Bldgs., Toronto, and the list of licenses could be seen in the Game and Fisheries Office.

C. G. J.

### Questions

The u swollen. her teats. use a mil breed her

Ans.— by apply turpentine using turp blistering. line has al have trou think it w the cow u able one a

I have a destructiv nose or h any kind which I fo wire thro point of h her. This yield by ment do y

Ans.—Y all that ca her place. should be valuable a the next b in the stab

Allan D. of Peterbo pears elsew placed at t Select, a so He is a six quality and he has done Farmer's Among his and a two-y of Peterbor more, got Birdsall got an R. O. F went to P another four Birdsall. M ber of sales sheep. At are running

Robert M of Shorthor appears else having had writes as fol

"To Pete splendid b Mather, of young bull Ravenna, O also a Kilb calf. To A beautiful J champion, Bond, Union bull, a M breeding. T didly-bred quality, too. Ont., one o that I have a great bull of the best To R. W. Ph a Lord Lov old, a well West, of Bo two in-calf champion, R Currelley, a ford heifer, th pion. To E choice young St. Jacques, from a very he is a parti

"From eve the most of most flatteri more than p has to be a g slogan, that go with the c "I have as females as ha of the latter the younges had in Cana



Questions and Answers. Miscellaneous.

Caked Udder.

The udder of a fresh cow is badly swollen. She also has a lump in one of her teats. At every milking I have to use a milking tube. Is it advisable to breed her again or get rid of her?

F. K.

Ans.—A caked udder might be remedied by applying sweet oil or goose grease and turpentine. Care must be taken when using turpentine, as there is danger of blistering. Rubbing the udder with gasoline has also been recommended. As you have trouble with a lump in the teat, we think it would be advisable to dispose of the cow unless she is a particularly valuable one as a breeder.

Destructive Cow.

I have a valuable dairy cow that is very destructive on fences. She will get her nose or head under or through almost any kind of fence. The only treatment which I found satisfactory was putting a wire through her nose and up to the point of her horns, or else blindfolding her. This, however, reduces her milk yield by more than half. What treatment do you suggest?

R. V.

Ans.—You evidently have done about all that can be done to keep the cow in her place. One which is so destructive should be sold for beef, or if she is too valuable as a milch cow for the block, the next best thing would be to keep her in the stable.

Gossip.

Allan D. Mann, a Shorthorn breeder, of Peterboro, whose advertisement appears elsewhere in this issue, has recently placed at the head of his herd Gainford Select, a son of Gainford Marquis (imp.). He is a six-year-old animal of excellent quality and size. Mr. Mann writes that he has done a good business through "The Farmer's Advocate" the past season. Among his sales is a ten-months-old bull and a two-year-old heifer to Thos. Beatty, of Peterboro. D. D. Crough, of Ennismore, got a young red bull, and Col. Birdsall got a fourteen-months bull out of an R. O. P. dam. A four-year-old cow went to P. Nichols, of Lakefield, and another four-year-old to B. Crowley, of Birdsall. Mr. Mann also reports a number of sales of H cneys and Leicester sheep. At the present time two cows are running in the R. O. P. test.

Robert Miller, of Stouffville, a breeder of Shorthorn cattle whose advertisement appears elsewhere in our paper, reports having had a good year's business, and writes as follows regarding his sale:

"To Peter Coutts, Conn, Ont., one splendid big young bull. To John Mather, of Keene, Ont., one very choice young bull. To Geo. G. Wright, Ravenna, Ont., a very choice Violet bull, also a Kilblean Beauty cow and heifer calf. To Alex. Malcolm, Ravenna, a beautiful jilt heifer in calf to the champion, Rosemary Sultan. To Jos. Bond, Unionville, a grand two-year-old bull, a Miss Ramsden of very choice breeding. To go to Indiana, four splendidly-bred heifer calves, with lots of quality, too. To Short Bros., Seagrave, Ont., one of the best imported heifers that I have owned, she is due to calve to a great bull in Scotland. This is a start of the best kind for two young men. To R. W. Philp & Son, Nestleton Station, a Lord Lovat imported bull 13 months old, a well-bred good bull. To Chas. West, of Bond Head, a Violet bull and two in-calf heifers, both bred to the champion, Rosemary Sultan. To W. H. Currelley, a Rosebud bull and a Stamford heifer, the latter in calf to the Champion. To E. T. Cram, Carleton Place, a choice young bull. To Harold Burbidge, St. Jacques, P. Q., a Miss Ramsden bull from a very good milking mother, and he is a particularly good bull too.

"From every man that I have sold to, the most of them by letter, I have the most flattering letters, saying they were more than pleased. Every animal I sell has to be a good one, for I believe in your slogan, that the pedigreed scrub should go with the other scrub.

"I have as good a lot of young bulls and females as have ever been owned, some of the latter in calf to Rosemary Sultan, the youngest grand champion we have had in Canada that I can recall."

C. G. J.

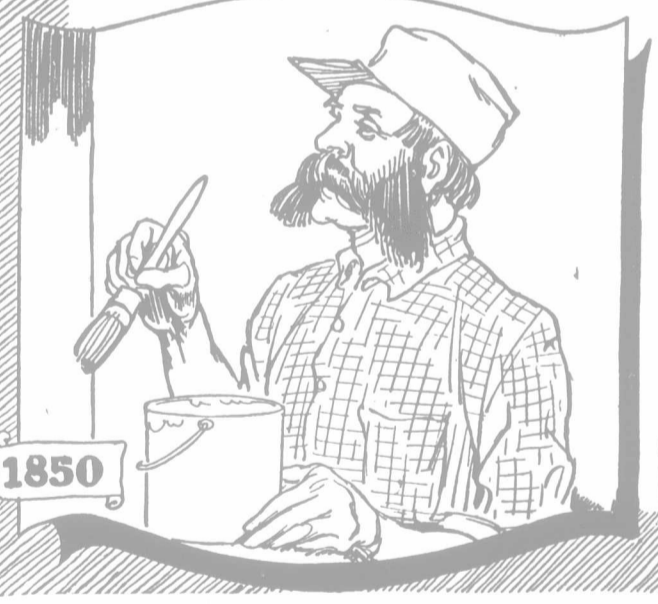
"Save the surface and you save all" Paint & Varnish



1745



1800



1850

Nearly Two Centuries Old Brandram's Genuine B-B White Lead

Do they not mean something to you,— these pictures? Look at them. A long and honorable history is behind them.

Canada was largely a wilderness when Brandram's Genuine B-B White Lead was first made. Napoleon has come and gone. The United States has come into being—and now Germany has fallen. Steam power, electricity, telephone, telegraph, wireless, submarines, airplanes— these have all come into being since the Brandram process was discovered.

1919 is using out of the same pail as 1745? Exactly the same process was used in making the white lead (Brandram's Genuine B-B) of 1745, as is used in making that of 1919. In the world competition which has been waged all these years, the Brandram process is the only survivor of all the white lead processes which were in use at the time it came into being.

This is the white lead which is used in B-H "English" Paint, and in all other Brandram-Henderson paint products employing a white base.

Your guarantee lies in that two centuries of history. No one else can give a guarantee of the same character



1919

LIGHTNING RODS

Nowadays it cost a lot of money to build. In 1918 lightning did upwards of half a million dollars damage to unrodded buildings in Ontario.

"Lightning Rods properly installed are almost absolute protection."

It is better far to be safe than sorry. We would appreciate your inquiries.

The Universal Lightning Rod Co'y. HESPELER Made in Canada ONTARIO

Alfalfa Seed

A quantity of Haldimand grown Ontario variegated alfalfa seed; free from weed seeds, of good quality, at only \$21 per bus. Special price on club orders. Supply is limited.

Burnside Stock Farm Canboro, Ontario

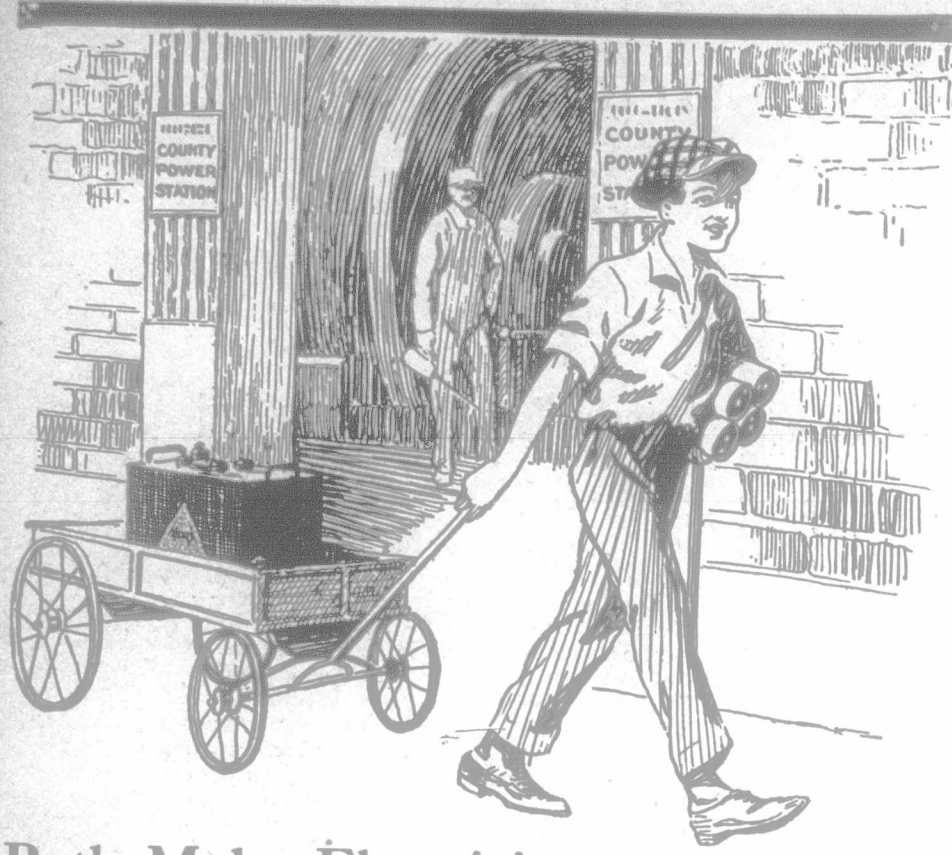
EGGS WANTED Highest cash price paid.

POULTRY WANTED We require a large quantity of heavy live hens. It will pay you to sell to

C. A. MANN & CO. 78 King St. London, Ont.

WHEN writing advertisers will you kindly mention The Farmer's Advocate and Home Magazine.





**Both Make Electricity:—**  
the Power Station Dynamo and the Fiery little Columbias

**T**HE big dynamo whirling in the power station makes electricity for the big jobs—to light the city; to run the factory full of machines; to propel the street cars.

The fiery little Columbia standing quietly behind the scenes makes electricity for all the little jobs—to ring bells and buzz buzzers; to make telephones talk; to run toys for the little folks; to ignite farm engines, autos, trucks, tractors, and motorboats.

**THE DRY BATTERY**

**T**HE world is so used to having the Columbia Dry Battery always at its beck and call, the little red fellow's work is accepted as a matter of course.

Yet he is really one of the great marvels of the age—marvelous for what he does—marvelous for his power—marvelous for his long life.

Columbia Dry Batteries are appropriately called "The handy-men of the world."

**THE STORAGE BATTERY**

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Well, I didn't like that. I was afraid the horse wasn't "alright" and that I might have to whistle for my money if I once parted with it. So I didn't buy the horse, although I wanted it badly. Now this set me thinking.

You see I make Washing Machines—the "1900 Gravity" Washer.

And I said to myself, lots of people may think about my Washing Machine as I thought about the horse, and about the man who owned it.

But I'd never know, because they wouldn't write and tell me. You see, I sell my Washing Machines by mail. I have sold over half a million that way. So, thought I, it is only fair enough to let people try my Washing Machines for a month, before they pay for them, just as I wanted to try the horse.

Now, I know what our "1900 Gravity" Washer will do. I know it will wash the clothes, without wearing or tearing them, in less than half the time they can be washed by hand or by any other machine.

I know it will wash a tub full of very dirty clothes in six minutes. I know no other machine ever invented can do that without wearing the clothes. Our "1900 Gravity" Washer does the work so easy that a child can run it almost as well as a strong woman, and it don't wear the clothes, fray the edges nor break buttons, the way all other machines do.

It just drives soapy water clear through the fibres of the clothes like a force pump might.

So, said I to myself, I will do with my "1900 Gravity" Washer what I wanted the man to do with the horse. Only I won't wait for people to ask me. I'll offer first, and I'll make good the offer every time.

Let me send you a "1900 Gravity" Washer on a month's free trial. I'll pay the freight out of my own pocket, and if you don't want the machine after you've used it a month, I'll take it back and pay the freight, too. Surely that is fair enough, isn't it?

Doesn't it prove that the "1900 Gravity" Washer must be all that I say it is?

And you can pay me out of what it saves for you. It will save its whole cost in a few months in wear and tear on the clothes alone. And then it will save 50 to 75 cents a week over that on washwoman's wages. If you keep the machine after the month's trial, I'll let you pay for it out of what it saves you. If it saves you 60 cents a week, send me 50c a week till paid for. I'll take that cheerfully, and I'll wait for my money until the machine itself earns the balance.

Drop me a line today, and let me send you a book about the "1900 Gravity" Washer that washes clothes in six minutes.

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## Revival of English Royal Show.

EDITOR "THE FARMER'S ADVOCATE":

The recussitation of the English Royal Agricultural Society's Show can hardly fail to be the big agricultural event of the present year, if only because it will show that the first and foremost, as it is the most essential, of the arts of peace has once more revealed itself as it really is, rather than it has been confused in the cloudy atmosphere of political and (so-called) social discussion. The great merit of our Royal Shows is that they really represent the great British agricultural industry in all its magnitude and all its comprehensiveness, so that even the "Prize-Sheet" of the 78th annual show which the Royal Agricultural Society of England will hold at Cardiff, from the 24th to the 28th of June next, is a better guide to what the industry is than anything we have had from our political friends during the past four and a half strenuous years of confusing advice, perplexing orders, and inept control. The "Prize-Sheet" is a closely-printed booklet of 92 pages, and it describes in detail how the large sum of £10,800 is to be distributed in prizes, in order to improve our agriculture in the details in which improvement is most possible and needed. Of this sum, the greater part comes from the Society itself; the other contributors being the breed societies, who give £3,547; the local Cardiff committee, who contribute £1,035; and "other sources," with £505 10s.

There are a few classes for produce, but the bulk of the prizes are for live stock, and a glance through the prize-sheet will soon give a very good reason for this, as well as for the well-known saying of British farmers that "Live stock is the sheet-anchor of the farmer." The figures and facts relating to the distribution of the prize-money among British farm live stock are, of themselves, very illuminating on this point. In the figures which we give below it must be noted that when we speak of "classification" we indicate a section of the show devoted to either a breed or a utility which is complete in itself, and has anything, from five or six to a dozen or fourteen, classes in it.

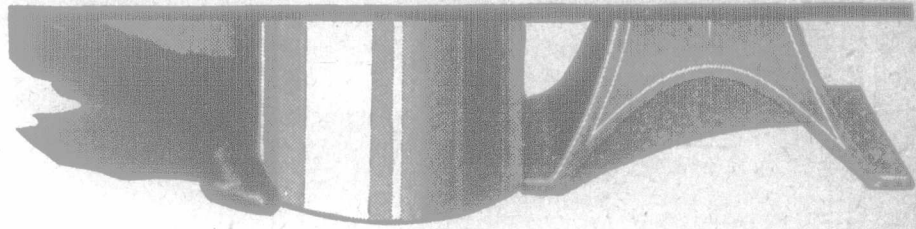
The sum of £3,348 is allocated to horses, which are classified into 12 sections, with 110 classes; £2,959 10s. is allotted to cattle, which have 19 classifications, with 131 classes; £2,020 10s. is set apart for sheep, these having 26 classifications and 108 classes; while the sum devoted to pigs is £1,057 5s., divided into seven classifications and 44 classes. Horses, cattle, sheep and pigs embrace what we usually term the farm live stock proper, and this prize-sheet, therefore, shows us that of these alone we have 65 distinct breeds, every one of which is British, every one of which is pure, or is being improved by some recognized society for some point of utility; and all of which make up a wealth of animal industry that no other country in the world, whatever its area, can anything like approach.

This is not all, for the Royal Agricultural Society also takes a hand in the improvement of the minor breeds of stock useful to the farmer or the small holder. For goats the prizes amount to £108, given in three classifications and 13 classes for poultry, £457 11s. is allocated to 25 classifications and 148 classes; while for rabbits £72 is allocated in 10 classifications and 24 classes. With regard to these minor species of live stock, it must not be forgotten that the Royal Agricultural Society has for many years eliminated the "fancy" element, and all its classifications are on lines of absolute utility.

Taking the major and the minor species of farm live stock, it will thus be seen that the Royal Show is thus representative of no less than 103 classifications of stock, all of which are not only of the highest standard of excellence at the present moment, but all of which are at the present time being developed and improved on lines of utility in the service of man.



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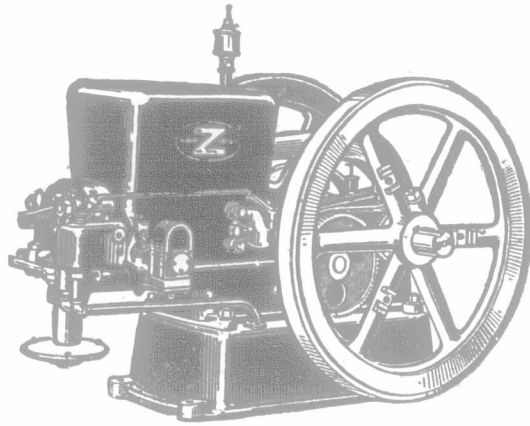
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## Over the Frontier.

EDITOR "THE FARMER'S ADVOCATE":  
From the time we learned that we were to form part of the army of occupation on the Rhine, numerous questions arose in our minds as to how we would be received by our enemy the Huns, upon our entry into their beloved Fatherland. There seemed but one solution to these questions, namely that their attitude towards us would demand our being constantly on the alert in case of probable conflicts. We used to talk frequently concerning the subject of our reception, and there were not a few who resolved to be always on the safe side, by carrying somewhere on their person a handy weapon of some sort, in case necessity demands its use; also to engage as little as possible in conversations pertaining to the great war.

I have been fortunate or unfortunate (opinions varied greatly as to which, especially among those who covered the journey on foot) to miss the long route march through Belgium with all its interesting events and receptions prepared by the civilians for our soldiers, as I happened to be returning from a pleasant two weeks leave in gay Paris, my journey being made by train or lorry and by frequent walking as circumstances warranted.

On a bright December morning aboard a lorry containing a few odds and ends, we pulled out of the square in the Belgian village of Stavelot, our last stopping place on the friendly side of the frontier. As we hastened along the road, numerous Belgian flags displayed from the windows of the houses helped to combat that odd sensation which arose within us, as we wondered whether or not we were still in Belgium or had crossed the frontier into German territory.

We travelled along through the silent valleys hemmed in by rolling woodlands and rocky precipices often from which a noisy brook came tumbling down to accompany us by the roadside for a short distance, soon to be lost in the dark evergreen forests; suddenly a steep grade would be encountered, which necessitated a slow, monotonous climb, but eventually with a steaming engine we would succeed in reaching the summit, getting a glimpse of numerous towns and villages, dotted here and there throughout the broad expanse of country, but only for a short time in most instances, then down a narrow winding road into the solitude of the valley below.

The hilly country past, we had just nicely settled down to the ordinary steady run once more when one of the lads suddenly shouted out, "hurrah boys, we are at last in Germany." Silence reigned for a few minutes when one chap remarked, "well fellows, who would have thought it last spring eh?"

The jolliest though most disappointed member in the company was a French Canadian who lamented the fact that though he had been able to speak the French language in France and Belgium (for this is the language spoken in a large portion of the latter country) he was now as helpless as the rest of us as far as talking was concerned. After soundly assuring him that he was simply having a taste of what some of us had suffered and undergone for a few months after crossing the channel when we first mingled with the French inhabitants, we settled down to study the new situation in which we found ourselves.

Our first experience was when we halted in front of a cross-road and by the side of a farm yard, not knowing exactly which one of the roads to follow. We had previously been told that the French language was spoken for some distance over the frontier, so we decided that our French speaking companion go and enquire of the fraulein and her mother the road to our destination. The rest of us could plainly see what was going on, and with a look of contempt they coldly replied in a couple of German words that they couldn't understand. Whether or not they could speak French we have often since wondered (although I am inclined to think they could); however it was useless to speak to them, so we ourselves decided on a certain road which fortunately proved the correct one.

I may state that this was the only instance where we found the German as we had expected him to be. At railway stations, in railway carriages, or wherever we were, he used us in the most courteous manner possible. A noticeable feature during our travels was the thrifty appearance of the country

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the Frontier.

...we learned that we of the army of occupation, numerous questions as to how we would be enemy the Huns, upon their beloved Fatherland, but one solution to namely that their attitude demand our being alert in case of prob- We used to talk fre- the subject of our re were not a few who ways on the safe side, where on their person of some sort, in case its use; also to engage ible in conversations great war. unate or unfortunate greatly as to which, those who covered the o miss the long route Belgium with all its and receptions pre- ans for our soldiers, be returning from a s leave in gay Paris, made by train or lorry lking as circumstances

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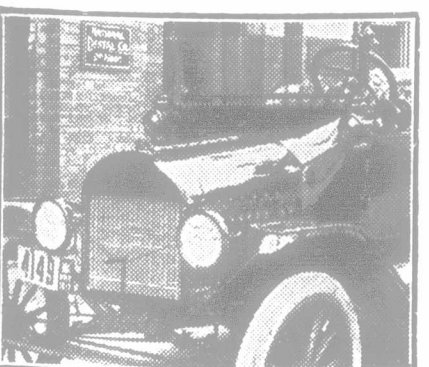
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districts. Apparently nothing was wasted and every available bit of land was under cultivation.

It was interesting to see the crowds of civilians gather to watch the Canadian Scottish battalion pass, their kilts swinging in unison as they marched to the strains of some rousing Scottish music, that kind that carries a Scotchman back to his native cottage amongst the glens and heathered hills of one of the most beautiful spots on this old earth. Although they marvelled at what to them was apparel more suitable for women than brave men (indeed they term the Scotties "ladies of hell") still there was something about the music and the fine appearance of the men that struck new life into the hearts of even the broken hearted Germans who must surely have realized that defeat was the result of their putting into practice the foolish idea that might should rule the world.

Next day I joined the corps, and after remaining for a few days we all started in lorries for the beautiful city of Bonn, on the Rhine, where the headquarters of the corps were located. As we passed down the wide, clean streets of this city in front of whose famous university, on the Hofgarten, the ex-Kaiser frequently reviewed his troops, the inhabitants gazed at us rather in amazement but were quite courteous towards us. We afterwards learned that they had heard terrible reports about the Canadians, in fact we were regarded as next to savages. Every soldier was armed and the first thing to do was to teach the Hun a thing or two just to make him aware that we were as part of a conquering army.

For instance the street car conductors soon learned that soldiers were to travel on their cars free of charge a simple fact that they found very difficult to grasp. Movements of the people were restricted, and everyone had to be in by a certain time nightly. Men had to pay compliments to officers and salute the British flag. I remember an instance of a big Prussian officer meeting a Canadian officer on the street, and giving him a proper salute; however he was no sooner by than he made a certain sign to the same officer which no Canadian would have tolerated from a Prussian. A sort of I-put-one-over-him smile filled his face, but he hadn't reckoned with a private who had witnessed all and who landed him such a solid one on the jaw that he fell unconsciously to the ground. Our good friend Pte. Canuck simply lifted the helmet from his head as a souvenir and proceeded down street leaving the Prussian in a dazed condition to reconsider the event.

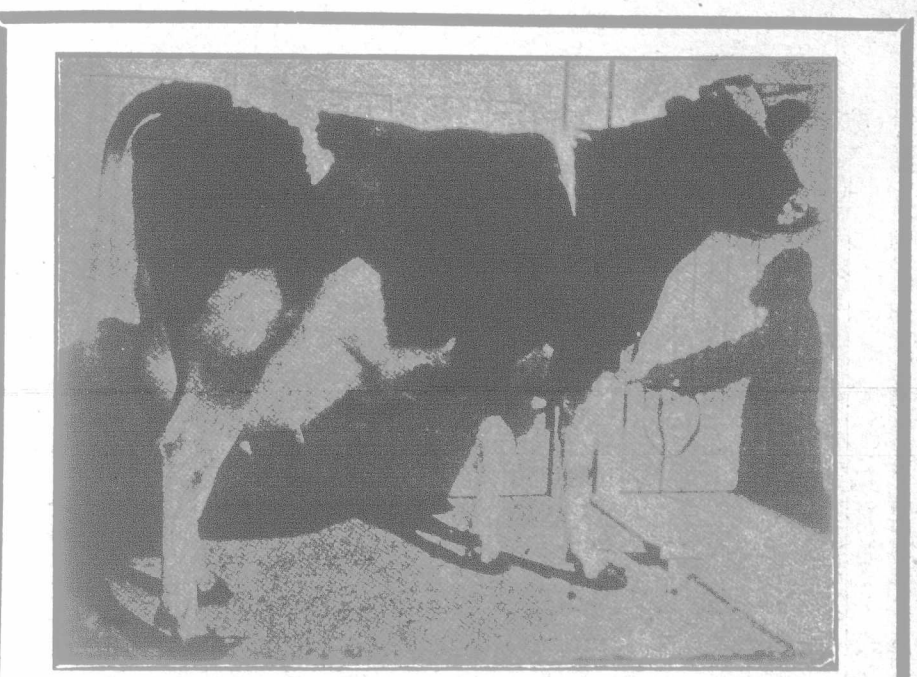
As time passed, the restrictions on the people were considerably lessened and they found the Canadians were not savages as they had expected, but gentlemen who demanded plain civility from every member of the community.

It seems to me there were three main reasons why the people became so friendly as to allow orchestras in some of the best theatre in the city to play, "Britannia Rules the Waves," and similar selections; namely (1) they were afraid of the consequence if they misbehaved or offered resistance. (2) Hearing of the furious conflicts such as in Berlin, and cities and towns just outside the occupied territory, they were glad we were there to preserve order, regarding us as the lesser of two evils. But to me the third and most important reason was that they being down and out as it were, realized that having lost a great conflict the wisest plan was to knuckle down and forget the past years of misery and bloodshed.

Several weeks have passed since we again crossed the frontier, this time in the opposite direction into Belgium. The trip to the Rhineland is one I will never forget, but one is obliged to wonder how we would have fared had the Germans been the victors, also to conclude after having seen the destruction in France both to lives and property that after all the Germans are getting off too easily.

J. CLAZIE.

H. McMillan, a "Farmer's Advocate" reader, gives the following recipe, which he has found successful for the removal of warts: "A cupful of soft water, a tablespoonful of soft soap and two teaspoonfuls of salt, mixed together and applied to the warts every third day."



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## Questions and Answers. Miscellaneous.

**Toadstools in Hot-bed.**  
 Last year the plants in my hot-bed were greatly upset by what we supposed were toadstools. How could this be prevented?  
 C. F.

Ans.—It is altogether likely that an insufficient depth of earth was used in the hot-bed. It is probable that only about three inches were used. If six inches of soil had been used it is not likely that this difficulty would have occurred.  
 J. W. C.

**Mange.**  
 My veterinarian informs me that my pony has been suffering from mange. What treatment do you advise?  
 S. H. M.

Ans.—Mange is a trouble that is difficult to treat. It is necessary to kill the parasite, and to do this several treatments at intervals of two or three days must be given for a period of two weeks. Clip the hair and then wash the body with soap and water, using a scrubbing brush if necessary to remove the scurf. Applying one part sulphur to three parts lard sometimes proves effective. One part creosote to twenty parts linseed oil and thirty parts soap solution is another remedy which is recommended.

**Boarder Hens.**  
 I have a flock of hens and feed them whole grain wheat, oats and barley mixed, also grain chopped, mixed with milk or water once a day. Mangolds are fed daily with an occasional cabbage or turnip. They have laid well, but out of 18 hens one year old and over a number are badly swollen below the vent. A few of the worst are very red and inflamed.

1. Is the trouble hereditary or contagious, and what would be the best remedy?
2. Would you advise killing birds so affected?
3. Would they be fit to eat. The hens otherwise seem quite healthy and lay well.

J. J. H.

Ans.—1, 2 and 3. I am under the impression that the birds as described are fat, and are birds that have not laid well, if at all, during the winter months. A laying hen is usually not heavy in the posterior, and if she has laid quite a few eggs her beak, in Barred Rocks, would be almost white and perhaps her legs also. The trouble may be hereditary in this respect that the difference between a high-laying hen and a poor layer, both fed well, with one hen the surplus of feed consumed over and above body maintenance goes to the production of internal fat which would produce a condition such as you describe, where on the other hand, the surplus goes towards the production of eggs, or the first hen probably does not carry the inherited factor for high egg production. They would make perfectly good food, and I think if I had them I would sell them for market purposes or use them at home. Unless they are vastly different to similar hens that I have seen, my opinion is that they are boarders in the strictest sense of the word.  
 W. R. G.

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**Questions and Answers.**  
 Veterinary.

**Swelling on Abdomen.**  
 Pregnant mare that will be due to foal about the last of May has swelling near the fore legs.  
 H. W. B.

Ans.—This is not uncommon in pregnant mares. It is probably due to defective circulation. Exercise will dissipate the swelling. Bathing with hot water and after bathing rubbing well with hot camphorated oil tends to hasten a reduction of the swelling when exercise is not given. The condition need cause no alarm. Give her regular exercise or daily light work.  
 V.

**Fatality in Cow.**  
 Cow gradually lost power of her hind legs. For a time she could use when assisted. Later we had to use slings. When on her feet she could walk around. She ate well and seemed in perfect health. One day while we were using the slings to raise her she died. I have another cow that appears to be going the same way. I am enclosing a weed that exists in quantities all through my hay. Is this harmful to cattle?

Ans.—The weed enclosed is "Equisetum" it is commonly called "Horse Tail." Horses appear to be susceptible to a form of poisoning from this weed. Young horses appear more susceptible than older ones; cattle are supposed to be practically immune, but it is possible they may suffer when the weed is consumed in considerable quantities for a considerable time. It evidently causes a state of partial paralysis followed by complete paralysis and death. Treatment consists in removing the cause, feeding on non-contaminated, administering a purgative of 2 lbs. Epsom salts, 2 drams calomel and 1 oz. ginger and following up with 2 drams nuxvomica 3 times daily.  
 V.

**Fatality in Cow.**  
 Cow was in fair condition. When the time for parturition appeared she could not deliver herself. She forced some of her insides out, but we could not deliver her. The entrance into the womb was so small that I could get only three fingers into the womb. She died. What was the cause? Could the calf have been delivered through her side? There is no veterinarian nearer than 100 miles. Is the condition contagious? Would a fall cause it?  
 T. K. L.

Ans.—The symptoms indicate either a fibrous growth around the neck of the womb or partial torion of the uterus. Neither of which is contagious. It is possible that a fall might cause torsion. The fibrous growths appear without apparent cause. The calf might have been delivered through an opening into the abdomen, but the cow would have died in all probability. It is not an operation that an amateur could perform with any hope of success. If a fibrous growth was present this might have been severed by the use of a knife and the calf delivered, but in most cases the dam dies. This was a case in which the probabilities of successful treatment would have been very slight even though a veterinary obstetric had been in attendance.  
 V.

**Miscellaneous.**  
**Unthrifty Calves.**  
 I have yearling calves which do not appear thrifty. What is the reason?  
 G. I.

Ans.—The trouble may be due to various reasons. The calves may not be on a proper ration, they may be suffering from indigestion, or may be infested with vermin. The latter can be remedied by applying hellebore and cement, washing with kerosene emulsion, or using zenoleum or some of the other proprietary dips. Giving the calf a little lime water and feeding carefully on good feed will help to cure the indigestion. It is altogether likely that once the calves are turned on grass they will take on a more thrifty appearance. Calves and yearlings should be fed particularly well. They should not be allowed to lose their calf flesh. Besides skim-milk, clover hay, a few roots, and a mixture of bran, rolled oats, oil cake and cornmeal, make a good ration for a calf or yearling. You might feed equal parts of the bran, oats and cornmeal, and make about ten per cent. of the ration oil cake.

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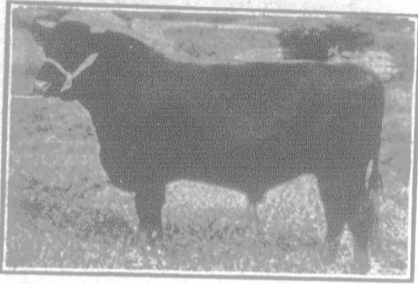
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### Canadian Council of Agriculture.

The annual meeting of the Canadian Council of Agriculture was held in Winnipeg, April 1, 2 and 3. The following members of the Council were present: President H. W. Wood, in the chair; R. McKenzie, Vice-President, John Kennedy, J. R. Murray, F. J. Collyer, representing eastern section of the United Grain Growers' Limited; C. Rice-Jones, J. J. McLellan, R. A. Parker, representing western section of United Grain Growers' Limited; Hon. Geo. Langley, F. W. Riddell, W. J. Robinson, representing Saskatchewan Co-operative Elevator Company; J. B. Musselman, A. G. Hawkes, T. Sales, R. M. Johnson, representing Saskatchewan Grain Growers' Association; W. R. Wood, Peter Avison, J. L. Brown, Robert Fisher, representing Manitoba Grain Growers' Association; P. Baker, H. Higginbotham, H. Greenfields, representing United Farmers of Alberta; J. J. Morrison, R. W. E. Burnaby, H. B. Cowan, A. A. Powers, M. Doherty, representing United Farmers of Ontario and the United Farmers' Co-operative Company; and G. F. Chipman and W. J. Healy, representing the Grain Growers' Guide.

The main question before the convention was that of political action on the part of the farmers. This matter occupied considerable time, and created a good deal of discussion. The results of this discussion are embodied in the following resolutions:

"Whereas the platform prepared by the Council has been adopted by each of the provincial associations in membership;

"And whereas in response to insistent demands from their members before the Council in regard to the sub-steps leading to definite political action;

"Now, therefore be it resolved that this Council recommends to the provincial associations that they take immediate and energetic action along such lines as, in their judgment, will be most effective in securing the election to parliament of members;

"And further, that an earnest effort be made to secure the co-operation of supporters of the principles of our platform, outside of our organizations, in the election of such members."

#### Oil Deposits.

Sir Adam Beck, the head of the Hydro-Electric Commission of Ontario, was to have been present. He, however, found it impossible to be in Winnipeg at this time. He sent the following letter in regard to oil fields in Western Canada, and action was taken on this matter by the Council:

"I regret exceedingly, owing to the important legislation coming up in the House next week in which I am interested, I find it impossible to be with you on Tuesday and Wednesday next. I hope your organizations will place itself on record as opposed to the granting of privileges to any of the large oil or other corporations to exploit the oil fields in the western and northern parts of Canada. The Government should undertake this themselves, cheap oil and gasoline becoming more a great factor in the industrial and agricultural life of the country. Gasoline users are paying a company, which is a monopoly in Canada at the present time, 20 per cent. more than the users in the United States would be paying under similar conditions, including duty, freight and all charges. Why not publicly-owned and controlled gas fields as well as water power?"

After a discussion of the information contained in this letter, the following resolutions were adopted:

"Whereas it has come to the attention of the Canadian Council of Agriculture that certain financial interests are making determined efforts to secure control of the vast deposits of oil in Northern Alberta, which control the Council believes would



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#### SHORTHORNS

—Herd headed by Victor Stamford 95959, and Master Marquis 123326, a great son of Gainford Marquis. I now offer for sale my stock bull, young Shorthorns of either sex, Oxford Down ewes and ewe lambs, a 3-year-old Clydesdale stallion, and Scotch Collie pups.  
**GEO. D. FLETCHER, R.R. 1, Erin, Ontario** Erin Station, C.P.R. Long distance 'Phone

#### Dual-Purpose Shorthorns

Herd headed by Dominator 106224 whose two nearest dams average 12,112 pounds of milk in a year. Cows in the herd with records up to 13,891 pounds of milk. Cows in calf to Dominator priced to sell.  
**WELWOOD FARM, Farmer's Advocate** London, Ontario

#### SPRUCE GLEN FARM SHORTHORNS

We have for sale a number of young bulls fit for service and a few choice heifers.

JAMES McPHERSON & SONS

DUNDALK, ONTARIO

#### WILLOW BANK STOCK FARM

SHORTHORN CATTLE and LEICESTER SHEEP. HERD ESTABLISHED 1855—FLOCK 1848. The great show and breeding bull, Browndale =80112=, by Avondale, heads the herd. Extra choice home bred. Also a particularly good lot of rams and ewes all ages. Imported and  
**JAMES DOUGLAS, CALEDONIA, ONTARIO.**

**Beach Ridge Shorthorns and Yorkshires**—Shorthorn herd headed by Sylvan Power cut in 1915, and sire of the G. Champion bullock at Guelph Winter Fair, 1918. Young stock of all ages, both sex, for sale; also young cows with calf at foot or in calf to Sylvan Power. We can supply any want in Yorkshires.

R. D. HUNTER, EXETER, ONTARIO

#### Glengow Shorthorns

—We have a choice offering in young bulls, fit for service. They are all of pure Scotch breeding, and are thick, mellow fellows, bred in the purple.  
**WM. SMITH, COLUMBUS, ONT.** Myrtle, C.P.R.; Brooklin, G.T.R.; Oshawa, C.N.R.

**Shorthorns Landed Home**—My last importation of 60 head landed at my farm on June the 20th, and includes representatives of the most popular families of the breed. There are 12 yearling bulls, 7 cows with calves at foot, 24 heifers in calf, of such noted strains as Princess Royal, Golden Drop, Broadhooks, Augusta, Miss Ramsgen, Whimble, etc. Make your selection early.  
**GEO. ISAAC,** (All railroads, Bell 'phone) Cobourg, Ontario



be most detrimental to the best interests of the Canadian people;

"Therefore, the Council urges upon the Dominion Government in the strongest possible manner that the oil deposits of Alberta and other parts of Canada be held as the property of the Government in perpetuity, that the Government undertake the cost of developing these great natural resources for the benefit of the consuming public, and that if any of these properties be leased to private interests that the leases should be granted only after full publicity has been given to the proposals under consideration and then only for short terms, and after the rights of the public have been fully protected under such leases;

"And further, this Council would request the Government to supply full information regarding any concessions that have already been granted in connection with these oil deposits, if there be any such."

**Tariff**

Naturally the tariff came in for a considerable discussion, and the following two other resolutions were sent to the Dominion Government on this matter:

"The Canadian Council of Agriculture here assembled, urges the Dominion Government during the present session of parliament, to incorporate in its financial proposals for the rehabilitation of Canada, following the expenditure of the economic power of the country during the war, provision for the removal of the 7½ per cent. war tax, and a substantial reduction in the present protective tariff as set forth in the Farmers' Platform, believing that no fiscal policy of reconstruction will be complete which does not seriously and specifically aim at adjusting the unfair burden of taxation upon the consuming and producing classes of Canada, developed out of the existing system of raising federal revenue by indirect taxation."

"That in view of the importance of immediate action being taken by the Dominion Government to make substantial reductions in the existing tariff, along lines laid down in the Farmers' National Platform, and having in mind the tendency of past Governments to shelve definite action in matters of this kind by referring their consideration to commissions of one kind and another;

"Be it resolved that this Council is unalterably opposed to any action being taken by the Dominion Government, the effect of which will be to enable the Government to postpone action indefinitely in this matter, in which we believe the Government should be prepared to take immediate action and to assume full responsibility therefor."

**Daylight Saving.**

Other resolutions:

"Whereas the parliament of Canada, representing the people of Canada as a whole, including those resident in both urban and the rural municipalities, has given official expression to the overwhelming objection of the people of Canada to the re-enactment of the Daylight Saving regulations;

"And whereas the action of the Railway War Board in ignoring the resolution of parliament by requiring the railway companies of Canada to advance their time tables one hour to agree with the time tables of the United States' roads in effect, constitutes a defiance of the expressed wish of parliament and of the majority of the people of Canada, and has created great confusion throughout the Dominion, and virtually compelled many municipalities to adopt Daylight Saving regulations to the great inconvenience and disadvantage of other classes in the community;

"Be it resolved that the Canadian Council of Agriculture in session to-day, on behalf of the organized farmers of Ontario, Manitoba, Saskatchewan and Alberta, numbering more than 100,000 members, desire to enter the strongest possible protest against allowing the railways of Canada to thus set at naught the expressed desire of the parliament and people of Canada, and would urge upon our representatives in parliament the necessity for taking immediate action to have the Government of Canada take such steps as may be required if necessary, to compel the Railway War Board to rescind its order, and thereby ensure the railways of Canada being operated

# Overhead Expenses

Free yourself from the annoyance of roofing troubles. Save repair costs. Obtain protection from fire and weather for all your buildings. Have a roof that pays for itself by giving years of satisfactory service. Lay

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# NEPONSET ROOF

No matter how large the roof may be, Neponset Paroid is the proper roofing. You can't get a roof that Paroid won't cover—for Paroid roofs them all—from the biggest barns to the greatest industrial plants.

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213



## Imported Shorthorns

SIRES IN SERVICE;

Imp. Collynie Ringleader  
(Bred by Wm. Duthie)

Imp. Clipper Prince  
(Bred by Geo. Campbell)

Imp. Orange Lord  
(Bred by Geo. Anderson)

We are offering a large selection in imported females with calves at foot or in calf. A few home-bred females, 19 imported bulls and 8 home-bred bulls, all of serviceable age. If interested, write us, or come and see the herd.

J. A. & H. M. PETTIT - Freeman, Ontario

Burlington Jct., G.T.R., half mile from farm. Phone Burlington.

## ANTICIPATION

will be greater than  
**REALIZATION**  
if you are not using a

## Good Shorthorn Bull

I have a few imported ones ready for service, as well as several of my own breeding. The price is not high.

WILL A. DRYDEN  
Maple Shade Farm Brooklin, Ont.

## GRAHAM'S SHORTHORNS

Present offering 2 choice bulls sired by the Duke whose dam gave 13,599 lbs. of milk and 474 lbs. of butter fat. R. O. P. test: One dark Red 8 months. The other Roan 13 months. Can also spare a number of females.

CHARLES GRAHAM, Port Perry Ont.

## Spring Valley Shorthorns

—Herd headed by Sea Gem Pride =96365=.

Present offering includes two real herd headers. One imported in dam, the other by Sea Gem's Pride and from a show cow. A number of other good bulls and a few females. Write for particulars. Telephone and telegraph by Ayr.

KYLE BROS., R. 1, Drumbo, Ont.

## Shorthorn Bulls and Females

—Herd headed by Ruby Marquis, a son of the great Gainford Marquis (imp.). Our calves now coming are all by this sire. We are also offering a few females in calf to him. Get our prices before buying elsewhere.

PRITCHARD BROS., R.R. No. 1, Elora, Ont.

## Pure Scotch and Scotch-Topped Shorthorns

We have several choice young bulls of the best of breeding and ready for service. Two are by Raphael (imp.), one by Right Sort (imp.), one by Sittytton Selection, and several by our present herd sire, Newton Cedric (imp.). Prices right.

R. M. MITCHELL

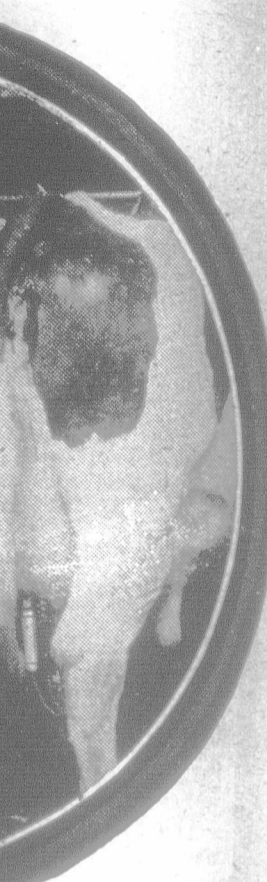
R. R. No.

FREEMAN, ONTARIO

## Shorthorns

—Present offering: 6 choice young bulls and a few females, their dams are good milkers and best of breeding. Prices moderate.

STEWART M. GRAHAM, Lindsay, Ontario



## Pleasure

Each regular and uniform action its soothing and calming effect results in a very appreciable flow.

machines, having the piston type vacuum as the piston wears, regular test cup action, results, nervous cow, with the attendant milk yield.

Book 19 Catalog purchasing king many many that It's free Ask for dealer. ion.

## RE SHINES

## Shorthorns

PREMIER SIRE  
ve won more  
e of any  
well

Elora, Ontario  
and Master Marquis 123326,  
offer for sale my stock bull,  
Hildred's Royal 45353. Also  
1-year-old Clydesdale stallion.

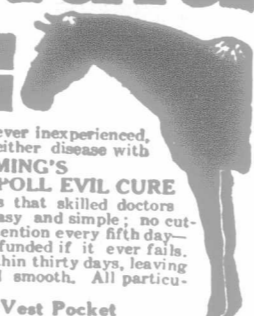
P.R. Long distance Phone  
orns  
2 pounds of milk in a year.  
to Dominator priced to sell.  
London, Ontario

ORTHORNS  
ew choice heifers.  
DUNDALK, ONTARIO

RM  
HED 1855—FLOCK 1848.  
nds the herd. Extra choice  
all ages. Imported and  
headed by Sylvan Power  
hampion on Canadian cir-  
1918. Young stock of all  
Sylvan Power. We can  
EXETER, ONTARIO  
fering in young bulls, fit  
all of pure Scotch breed-  
ellow fellows, bred in the  
G.T.R.; Oshawa, C.N.R.  
0 head landed at my farm  
ades representatives of the  
th calves at foot, 24 heif-  
oks, Augusta, Miss Rams-  
Cobourg, Ontario



## Fistula and Poll Evil



Any person, however inexperienced, can readily cure either disease with FLEMING'S FISTULA AND POLL EVIL CURE—even bad old cases that skilled doctors have abandoned. Easy and simple; no cutting; just a little attention every fifth day—and your money refunded if it ever fails. Cures most cases within thirty days, leaving the horse sound and smooth. All particulars given in Fleming's Vest Pocket Veterinary Advisor. Write us for a free copy. Ninety-six pages, covering more than a hundred veterinary subjects. Durable bound, indexed and illustrated. Fleming Bros., Chemists, 75 Church Street, Toronto, Ont.



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Three Requirements for Good Butter  
Good Cows A Clean Churn & Reliable

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THE CANADIAN SALT CO. LIMITED

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### WHITE SCOURS BLACKLEG

Your Veterinarian can stamp them out with Cutter's Anti-Calf Scour Serum and Cutter's Germ Free Blackleg Filtrate and Aggressin, or Cutter's Blackleg Pills.

Ask him about them. If he hasn't our literature, write to us for information on these products.

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Berkeley, Cal., or Chicago, Ill.  
"The Laboratory That Knows How"

## Europe Wants HOLSTEINS

Little Belgium alone requires 20,000 purebred and 100,000 grade Holsteins. Other European countries are in similar condition. BREED WHAT THE WORLD WANTS. IF YOU CAN'T BUY A HERD, BUY A HEIFER.

Information from the  
**HOLSTEIN-FRIESIAN ASSOCIATION**  
President, Dr. S. F. Tolmie, M. P.,  
Victoria, B. C.  
Secretary, W. A. Clemons, St. George, Ont.

## Holstein Bulls

15 ready for service, 1 younger. From dams with 32.7 lbs. butter in 7 days to those priced for the most conservative buyer. Females also.

R. M. HOLTBY  
R.R. NO. 4, PORT PERRY, ONTARIO

## Fairview Holstein-Friesians

Owing to lack of help, I offer my entire herd of thirty head, or part of it, mostly two and three-year-olds (milking), sired by bull with 90 lbs. a day on both sides.

FRED. ABBOTT  
R. D. No. 1 Mossley, Ontario

in this matter in accordance with the declared desires of the great majority of the people of Canada."

### Express Rates.

"We, the members of the Canadian Council of Agriculture, in annual meeting assembled, have followed closely the evidence submitted by the express companies in support of the application for permission to increase express rates, which evidence entirely failed to substantiate the fact that there was any real need on the part of the express companies for the increased revenues, desire to reiterate our unaltered opposition to the proposed increase. In our opinion a great injustice would be perpetrated upon the Canadian people by the fixation of rates based upon present cost of operation of these carrying companies, and the further needed settlement on our farm lands of returned soldiers and agricultural immigrants, would be discouraged."

### Terminal Elevators.

"Not having had access to the Government Audit of Terminal Elevators, and, consequently, not knowing that the terminal elevator earnings have been excessive, the Canadian Council of Agriculture cannot state specifically what, in their opinion, would be the best adjustment of the terminal overage and tariff question.

"The Council, however, recommends that in order to remove any incentive for excess overages, no terminal elevator should be allowed to retain any overage above one-quarter of 1 per cent. of the gross amount of each kind of grain handled through the elevator, and that the Dominion Government should take any overage above this amount, the revenue therefrom to be applied to the elimination of inward grain inspection and weighing charges, and the creation of a fund that would be used for payment to the elevators of part of the terminal tariff charges in order to reduce such charges to the farmer.

"Further, the Council is emphatically of the opinion that if the revenue of terminal elevators, after the above provision is made, is excessive, that the elevator or storage charges should be reduced so that the shipper of grain may benefit."

### Grain Speculation.

The Council discussed the question of legislation to check speculation in grain, and passed a resolution, asking R. C. Henders, M.P., to introduce in the Dominion House the bill introduced in the Manitoba Legislature, at its present session, by W. R. Wood, but not proceeded with on the ground that such legislation would be beyond the powers of the province, as defined by the British North America Act. The resolution also calls upon the other Western members of parliament to support the bill when it is introduced by Mr. Henders.

### Live-Stock Matters.

A resolution was passed that the President of the Council appoint a committee to investigate conditions surrounding the live-stock industry, and report to the Council when occasion warrants; and further, that this committee or committees be further empowered, when so instructed by the executive, to act with the live-stock associations of the several provinces.

### Prohibition.

A memorial, presented by the Inter-provincial Council of Farm Women in favor of dominion-wide prohibition, was endorsed by the Council of Agriculture. Representatives of the organized Farm Women were present and requested representation on the Council, while representatives of the Inter-provincial Council of Farm Women, were most cordially made welcome, and by resolution were invited to sit as members to the Canadian Council. Notice has been given of a motion to enlarge the Council to include women's organizations.

In the election of officers, the whole executive was re-elected as follows: President, H. W. Wood, Alberta; Vice-President, R. McKenzie; Secretary, Norman P. Lambert; Committee: Peter Wright, Myrtle, Man.; J. A. Maharg, M.P., Saskatchewan, and G. F. Chipman, Winnipeg.

Before the Council adjourned, the Ontario members in attendance again extended a cordial invitation to the Council to hold its next meeting in Toronto or Ottawa.

## THE GENERAL ANIMALS INS. CO. OF CANADA

71 A ST. JAMES, MONTREAL.

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AGAINST LOSS THROUGH DEATH BY ACCIDENT OR DISEASES  
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71 A St. James Street, Montreal.

JOHN H. HARRIS, 31 Scott Street Toronto, Ontario.

## Raymondale Holstein-Friesians

A herd sire of our breeding will improve your herd. We have sons of our present sire, Pontiac Korndyke of Het Loo (sire of \$12,750 Het Loo (Pietertje)) and also sons of our former sire, Avondale Pontiac Echo. Several of these are of serviceable age, and all are from good record dams. Quality considered, our prices are lower than anywhere else on the continent. These youngsters should not remain long. Write to-day.

RAYMONDALE FARM  
Vaudreuil, Que.

D. RAYMOND, Owner  
Queen's Hotel, Montreal

## HOSPITAL FOR INSANE

HAMILTON - ONTARIO

Present herd sire is one of the best sons of King Segis Alcartra Spofford. We have three of his sons born during May and June last, and also a grandson of Lakeview Lestrangle. Apply to Superintendent.

## Premier Echo Sylvia DeKol No. 38053

814.8 lbs. of milk with 33.96 lbs. of butter in 7 days, 120.8 lbs. in one day is the average for the dam, sire's dam and sire's sister of this young bull that I am offering for immediate sale. He was born Nov. 17, 1918 and is a very fine individual. More black than white.

Write at once for extending pedigree and price.

H. H. BAILEY, Manager, OAK PARK STOCK FARM  
PARIS, ONTARIO, CANADA

## At Service—Son of Ormsby Jane King

ORMSBY JANE HENGERVELD BURKE

The services of our 18 months herd sire are now open for a limited number of approved cows—at a moderate price. Individually, he is one of the strongest young sires of the breed and his sire Ormsby Jane King is a son of Ormsby Jane Segis Aaggie (the great white heifer) 46.33 lbs. of butter and 21.75 lb. two-year-old daughter of Earl Burke Korndyke and he again is a 31.30 lb. grandson of L. I. METCALF J. D. STEVENS

L. C. SNOWDEN R. R. STEVENS  
Bowmanville, Ontario

## 33-LB. GRANDSONS OF LULU KEYES

I have at present ten young bulls all sired by my own herd sire, King Korndyke Sadie Keyes, a son of Lulu Keyes, 36.05 lbs. of butter and 785 lbs. of milk in 7 days. These youngsters are all first-class individuals, and their dams' records run as high as 33.28 lbs. of butter in 7 days. Several of them must go quick to make room.

D. B. TRACY (Hamilton House Farms) COBOURG, ONT.

## Sunnybrook Holsteins!

The Bull is the first consideration!

We have a few for sale highly strained in the blood of the World's Record cows, all sons of Sir Lyons Hengerveld Segis (one of Canada's greatest bulls). Nothing offered that is not from high testing dams. Inspection invited. Write for particulars.

Jos. Kilgour, Eglinton P.O., North Toronto

## Manor Farm Holstein-Friesians

If it's a herd sire you want, write me. I have sons of both my senior and junior sires, King Segis Pontiac Posch and King Korndyke Sadie Keyes. All from good record dams. Choice bull calves at present to offer—average for two nearest dams, up to 34.71 lbs. butter to seven days. Correspondence solicited. Visitors welcome.

GORDON S. GOODERHAM, Clarkson, Ont.  
Stations: Clarkson and Oakville. Farm on Toronto and Hamilton Highway.

## Highland Lake Farms

For Sale: Two extra good (30-lb.) thirty-pound bulls ready for heavy service. Priced to sell. Also younger ones by a son of May Echo Sylvia.

R. W. E. BURNABY - JEFFERSON, ONT.  
Farm at Stop 55, Yonge St. Radial

I Have Holstein Bulls and Females at right prices. The bulls are from good record sired by Baron Colantha Fayne, a son of Canada's first 33-lb. cow. The females are of much the same breeding. If you want Holsteins, get my prices.

T. W. McQUEEN, Oxford County, Bell 'Phone, Tillsonburg, Ont.

## RIVERSIDE HOLSTEINS—CHOICE BULLS

We have several 10 months old, from dams with official records up to 100 lbs. of milk per day and 32.32 lbs. of butter in 7 days. These are well marked and straight individuals. Inspection invited.

J. W. Richardson, Caledonia, Ontario

### YOU! MR HOLSTEIN BREEDER

How would a 16 months son of Duchess Angie Wayne do for your next herd sire? She is a 26.06 lb. 4-year-old and a sister to Calamity Snow Mechthilde, the Canadian champion three-year-old R.O.P. cow who has just completed another R.O.P. record of over 25,000 lbs. This youngster is a great individual and sired by Canary Hartog. We also have others younger, as well as females.

Walburn Rivers & Sons, Pioneer Farm, R.R. No. 2, Ingersoll, Ontario

Silver Stream Holstein—Special offering: One bull fit for service, a fine individual. Dam, a daughter of King Lyons Hengerveld. Six nearest dams average 31.31 lbs. butter in 7 days. Sire a son of King Lyons Colantha, his or better come and see them. Priced to sell.

JACOB MOGK & SON, R.R. 1, TAVISTOCK, ONTARIO

## 6 BULLS BY ESCANNA FAVORITE

A son of the famous Right Sort (imp.). All are ready for service and priced to sell. We have others younger and could spare a number of young cows calving early to the service of the same sires. Write, don't delay.

W. G. GERRE, C.P.R. Station on farm, Bell 'Phone, BELLWOOD, ONTARIO

## Alluvialdale Stock Farms Offer For Sale

Two young Registered Holstein bulls fit for service. Dams official tested of Johanna strain, sire Sir Charles Walker whose 7 nearest dams average 30 lbs. butter in 7 days. Write for price and pedigree.

T. L. Leslie, Norval Station, Halton County, Ont.



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 ave sons of our present sire, Pontiac,  
 and also sons of our former sire,  
 able age, and all are from good  
 air than anywhere else on  
 ain long. Write to-day.  
**D. RAYMOND, Owner**  
 Queen's Hotel, Montreal

**INSANE**  
**ONTARIO**  
 tra Spofford. We have three of  
 also a grandson of  
 ntendent.

**Kol No. 38053**  
 s, 120.8 lbs. in one day  
 ing bull that I am offering for im-  
 dual. More black than white.  
 and price.  
**STOCK FARM**

**by Jane King**  
**URKE**  
 ed number of approved cows—at a  
 s of the breed and his sire Ormsby  
 te heifer) 46.33 lbs. of butter and  
 Dolly Hengerveld Korndyke is a  
 again is a 31.30 lb. grandson of  
 rds.  
**manville, Ontario**

**ULU KEYES**  
 sire, King Korndyke Sadie  
 of milk in 7 days. These  
 ds run as high as 33.28 lbs.  
 om.  
**COBOURG, ONT.**

**blsteins!**  
**eration!**  
 Record cows, all sons of Sir  
 offered that is not from high  
**orth Toronto**

**Friesians**  
 ny senior and junior sires, King  
 ood record dams.  
 d dams, up to 34.71 lbs. butter  
**arkson, Ont.**  
 to and Hamilton Highway.

**Farms**  
 y for heavy service. Priced  
 Echo Sylvia.  
**FFERSON, ONT.**

**CE BULLS**  
 00 lbs. of milk per day and  
 ividuals. Inspection invited.  
**Caledonia, Ontario**

**ORITE**  
 ed to sell. We have others  
 service of the same sires.  
**BELLWOOD, ONTARIO**

**er For Sale**  
 ed of Johanna strain, sire  
 Write for price and pedigree.  
 Halton County, Ont.

**Questions and Answers.**  
 Miscellaneous.

**Warbles—Feeding Cattle.**  
 My cows and young cattle have large,  
 white grubs on their backs. What will  
 I do for them and what will prevent this?  
 2. Is a disk drill with 6-inch spacing  
 preferable to 7-inch spacing?  
 3. How many times a day do you advise  
 feeding cattle grain? If only once, is it  
 better to feed at night or first thing in the  
 morning? Are oats better ground or fed  
 whole to calves and cows?

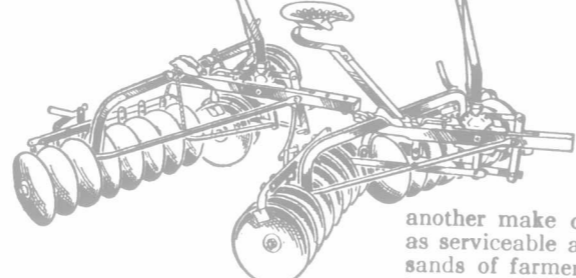
W. P. C.  
 Ans.—1. The cattle are troubled with  
 warbles? Squeeze the grubs out and  
 destroy them. This will prevent them  
 developing into flies to propagate the  
 pests another year. Little can be done  
 to prevent the cattle from becoming  
 infected.

2. Either 6 or 7-inch spacing would  
 give very good results. The wider spacing  
 permits of more root space for the plants.  
 3. It depends on the class of stock  
 kept. With cows on records, breeders  
 frequently feed three or four times a day.  
 For the average herd, or for young stuff  
 or feeding steers, twice a day feeding  
 gives good results. If one is just carry-  
 ing the stock along, a little grain in the  
 morning might keep them in good con-  
 dition provided the roughage ration were  
 suitable. We prefer rolling the oats.

**Leaky Teat—Summer Pasture.**  
 1. What treatment do you advise for  
 a leaky teat?  
 2. I would like to seed a field down  
 this spring for summer pasture. Would  
 you recommend sowing millet?  
 3. What is the top weight for veal  
 calves?  
 4. How long should a cow go after  
 freshening before being fed?

H. W. B.  
 Ans.—1. It is sometimes difficult  
 to stop the leak. Some recommend

**Sizes for Horses or Tractors**



Use the Bissell Double  
 Disk Harrows. They  
 have great capacity  
 for cultivating, and  
 have made a record  
 for working the soil  
 better than other  
 Disks—in fact, you  
 won't be able to find  
 another make of Disk Harrow nearly  
 as serviceable as the Bissell. Thou-  
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 are simple in design, durable and  
 Built for Business. Write Dept. W  
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**T. E. BISSELL COMPANY, Ltd., Elora, Ontario**

We have doubled our factory capacity and are determined to  
 supply our customers far and near. See ad. also on page 846.

**FOR SALE**  
 One pure-bred Ayrshire bull 16 months old.  
 Excellent quality \$125.00, worth double the price,  
 also 1 bull 15 months old, by Durham bull and  
 pure-bred Ayrshire cow \$100.00, excellent type.  
 Both these young bulls are in grand condition.  
**W. A. JENKINS MFG. CO. LTD.**  
 LONDON ONTARIO

**Choice Offering in Ayrshires**  
 AT SPECIAL PRICES. Several young bulls  
 of serviceable ages. All from R.O.P. sires  
 and dam. Come and see them.  
**JOHN A. MORRISON, Mount Elgin, Ontario**  
**Glencairn Ayrshires**—Herd established  
 40 years. Producing  
 ability from 8,600 to 11,022 lbs. If that sort of pro-  
 duction appeals to you, we have heifers all ages  
 and young bulls for sale. **Thos. J. McCormick,**  
**Rockton, Ont. Copetown Station, G.T.R.**

**Westside Ayrshire Herd**  
 I can price females with records up to 12,000 lbs. milk, and have two young bulls aged 12 and 16  
 months, with rich breeding at attractive prices for quick delivery. Correspondence and inspection  
 invited. **DAVID A. ASHWORTH, Denfield, R. 2, Middlesex Co., Ont.**

**CITY VIEW AYRSHIRES**  
 Bulls ready for service. Bull calves, some have 7  
 crosses of R.O.P. blood. Heifers just freshened.  
 Two-year-olds bred for early fall. Nothing re-  
 served at present. **James Begg & Son, St.**  
**Thomas, Ont.**

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 will you kindly mention  
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**Homestead Farm R. O. P. Ayrshires**  
 At the head of our herd at present we have a grandson of the great Jean Armour. He is being used  
 on the daughters of our former sire Garraugh Prince Fortune (imp). We can spare a few R. O. P.  
 females of this breeding and also have young bulls. **MacVicar Bros. Phone 2253, Harrietsville,**  
**Belmont, R.R. No. 1, Ont.**

inserting a milking tube into the teat  
 and then scarifying the skin near the  
 opening. The edges of the hole may be  
 drawn together with a few stitches and  
 dressed with a healing ointment. This  
 should be done by a qualified veterinarian  
 when the cow is dry.  
 2. Oats and clover make a satis-  
 factory summer pasture.  
 3. As a rule, butchers do not like  
 veal calves to weigh much over 200  
 pounds.  
 4. After a cow freshens it is good  
 practice to give her a warm drink, a  
 pound of salts and a bran mash. A  
 mash and hay would be sufficient for  
 the first day, and then it would be quite  
 safe to start in with the regular ration.  
 If the cow is a heavy milker and there is  
 any danger of milk fever, it is well to  
 withhold the heavy feed for several  
 days, and then start in lightly and grad-  
 ually increase until the cow is on a full ration.

**Sweet Clover.**  
 1. Is it satisfactory to sow sweet  
 clover on the surface of old timothy  
 sod which is in fairly good condition?  
 Will it be too late to sow it about April  
 20? Can it be used as pasture by the  
 first of July?  
 2. Would buckwheat be a satisfactory  
 crop to sow to plow down as fertilizer  
 to build up the land?  
 3. What is the cause of a sow eating  
 her young pigs?  
 J. L.

Ans.—1. Sweet clover would no doubt  
 catch if sown on timothy sod and there  
 would be fair picking by the first of July.  
 Sweet clover stands pasturing very well.  
 2. Plowing under a crop of buckwheat  
 would add humus to the soil, but plowing  
 under red clover or sweet clover would  
 be preferable as both these crops increase  
 the nitrogen content of the soil.  
 3. This abnormal condition is due  
 largely to the sow being in a fevered  
 condition, which in many instances is  
 caused by too close confinement on a  
 heating ration. Feeding lightly on a  
 laxative ration before farrowing and for  
 a few days afterwards is advisable. Roots  
 bran and oats make a very good ration.  
 It is also advisable to feed some mineral  
 matter, which may be given in the form  
 of charcoal, wood ashes, salt, and sulphur.

**"Royal Purple" Calf Meal**

Any Farmer can increase his income by selecting one or two calves each season to make baby beef



**Mr. Farmer, if not your-  
 self, give your boy a chance  
 to make something for him-  
 self on the side.**

**MABEL.**—This excellent Cross-bred  
 Angus-Shorthorn heifer (shown in  
 photograph) was born November 5th,  
 1917. At thirteen months and thir-  
 teen days old weighed 990 pounds, and  
 sold to Anderson Bros., of London, for  
 baby beef, for which they paid 25c a  
 pound, live weight. This calf was fed  
 "ROYAL PURPLE" Calf Meal. It was  
 fed and bred by Mr. Andrew Hicks, of  
 Centralia, Ontario.

Mr. Hicks also raised BILLY SUNDAY,  
 which he sold at Toronto Fat Stock Show, on  
 December 8th, 1918, at auction, for 25c a  
 pound, to the Harris Abattoir. Billy was  
 fifteen months five days old and weighed 1,330  
 lbs. Said to be the heaviest calf at his age  
 ever seen at the Toronto Fat Stock Show. He  
 was also fed ROYAL PURPLE throughout the  
 year.  
 Mr. Hicks fed 2,100 lbs. of ROYAL PURPLE  
 CALF MEAL to all his calves last year.

There is something wrong with the farmer's reasoning and figuring if he uses new milk to raise  
 calves. Calves can be raised on our Royal Purple Calf Meal after three days old, just as well as  
 on new milk, at 30% of the price of new milk. This we have proven beyond a shadow of a doubt.  
 We admit there are meals sold on our Canadian market called "Calf Meal" that would make  
 bettering food, because they do not take the place of new milk, but our Royal Purple profit  
 contains all the elements found in new milk.

If you will write us we will send you one of our new books, which tells you why our meal will  
 produce calves like are shown in this advertisement, and compares it with other meals taken from  
 Government Bulletin No. 388.

Royal Purple Calf Meal is sold everywhere by dealers. If your particular dealer does not  
 handle it, write us, and we will tell you where you can get it.

Made by THE W. A. JENKINS MANUFACTURING COMPANY, LIMITED, LONDON, ONT.



Union Made



**Wear Like Iron**

THEY'RE more than just overalls—they're exceptional for comfort, long wear and least mending. Reinforced, a double and triple stitching at the wearing points. Buttons can't wear off. Ask your dealer for "Kitchen's," and insist on having our "Railroad Signal" brand. The Kitchen Overall and Shirt Company, Limited Brantford, Ont. 47

**KITCHEN'S "Railroad Signal" OVERALLS**

**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

**Cream Wanted**

Ship yours to us, as we must have it to supply our well-established trade with good quality butter. Therefore, we are prepared to pay you highest market price paid. We furnish cans and pay express charges. References any bank.

**Mutual Dairy & Creamery**  
743 King Street West  
Toronto - Ontario

**JUST JERSEYS Baldwin's REGISTERED COATICOOK, QUE.**

**Will Sell Few Fresh Jersey Cows**  
Jersey Bull one year, dam Mabel's Post Snowdrop, 1st prize as calf, 1st Junior Champion as yearling, 2nd prize two-year-old Toronto, four times 1st Woodstock, four times shown. Bull six months, dam Oxford's Silver Bell, milked 38 lbs. day, score 172 points at Guelph, 140 days in milk. First calf 1915. I developed and was breeder of Beauty Maid Champion four-year-old butter cow of all breeds in Canada, also Woodstock Pat. Champion Berkshire Boar Eastern Prov. 1916-17.  
IRA NICHOLS, R.R. No. 2, Burgessville, Ont.

**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 past. We have had, and have in service, the two grand champions of the breed. If you need a sire for pure blood, write us for literature, descriptions and prices.

WOOD FARM LOWELL, MASS.

**Questions and Answers. Miscellaneous.**

**Charcoal for Pigs.**

Is coal fed to hogs of any benefit?

J. J. H.

Ans.—Feeding charcoal and wood ashes to hogs is recommended. They contain certain mineral matter that is beneficial.

**Preserving Eggs.**

Is a newly made solution of water-glass for preserving eggs alright for preserving eggs a second time the following season?

J. W. B.

Ans.—It is possible that the eggs would keep all right, but for all the waterglass costs it would be much safer to use a fresh solution than to use the solution a second time.

**Lump in Teat.**

What would you advise doing with a cow that is hard to milk in one quarter. There seems to be a growth or tumor in the milk passage.

I. D. C.

Ans.—It is possible that a veterinarian may operate successfully, especially if the lump is near the point of the teat. However, if it is far up in the teat it is doubtful if a cure could be effected.

**Sweet Clover for Pasture.**

Could sweet clover be sown with oats that are to be pastured off in the summer? Would sweet clover stand close cropping by sheep?

Z. R. E.

Ans.—It would be quite satisfactory to sow the sweet clover with oats for pasture. The sweet clover will stand fairly close pasturing, however, the crown of the plant must not be destroyed.

**Lump on Colt's Leg.**

I have a colt with a soft lump on the inside of the rear leg. The colt is not lame. What treatment do you advise?

F. S.

Ans.—Bathe the lump with hot water and if it contains fluid it might be well to lance it, and then apply a disinfectant solution. Apply an absorbent liniment consisting of 4 drams each of iodine and iodide of potassium and 4 ounces each of alcohol and glycerine.

**Sweet Clover For Silage.**

Is sweet clover suitable for silage?

J. P.

Ans.—Sweet clover has been used to a limited extent as a silage crop. It contains a fairly high nutritive value, and is quite readily eaten by the stock. When it is taken out of the silo it is not a very appetizing looking feed; however, if the weather is catchy around haying time it is one method of saving the crop, and of realizing on it.

**Lump Jaw.**

Can anything be done for lump jaw?

A. J.

Ans.—Give the iodide of potassium treatment three times daily. Commence with one dram doses and increase the dose by one-half dram until the animal 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 the treatment in two months. If the bone is not involved, the quickest method of treatment is to dissect the tumor out. This operation should be performed by a veterinarian.

**Crippled Pigs.**

I have four pigs nine months old which have become lame. I have been giving them salt, ashes and charcoal and they seemed to be getting better, but now one of them has lost the use of its hind parts altogether. I am now feeding barley and oat chop, although when they first started going lame I was feeding on shorts. What treatment would you advise?

R. S.

Ans.—Crippling may be brought about by the hogs being confined in damp, cold quarters, or from lying on cold cement. It is also thought that feeding a ration lacking in mineral matter will cause the trouble. The mixture of wood ashes, charcoal, sulphur and salt would help overcome this. Oats and a small quantity of barley makes a very good ration, especially if you have skim-milk to feed with it. If you can get the crippled pigs out in the sunshine and started to root in some dry soil, the lameness will no doubt soon disappear. There is little that can be done medicinally for this trouble.

**PEERLESS PERFECTION**

**Field Fence is Strong—Yet Springy as a Bed Spring.** Animals can't break through it no matter how hard their attacks. It simply can't be broken. Just springs back in shape like a bed spring. It's made of heavy Open Hearth steel galvanized wire with all the impurities taken out and all the strength and toughness left in. Will not corrode or rust. All wires are extra heavy. Will not sag. Requires less posts than ordinary fence. Absolutely guaranteed.

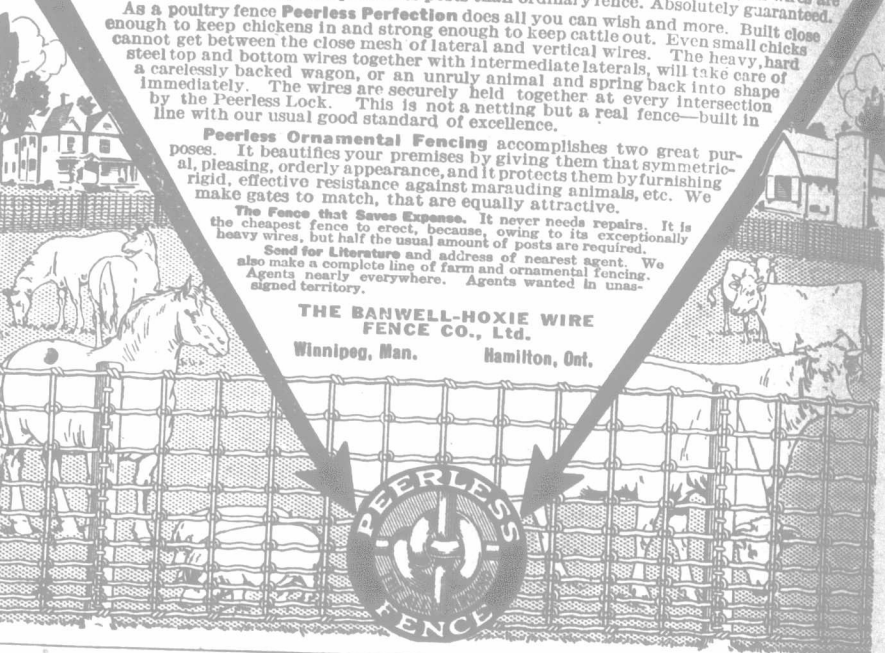
**As a poultry fence Peerless Perfection does all you can wish and more.** Built close enough to keep chickens in and strong enough to keep cattle out. Even small chicks cannot get between the close mesh of lateral and vertical wires. The heavy, hard steel top and bottom wires together with intermediate laterals, will take care of a carelessly backed wagon, or an unruly animal and spring back into shape immediately. The wires are securely held together at every intersection by the Peerless Lock. This is not a netting but a real fence—built in line with our usual good standard of excellence.

**Peerless Ornamental Fencing** accomplishes two great purposes. It beautifies your premises by giving them that symmetric, rigid, effective resistance against marauding animals, etc. We make gates to match, that are equally attractive.

**The Fence that Saves Expense.** It never needs repairs. It is the cheapest fence to erect, because, owing to its exceptionally heavy wires, but half the usual amount of posts are required.

**Send for literature** and address of nearest agent. We also make a complete line of farm and ornamental fencing. Agents wanted in unassigned territory.

**THE BANWELL-HOXIE WIRE FENCE CO., Ltd.**  
Winnipeg, Man. Hamilton, Ont.



**Every Farmer Wants the Best**

POSSIBLE RETURNS FOR HIS

**CREAM**

We offer you accurate tests and best market price.

We supply cans. Ship your Cream to

**LINDSAY CREAMERY LIMITED**  
Lindsay, Ontario

**Special Private Sale JERSEYS**

We are offering at reduced prices, COWS, YEARLING AND TWO-YEAR-OLD HEIFERS, sired by our noted herd bulls, Olga 4th's Oxford—1746—, whose dam gave under test over 16,000 lbs. milk in one year and over 1,000 lbs. butter; and Imp. Golden Prince—2995—, sired by the Great Island bull, Golden Maid's Prince 3027, HC, PS.

Young bulls of the above breeding.

Also a few imported cows.

Prices reasonable. Inspection invited. Come and make your own selection from a large herd.

**LARKIN FARMS QUEENSTON, ONT.**

**Brampton Jersey Bulls**

We are offering a half dozen young bulls of serviceable age at prices that should clear them fast to make room for our coming importation. These bulls are all from R.O.P. dams and sired by our Bright Prince and Raleigh herd sires.

BRANTFORD

**B. H. BULL & SONS**

ONTARIO

**PROSPECT FARM JERSEYS**

We have a large herd, and for over 30 years we have used only first-class sires, and are now in a better position than ever before to offer some choice young cows and heifers, "both registered and high grades," due to calve in March and April. They are all in the pink of condition, six months and younger.

**R. & A. H. BAIRD, New Hamburg, Ontario. Bell 'Phone**

**The Woodview Farm JERSEYS**  
London, Ontario  
JNO. PRINGLE, Prop.

**CANADA'S MOST BEAUTIFUL JERSEY HERD**  
Herd headed by Imported Champion Ronwer, winner of first prize with five of his daughters on the Island of Jersey, 1914, second in 1916, and again first in 1917. We are now offering for sale some very choice bull calves, ready for service, sired by imported bulls and from Record of Performance imported prize-winning cows. Also some cows and heifers. Prices right. We work our show cows and show our work cows.

**The Edgeley Champion Herd of Jerseys**

Present offering: Two young bulls dropped June 1918, one sired by Brampton Prince Stephen, dam Rhoda of Pine Ridge Farm, 10,801 lbs. milk 593 lbs. fat in one year. Others sired by Edgeley Bright Prince, son of Sunbeam of Edgeley, champion butter cow of Canada.

(Woodbridge, C.P.R.; Concord, G.T.R.)

**EDGELEY, ONTARIO**

The Sheep for

Our Oxford

We have at present ewes and rams, ewe lambs—the best and breeding stock

**PETER R. R. No. 1 H. C. Arkell**

**Increase**

Shear with a machine the first stubble that grows money by shearing. Get a Stewart Machine. Soon pay for it. Send us your money order. CHICAGO ILL. Dept. B 761, 12th St.

**SHROPSHIRE**

Breeding ewes of bred to lamb in ewe lambs. C. Oshawa, Ontario

**FC**

Shropshire ewe Clydesdale Stallion W. H. Pugh

**Shropshires**

ewes and lambs, good size JOHN MIL

**Boar**

Pedigree King Farrowed 1915. proved a good

Manager, South

**York**

We are now spring pi

**WELLS**

Farmer's Adv

**TAM**

Boars ready for service also young sows JOHN W. TODD

**FC**

Litter of Pure-bred E. P.O. Box 1635

**Inverug**

Still to the fore, well bred and ready to breed in as you're passing Hadden, Pefferlaw

**Champion Duro**

two calves 3941, Toronto and Brookwater Ontario champion Toronto come and see my h

**CULBERT MALO**

Sunnyside Chester Whites best of our champions. In our Toronto and Ontario, London and W. E. Wright & S

**Lakeview**

If you want a brood greatest of the prize-winning for JOHN DICK



### Summer Hill Oxfords



The Sheep for the Producer, Butcher and Consumer.

**Our Oxfords Hold an Unbeaten Record for America.**

We have at present a choice offering of yearling ewes and rams, as well as a lot of good ram and ewe lambs—the choicest selection of flock-heads and breeding stock we have ever offered.

**PETER ARKELL & SONS**  
R. R. No. 1 Teeswater, Ontario  
H. C. Arkell W. J. Arkell F. S. Arkell

**Increase Your Wool Clip**  
Shear with a machine, and not only get 15% more wool the first season, but leave a smooth, even stubble that grows more wool the next year. You lose money by shearing with hand shears. Machine shearing is easier and doesn't scar the sheep. Get a Stewart No. 9 Ball Bearing Shearing Machine. Soon pays for itself. If dealer can't supply you send us his name. Write for catalogue.  
**CHICAGO FLEXIBLE SHAFT COMPANY**  
Dept. B 761, 12th St. and Central Avenue, Chicago, Ill.

**SHROPSHIRE SHEEP**  
Breeding ewes of Kellock and Campbell breeding; bred to lamb in March and April, also ram and ewe lambs. C. H. SCOTT, Hampton, P. O. Ottawa, Station, all Railways. Bell 'Phone.

#### FOR SALE

Shropshire ewe lambs and young ewes, two Clydesdale Stallions, four Shorthorn bulls.  
**W. H. PUGH - Myrtle Station, Ont.**

**Shropshires and Cotswolds**—A lot of young ewes in lamb to imp. ram, and ewe lambs, good size and quality, at reasonable prices.  
**JOHN MILLER, Claremont, Ont.**

### Boar for Sale

Pedigree Yorkshire, Oak Park King No. 2—50330  
Farrowed 1915. In good breeding condition; has proved a good sire. For price and particulars apply to

**Manager, Southern Ontario Land Co., Ltd.**  
Wheatley, Ontario

### Yorkshires

We are now booking orders for our spring pigs. Write for prices.

#### WELWOOD FARM

Farmer's Advocate, London, Ontario

#### TAMWORTHS

Boars ready for service—a choice lot to select from; also young sows bred for spring farrow. Write:  
**JOHN W. TODD, R.R. No. 1, Corinth, Ont.**

#### FOR SALE

Litter of Pure-bred YORKSHIRE PIGS. Apply  
**E. GOFF PENNY**  
P.O. Box 1635 Montreal

#### Inverugie Tamworths

Still to the fore, wi' a bonny bunch o' gilts, bred and ready to breed; a few weaned laddies. Ca' in as ye're passin' or write me a bit note. **Leslie Hadden, Pefferlaw, Ont., R.R. No. 2.**

**Champion Duroc Jerseys**—Herd headed by two champion boars: Campbell 46, 3941, Toronto and London champion, 1916, 1917; Brookwater Ontario Principal 9735 (imported), champion Toronto and London, 1918. Write, or come and see my herd. Satisfaction guaranteed.  
**CULBERT MALOTT, R.R. 3, Wheatley, Ont.**

**Sunnyside Chester Whites and Dorsets.** In Chester Whites both sexes, any age, bred from our champions. In Dorsets ram and ewe lambs by our Toronto and Ottawa champions, and out of Toronto, London and Guelph winners.  
**W. E. Wright & Son, Glanworth, Ont.**

#### Lakeview Yorkshires

If you want a brood sow or a stock boar of the greatest strain of the breed (Cinderella), bred from prize-winning generations back, write me.  
**JOHN DICK - PORT CREDIT, ONT.**

### Questions and Answers. Miscellaneous.

#### Vermin on Cat.

I have a pet cat that is not well. He scratches himself a good deal around his head. What treatment would you suggest?  
**J. F.**

**Ans.**—It is possible that the cat is suffering from the attacks of vermin. Giving it a thorough washing in kerosene emulsion, or in soap suds to which a little coal oil has been added, should bring relief.

#### Lump in Teat.

I have a fresh cow that has a lump in each of her hind teats. What is the cause, and what treatment would you advise?  
**F. J. B.**

**Ans.**—If the lump is not too far up in the teat a veterinarian might operate successfully. The cause of such lumps forming is more or less obscure. They may be caused by an injury. If the lumps are very far up in the teat it might be advisable to dry the cow and fatten her.

#### Bull Not Sure.

I have a pure-bred herd sire rising two years old. During the past three months he has not proven sure. He is in good condition and is fed on hay and chopped oats. Would you advise keeping him any longer?  
**M. W.**

**Ans.**—As a few cows get in calf, it is possible that the sterility is due to too high condition. Give him plenty of exercise. There is a possibility that he may be diseased. If this is the case, it would be better to get rid of him, however, if such were the case it is not likely that he would stop any cows. If he is a valuable animal treatment should be applied for a time at least before sending him to the block. Reduce his flesh and wash out the sheath with a weak disinfectant solution. Also wash out the cow and apply the disinfectant over the hind quarters.

#### Pasture Crop.

1. What is a good mixture to sow in the orchard to provide pasture for young calves?

2. Would it obstruct a tile drain in any way to run a pipe from the kitchen sink into it? There is a good fall from the house.  
**W. C. D.**

**Ans.**—1. If early pasture is wanted, it could be secured by sowing either rape or oats. We would prefer the oats for young calves. If fall pasture was required, red clover, alfalfa, or sweet clover might be sown in the spring, without a nurse crop.

2. If the drain had satisfactory fall it is not likely that connecting the kitchen sink with it would obstruct it very much. There is a possibility, however, that where there would be more or less of a constant stream of water the tile might be blocked with the roots of whatever crop was grown on the land through which the tile passed. Where the stream is intermittent the roots seldom bother the tile. However, we have seen a 4-inch tile completely blocked with the fibrous roots of mangels; the tile was taking the water away from a spring and was down three feet.

#### Water Supply.

I intend building a bank barn on land 100 feet above water level. Could I pump the water from the river to a tank at the barn by using a gasoline engine? There is a small creek running on a level with the barn. Could I pipe water from this to the building? Would it be necessary to have two tanks?

2. If sweet clover were sown this year would it make pasture next year?  
**T. K.**

**Ans.**—1. It is quite possible to pump the water that height with a three or four-horsepower gasoline engine. The water could be pumped into one large tank and the flow from that to the watering-troughs regulated by a float. If the creek is located sufficiently high above the buildings, the water might be piped from it to the barn. It would flow by gravity and would save the expense of a pumping outfit. The one tank would then be sufficient.

2. Yes.  
3. It depends somewhat on the condition of the animal. From 1 to 2 lbs. is the dose for a cow?

## LANDS WANTED FOR... SOLDIER SETTLERS

**POWERS** have been granted to the Soldier Settlement Board of Canada by Order in Council of the 11th of February, 1919, to purchase land to be re-sold to qualified returned soldiers who desire to make farming their permanent vocation.

To assist soldiers in settling in any suitable district in which they may wish to locate, the Soldier Settlement Board desires to have filed in each of their Provincial Offices a select list of farm lands available for purchase in each district of the Eastern Provinces, with full description and lowest cash prices of the same. Purchases by the Board will be paid for in cash.

The public are informed that this land is for purchase by returned soldiers, and must be of good agricultural quality, and reasonable price, making possible the success of the soldier as a farmer. It should be within seven miles of a railway, open, free from weeds, water supply assured, and of moderate price. In giving particulars, mention nearest market and school. In comparison with the vast supply of vacant lands, the number of farms immediately required will be very limited. Owners, therefore, will kindly assist the Board by offering for the present only land which fills the above requirements.

No commission will be charged or paid. No offers to sell will be binding on the person offering, unless a sale is effected, and no obligation will be on the Board to accept any offer.

If application from a returned soldier be received for the purchase of land, an inspection and valuation of such land may be made by the Board, as soon as free from snow. If approved, negotiations may be entered into for the purchase and sale thereof. An approved list is desired for each suitable district throughout Canada.

All communications concerning land in the Eastern Provinces should be addressed to the Provincial Supervisor of the Soldier Settlement Board for the province in which the land offered for sale is situated, a list of whom is given below:—

- |   |   |
|---|---|
| <b>ONTARIO:</b><br>Mr. W. M. Jones, 32 Adelaide St. E., Toronto.        | <b>NOVA SCOTIA:</b><br>Mr. R. H. Congdon, 529 Barrington St., Halifax.                |
| <b>QUEBEC:</b><br>Lt.-Col. Bruce F. Campbell, Drummond Bldg., Montreal. | <b>PRINCE EDWARD ISLAND:</b><br>Soldier Settlement Board, Riley Bldg., Charlottetown. |
| <b>NEW BRUNSWICK:</b><br>Mr. Wm. Kerr, Post Office Bldg., St. John.     |   |

### SOLDIER SETTLEMENT BOARD, Canada.

### Shorten Piggy's Growing Stage

—prevent him from getting a set-back at weaning—get him in the habit of putting on weight fast—and have him ready for market weeks earlier by feeding him

## GARDINER'S PIG MEAL

This is the greatest feed you can get for pigs at the weaning period. It gives them just the right start for that quick growth that spells profit.



Gardiner's Pig Meal is put up in 25, 50 and 100-lb. bags. If your dealer hasn't it, write us for prices—and for particulars about Gardiner's Calf Meal, Oyatum, Sac-afat and Cotton Seed Meal.

**GARDINER BROS.,**  
Feed Specialists,  
SARNIA, Ontario. 13

## Cane Feeding Molasses

A wonderful fattening ingredient containing all the elements necessary to finish your stock. Used by the most scientific stock feeders in Canada. Don't delay—write for particulars immediately.

### Dominion Sugar Co., Limited

Head Office: Chatham, Ontario

## BERKSHIRES

Large stock; all ages; two imported herd sires; English, American and Canadian strains. Send for breeding list.  
**CREDIT GRANGE FARM, MEADOWVALE, ONTARIO**

### ELMHURST LARGE ENGLISH BERKSHIRES

From our recent importation of sows, together with the stock boar, Suddon Torredor, we can supply select breeding stock all ages. Satisfaction and safe delivery guaranteed.  
**H. M. VANDERLIP, Breeder and Importer, R.R. 1, BRANTFORD, ONTARIO.**  
Langford Station and Brantford and Hamilton Radial.

#### Prospect Hill Berkshires

Young stock, either sex, for sale, from our imported sows and boars; also some from our show herd, headed by our stock boar, Ringleader. Terms and prices right.  
**JOHN WEIR & SON - Paris, Ont. R.R. 1**

#### Big Type Chester Whites

Our fourth importation has just arrived, including an 800-lb. sow with litter at side, sired by the 1,000-lb. Champion of the National O. I. C. Show. Ten litters March and April pigs for sale. **John G. Annesser, Tilbury, Ont.**

### Oak Lodge Yorkshires, Shorthorns

—We have one of the strongest selections of young sows and boars we ever had in the herd. Write us also regarding your next herd sire. We have them from great milking dams—all good families  
**J. E. BRETHOUR & NEPHEWS, Burford, Ont.**

#### Meadow Brook Yorkshires

Sows bred, others ready to breed. Six large litters ready to wean. All choicely bred and excellent type.  
**G. W. MINERS, R.R. No. 3, Exeter, Ont.**

#### PIG FOR SALE

A Berkshire boar 6½ months old, bred from Toronto and London prize winning stock. A bargain at \$50.00.  
**ALVIN ANDERSON, Hawkstone, R.R. 1, Ont.**







Department.

ery bed. When the plants  
own, the paths will be lost;  
time no one needs to walk  
n. The flowers in the centre  
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vegetable garden, the rows are  
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or tomatoes follow radish.

re, all members of the cab-  
are planted together. This  
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garden would exist year  
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many possibilities, there-  
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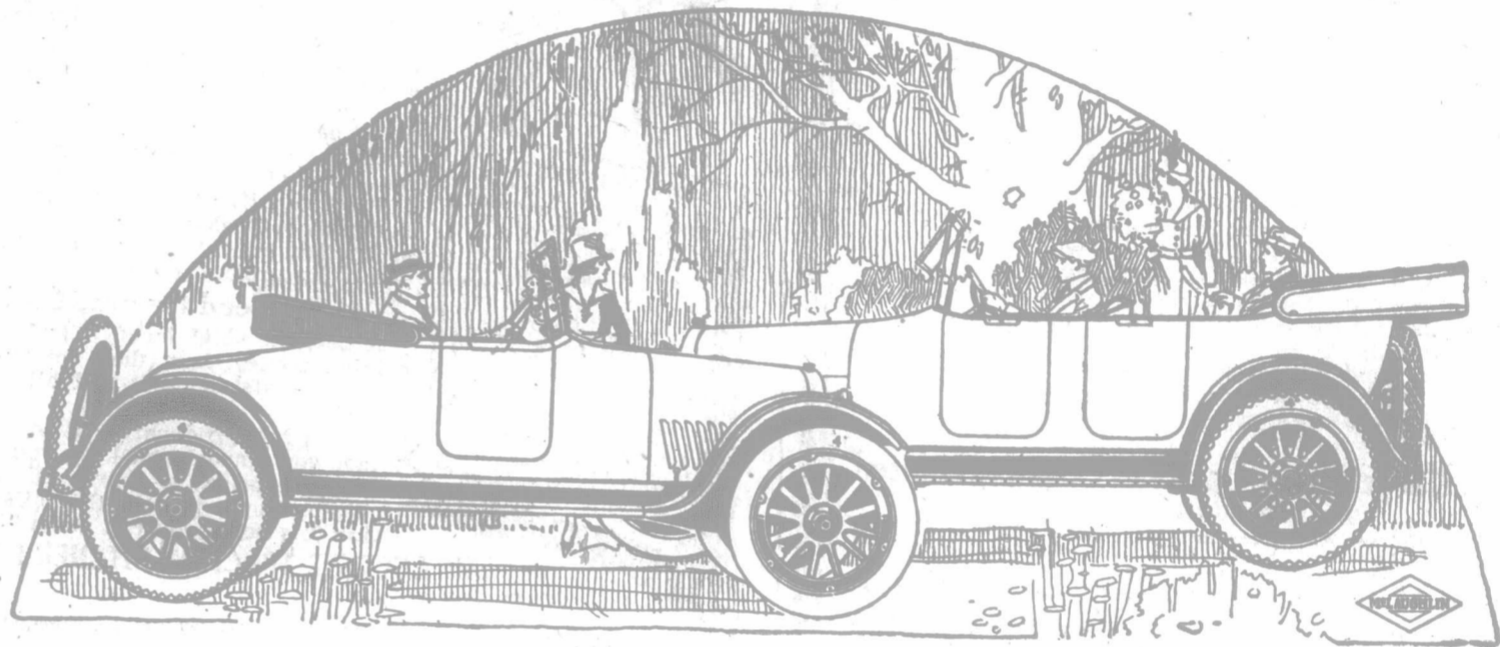
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