

PUBLISHED EVERY WEEK. \$1.50 PER YEAR.

Director Central Exp Farm  
dec 31, 18

# THE FARMER'S ADVOCATE

AND HOME MAGAZINE

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

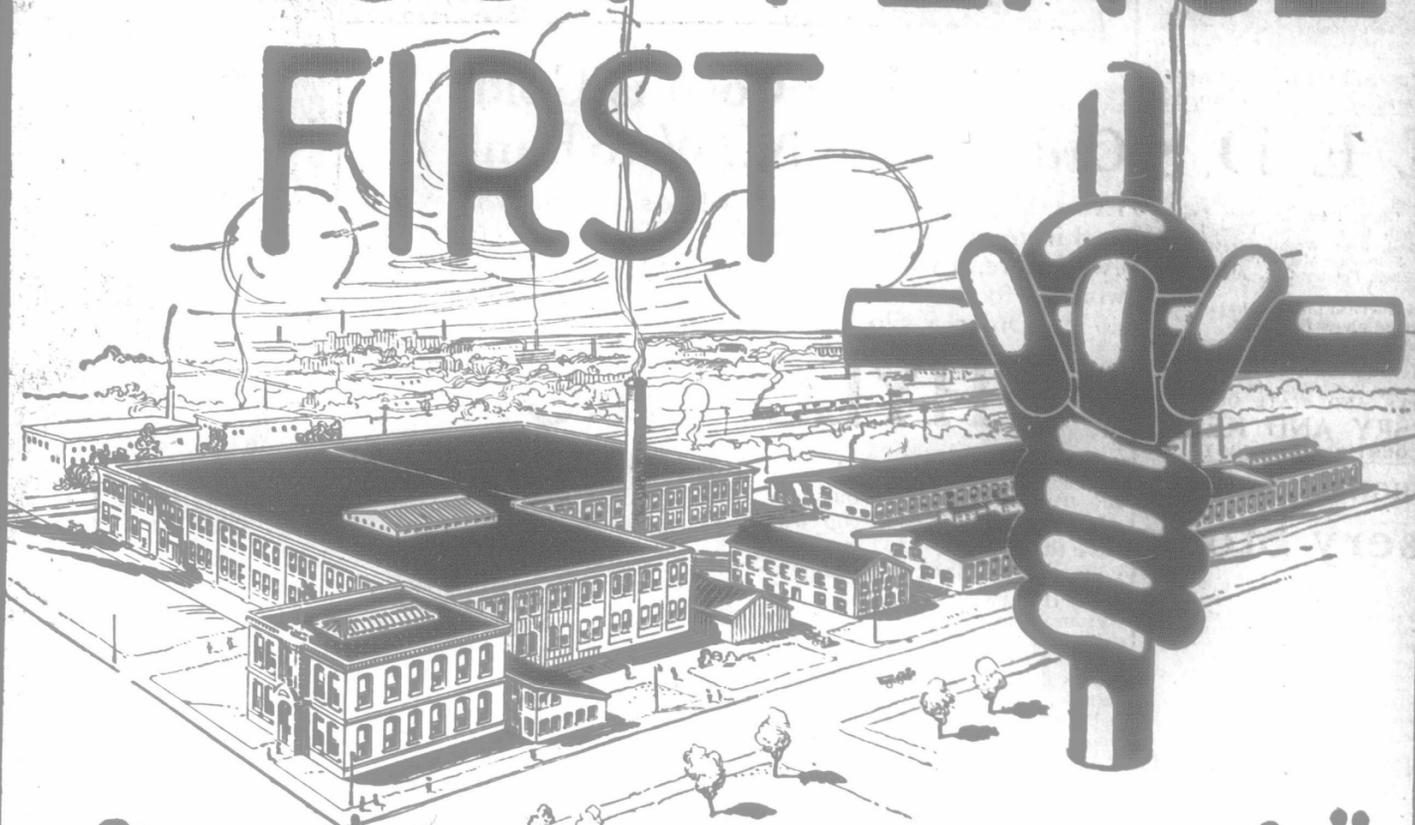
ENTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1907.

Vol. LIII.

LONDON, ONTARIO, JANUARY 24, 1918.

No. 1322

# FROST FENCE FIRST



Strength  
Service  
Security

*"It pays to use it"*

FROST STEEL and WIRE CO. Ltd. HAMILTON CANADA

**The Wonderful—Light-Running  
Gilson Thresher**  
"Goes like Sixty"



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

**THE WONDERFUL GILSON**

**SIMPLY CAN'T BE CLOGGED.** The simple, scientific, carefully worked-out construction of the light running Gilson Silo Filler makes it absolutely impossible to clog the throat of the blower. The Gilson is the lightest running blower cutter made. It has broken all records for high elevation and rapid work with light power. A 4 h.p. operates the small size splendidly. Made in three sizes to suit any power. The Gilson is rightly called the

**KING OF SILO FILLERS**

because of its remarkable elevating powers, absolute safety, durability, strength and simplicity—it stands supreme. It has convenient and quick knife adjustment; solid steel-bound cutting wheel; patented safety reverse—and is guaranteed to cut and elevate MORE ensilage with the SAME power than ANY other ensilage cutter IN THE WORLD. Write to-day for catalogue and proof. Manufactured and guaranteed by—  
**GILSON MANUFACTURING CO. LTD.** .509 York St., GUELPH, Ont.



**IRON AGE**  
GARDEN TOOLS

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

**IRON AGE Combined Hill and Drill Seeder**

solves the garden labor problem. Takes the place of many tools—stored in small space. Plows, cultivator, weeder, ridger, etc. better than old-time tools. A woman, boy or girl can push it and do a day's work in 40 minutes of combined use. \$14.95. Write for catalogue No. 1 B.  
**THE BATEMAN-WILKINSON CO., Ltd.**  
41 Symington Avenue, Toronto, Canada.



**THE MARTIN  
DITCHER AND GRADER**  
DIGS YOUR DITCHES  
GRADES YOUR ROADS

EASILY QUICKLY CHEAPLY

REVERSIBLE ADJUSTABLE



PERFORMS IN ONE DAY  
**DOES THE WORK OF 50 MEN**  
SEND FOR FREE BOOKLET  
The PRESTON CAR & COACH CO. LIMITED  
37 DOVER ST. PRESTON CANADA

A Better Separator For Less Money

**VIKING**

Cream Separators of Quality

FOR SALE :

Cedar Posts and Telephone Poles

All sizes and all lengths. Apply to  
**NORMAN HIPEL**  
Box 27 Preston, Ont.

"Bull Dog" London Concrete Mixer No. 6  
Capacity, 50 cubic yards per day.  
Price, \$357.50, complete with gasoline engine. Pays for itself in 20 days' use. Built to last a lifetime. Send for catalogue No. 1 B.  
**London Concrete Machinery Co.**  
Dept. B  
London, Ontario

World's Largest Mfrs. of Concrete Machinery



**Farmers and Lumbermen**

Why throw away your money to middlemen? We will furnish you, f. o. b. Watford, Ont., this beautiful set of strong and easy-running sleighs; usual price, \$35.00, for \$25.00. Fully guaranteed. Made of the best material, white oak runners, seven feet long, two inches wide. Spring steel shoeing; well painted; made to last a lifetime. Ask your neighbor about them. For 20 years the Hastings sleigh is known to be the best made, strongest, and easiest-running sleigh in the market; you run no risk. Send us a P. O. money-order or your cheque. Address:

**HASTINGS SLEIGH COMPANY**  
Robt Taylor, Manager. WATFORD, ONT.

**F E E D S**

Cotton Seed Meal, Linseed Oil Cake Meal, Corn Oil Cake Meal, Gluten Feed, Digestive Tankage, Vim or Oat Feed, Bran, Shorts, Corn, Cracked Corn, Corn Meal, Feed Wheat, Scratch Feed, Laying Mash, Fattening Mash, Beef and Bone Scrap, Oyster Shell, Poultry Grit, Alfalfa Meal, Charcoal, etc.

If it is in the Feed Line, we have it. Write or phone for prices.  
We are also buyers of Buckwheat, Oats, Goose Wheat, Bleg, Peas, Beans, etc., both for feed and seed. Also Hay, Straw, Potatoes, Cabbages, Onions, Shallots and Dutch Sets, etc.  
**SEND SAMPLE AND STATE QUANTITY**  
**CRAMPSEY AND KELLY**  
DOVERCOURT ROAD, TORONTO

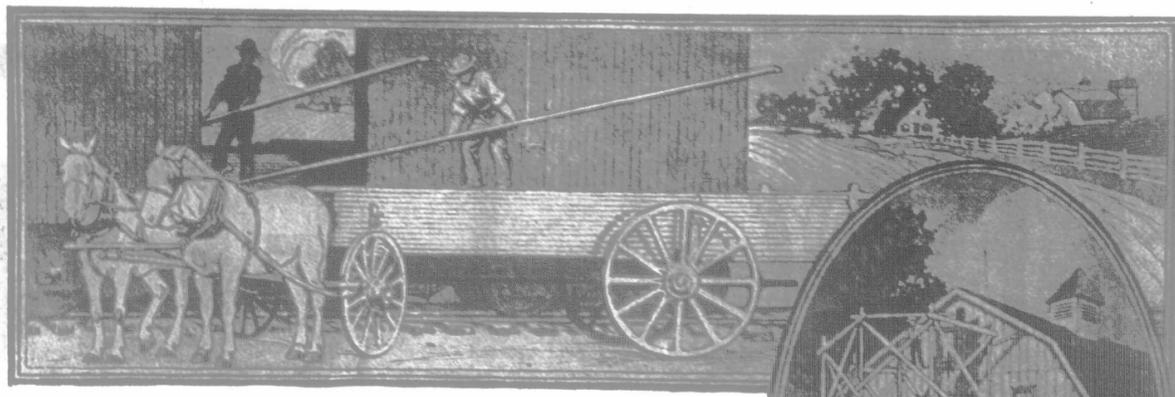
**HIGH-GRADE  
Nursery Stock**

We have for delivery early in spring, 1918, all varieties of Apples, Plums, Pears, Cherries, Peaches and other fruit stock, and an extensive line of small fruits, such as Currants, Gooseberries and berries; also a general line of all kinds of Ornamental Trees, Shrubs and Roses. Catalogue and quotations cheerfully furnished on application. We have a few vacancies for dependable, energetic salesmen. If interested, apply at once.

**E. D. SMITH & SON, LIMITED**  
NURSERYMEN  
WINONA ONTARIO

**FARM  
FOR SALE**

Sunnyhill Stock Farm, 300 acres  
One of the finest grain and stock farms in Ontario, twelve miles from Lindsay, one mile from Grass Hill C.P.R. station, and two and a half to G.T.R. Close to church and school. Excellent water, including good well and spring creek. Fine dwellings, bank barns on stone foundation, good stables. May be sold all in one or divided.  
Sealed tenders received up to February 1st. Further particulars apply:  
**Wm. Manning & Sons, Woodville, Ont., or**  
**Wm. Manning, 99 Pacific Ave. Toronto, Ont.**



**This Year Corn is Gold  
Order a Silo NOW to Bank It**

Everything indicates that corn will be sky-high. When you feed it you will feed M-O-N-E-Y. This year, more than ever before, it will be good business to save every penny's worth of food value in your crop. There is but one way to do it. Order a silo now—more important still, order a

**HYLO SILO**

Then you will not only have a silo up and ready for business when you need it, but you will have the silo that is to corn what your Savings Bank is to money.  
The Hylo Silo is sound from top to bottom and through and through. No defects in material or design—therefore no leakage, mildew or spoilage. Mortised joints all wood—nothing to corrode, rot or crumble. Doors airtight but cannot stick. Anchorage simple but sure. Automatic self-adjusting hoops.  
You can store your corn in the

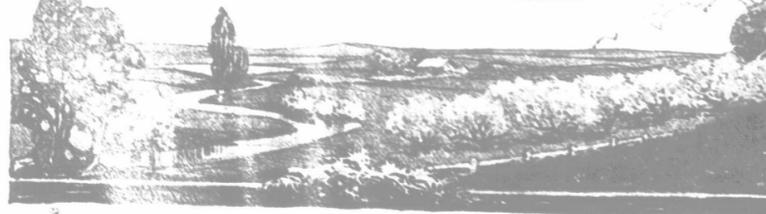
Hylo Silo with the same confidence that you put money in the bank. You can be sure that the Hylo Silo will keep it safe and sweet and give it back when you want it with big interest in form of increased succulence and greater food value. Thousands of farmers bank upon the Hylo Silo, because it has never failed to increase their prosperity every year.

To make the most money from your crop, order now. To save the most money on your silo, order now. Choice timber is still going up. We cannot guarantee to maintain our low prices after our present supply is exhausted

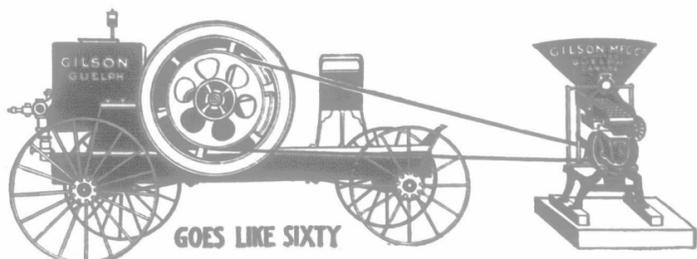
Nothing should stop you from ordering NOW. Our easy payment plan lets the silo pay for itself. Write to-day for complete details and catalogue.

**Gilson Manufacturing Co., Limited**

229 York Street  
GUELPH ONTARIO



# This Grinding Outfit Will Cost You Nothing!



GOES LIKE SIXTY

Do your own grinding at your own convenience—be independent. Get a Gilson Grinding Outfit on our new, easy payment plan, and it will pay for itself.

Did it ever occur to you that all the time you are doing without a Gilson Engine—and getting your work done in a more expensive way—you are paying for the engine, but not getting it?

Gilson Engines Dominate in Quality and Service—start without cranking—are absolutely guaranteed.

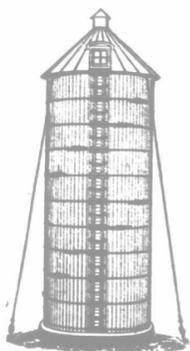
WRITE US TO-DAY FOR CATALOGUE—and be sure and specify what size engine you are interested in.

## GILSON MFG. CO. Ltd.

499 York St., Guelph, Can.

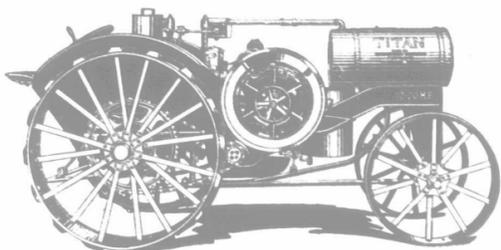
### THE HYLO THE WONDERFUL GILSON

A superior Silo for the discriminating buyer



SEND FOR SPECIAL CATALOGUES

# International Tractor Service



WISE tractor buyers insist upon three features. The tractors must operate on the cheapest fuel a farmer can buy. They must be so simple that the farmer or his help can operate them. They must do enough good work in the field, and at the belt, to more than pay for themselves. Titan 10-20 h.-p. and International 15-30 h.-p. tractors meet all three of these demands.

One reason for the very satisfactory records these tractors make is the service our local dealers and branch houses give—a service that enables farmers to keep their tractors going whenever there is work to do. It includes all necessary instruction in the care and handling of the machines.

Keep this service feature in mind when you come to buy a tractor. It applies equally to our Titan 10-20 h.-p. and International 15-30 h.-p. tractors. There is such a demand for these tractors that we cannot promise better than spring deliveries on tractors ordered now. Send for catalogues now, make your decision soon, and you will have your tractor for the heavy rush work of early spring. Address the nearest branch house listed below.

## International Harvester Company of Canada, Limited

West—Brandon, Man.; Calgary, Alta.; Edmonton, Alta.; Estevan, Sask.; Lethbridge, Alta.; North Battleford, Sask.; Regina, Sask.; Saskatoon, Sask.; Winnipeg, Man.; Yorkton, Sask.  
East—Hamilton, Ont.; London, Ont.; Montreal, Que.; Ottawa, Ont.; Quebec, Que.; St. John, N.B.

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

# Think of all the work this ALPHA GAS ENGINE would save you

WITH this simple, strongly-built engine you can saw wood, run a pump, cream separator, churn, washing machine, feed cutter or feed grinder, and save time and labor around your farm.

If you need a gas engine, it will pay you to buy a good one. An ALPHA costs little more to begin with than a cheap, poorly-designed engine, and will quickly make up for any difference in the first cost by the longer and far more satisfactory service it will give you.

The ALPHA is simple and durable in construction and is free from any of the complicated, delicate parts that make some engines a constant source of irritation and expense. You can operate it with either gasoline or kerosene, and it will develop its full published rating with a minimum amount of either.

An ALPHA is a saving investment any way you look at it. It will save the money you now must pay out to get done work that requires power, because you can own and operate it for less than it would cost you to hire some one with an engine, and it will do quickly work you are now doing by hand and give you more time to attend to other work. The sooner you get an ALPHA, the sooner it will pay for itself.

Ask for catalogue, prices and complete information. Made in eleven sizes, 2 to 28 H. P. Each furnished in stationary, semi-portable or portable style, and with hopper or tank cooled cylinder.

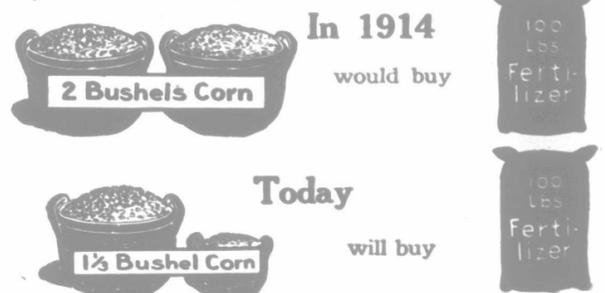
## THE DE LAVAL COMPANY, Ltd.

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

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

# Fertilizers Pay Better Than Ever

TODAY a bushel of corn or wheat buys more fertilizer (potash excepted, of course) than at any time during the past three years. Note how much cheaper you can buy a 2-10 fertilizer now than before the war.



In terms of farm products, fertilizers cost less today than in 1914. Fertilizers paid you then—they will pay you better now. Fertilizers are today more profitable and more necessary to efficient production than before the war. Boost crop production, grow more per acre and increase your profits by using fertilizer. Help both the railroads and yourself by ordering Spring Fertilizers NOW.

Send for literature to Department 40  
**Soil Improvement Committee**  
of the National Fertilizer Association  
Postal Telegraph Bldg., Chicago The Munsey Bldg., Baltimore

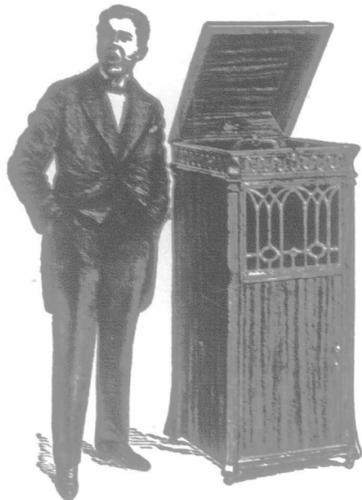
# NORTHERN ONTARIO

Millions of acres of virgin soil, obtainable at 50c. an acre in some districts—in others, free—are calling for cultivation.

Thousands of farmers have responded to the call of this fertile country and are being made comfortable and rich. Here, right at the door of Old Ontario, a home awaits you.

For full information as to terms, regulations and settlers' rates, write to:  
H. A. MACDONELL, Director of Colonization, Parliament Buildings, Toronto, Ont.  
Hon. G. H. Ferguson, Minister of Lands, Forests and Mines.

# The Test of Tests



## The NEW EDISON "The Phonograph with a Soul"

**T**HIS remarkable new musical invention brings into your home the literal Re-Creation of the art of the world's greatest musical artists.

Let us give you an hour of music. Let us Re-Create for you the voices of the Metropolitan Grand Opera stars.

Let us Re-Create the masterly bowing of Spalding. Let us Re-Create the 'cello, flute, piano, orchestra—any voice or any instrument, or combination of voices and instruments.

The musical critics of more than five hundred newspapers declare that the Edison Re-Creation of music cannot be distinguished from the original music.

The new Edison is the only instrument which has successfully sustained the test of direct comparison with living artists.

May we send you the brochure "Music's Re-Creation and the Booklet, "What the Critics Say." 134

THOS. A. EDISON, Inc., - - - ORANGE, N. J.

Use Power in the House as well as in the Barn

Runs by Motor or Engine

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

*Maxwell*

**Power Bench Washer**

—has proved itself a wonderful friend to others. Let it help you. It will even do the washing! Handles the biggest or smallest wash.

heaviest or daintiest clothes with no tearing or wearing. Pays for itself over and over! Made in three sizes. Write for particulars.

MAXWELLS LIMITED - Dept. W - St. Marys, Ontario 40

### THERE IS ONE MAN

always ready to take out Life Insurance—a sick man. But he is the one person who cannot buy insurance.

It is merely prudent, then, to insure while one is in perfect health, before sickness or accident make it impossible to make provision for dependent ones.

The Great-West Life Assurance Company issues Policies to meet every need and circumstance. For older persons, the Ordinary Life Policy gives protection at low cost. For younger persons, the 20-Payment Life Policy, where the insurance is paid for during the earlier and more productive period of life, and the Endowment Policy, offering a most profitable method of saving money where the savings are protected by Life Insurance.

The Great-West Policies have earned for themselves a reputation second to none. They are Inexpensive, Liberal and Profitable. Personal rates will be submitted on application. State age.

**THE GREAT-WEST LIFE ASSURANCE COMPANY**  
Dept. "Z" Head Office: WINNIPEG  
Ask for a 1918 Desk Calendar—free on request.

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

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



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

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

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

Write today for this catalogue.

### THE DE LAVAL COMPANY, Ltd.

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

MONTREAL PETERBORO WINNIPEG VANCOUVER



Made in Canada

## MORE TIME FOR MONEY-MAKING WORK

Every minute and every effort counts these days. Less time spent on household duties means more for productive work.

More butter, more eggs, more pork are needed.

# PATRIOT

Spiral Cut Gear Hand Washing Machine



will help production by lessening the time and labor spent on washing.

Ball Bearings and the Balanced Fly Wheel make it easy to operate.

The Patriot is well made, durable, convenient; a true time, money and labor saver.

Ask your dealer to show you the Patriot, or send to us for particulars.

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

# The Farmer's Advocate and Home Magazine

PERSEVERE  
AND  
SUCCEED

ESTABLISHED  
1866

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1878

LIII.

LONDON, ONTARIO, JANUARY 24, 1918.

1321

## EDITORIAL.

The dairyman cannot afford to keep poor cows now. Weed the herd.

Plan to sow a little spring wheat this year. Marquis and Wild Goose are the best varieties.

Seed corn will be scarce and none too satisfactory. Secure your seed early and test before planting.

The hen that lays a large number of eggs never paid so well as now, while the poor layer never was so unprofitable.

The tuberculin test is a safe and reasonably sure guide in ascertaining whether or not the herd is free from tuberculosis.

In feeding cattle this winter use a maximum of roughage and a minimum of concentrates. In a time like this high finish may not be most profitable.

Prof. W. R. Graham, of the poultry department of the O. A. C., says, "Feed no wheat to hens." Replace it with screenings and mixed grains of the coarser kinds.

In the biggest hog-producing States of the Union, serum and virus are depended upon to combat hog cholera. Read the story in the live-stock department of this issue.

Lay plans to grow more grain than ever in 1918. Cereals of all kinds are the most economical human food and can be grown with less labor than some other crops.

Experts tell us that Canada can produce as good root seed as any other country can. This country must rely on itself in this regard in 1918, or the seed supply for 1919 may be practically nil.

The proposed increase in freight rates makes a difference of \$40,000,000 annually to the people of Canada, and the people will have this to pay as a further annual tax or increase in the already high cost of living.

For greater production without extra work, sow and plant the heaviest yielding varieties of all farm crops. Try O. A. C. 21 barley, O. A. C. 72, O. A. C. 3, or Banner oats, and Irish Cobbler and Green Mountain potatoes. There are other good varieties but these are among the best.

Canada could get along without some unnecessary industries in war time better than with 100,000 Chinamen, as has been suggested. This country has not yet reached the stage where it will tolerate Chinese labor in large numbers brought in in bond. Get them in and they will always be here.

Pastures will prove profitable in increasing pork production. Alfalfa, young clover, mixed grains sown thickly with red clover, are among the best for early feeding, and rape and corn may be used later in the season. Small pigs do not do as well on pasture as those weighing around 100 pounds or better.

The farm survey of a good township in Old Ontario has revealed the fact that the labor income of the farmer is not nearly as high as some who do not understand the cost of farm production believed it to be. Besides, it is clearly shown that good live stock is the great need of the district, and the small acreage is not nearly so profitable as the big farm.

## The Greatest Producers of all.

A great many people living in this country fail to realize the importance of the Canadian farmer in a crisis like that through which we are now passing. There is no place on earth where the labor of the farmer returns a greater production of foodstuffs, or even anywhere nearly as great, as right here in Canada. Production per capita in this country is higher than in any other country, which means that the farmer here produces more for export than the individual farmer in any other part of the globe. This has a direct bearing upon the efforts which are now being put forward to increase production in Canada. It is possible that one man producing to the limit on a Canadian farm would be worth several of his kind in the fighting line at the present time, in so far as national service is concerned. The food problem is grave, and is growing more acute each day. What would those people in our country who complain of the high cost of living do if it were not for the fact that experienced, competent men are in charge of the farm production of the country? It is all very well to talk about alien labor and the inexperienced help for the farms. We should make use of all available help, but the fact remains that the experienced men on the land are worth more on the farm than in any other capacity at the present moment. Dr. Zavitz gave out some very interesting figures at the Experimental Union meeting. They are worth pondering over. According to the United States Year Book for 1916, for the three years previous to the war, 1910-11-12, for six food crops, including wheat, corn, oats, barley, potatoes and rye, the estimated production per capita of these in terms of bushels of wheat was as follows: Canada, 70.4; Argentina, 56.3; the United States, 45.3; Australia, 24.7; the German Empire, 21.3; Austria-Hungary, 21; France, 17.9; Russia, 17.4; Italy, 9.6; India, 7.8; Great Britain and Ireland, 5.6. Canada, it will be seen, is the heaviest producer per capita from farm crops of all the principal countries of the world. And further, Sir William Hearst pointed out in a recent speech that the farmers of Ontario have increased their acreage considerably during the past two years, and the field crops of all Canada were worth upwards of one billion dollars in 1916. The Canadian farmer is an important factor in the winning of the war. The Canadian farmer is the heaviest producer and is the closest of all available heavy producers to the Old Lands, which need these foodstuffs now when transportation is the biggest problem facing them. Worth more to his country here than on the firing line? Yes, many times over! This is no question of the individual. It is a question of the Empire, of the Allies, of Democracy, of the World. Fighters would not last long on the lines without food. The man who abuses the Canadian farmer who honestly produces all he can in the interests of humanity at this time is a traitor to his country and to humanity. Shame on the cowards wherever they may be who attempt to set class against class in this our hour of trial. United we must stand for the good of our land.

## Organized Agriculture Objects to Increased Railway Rates.

As announced in last week's issue, an important meeting of stockmen was recently held in Toronto to discuss and protest against the proposed increase of fifteen per cent. on railway transportation rates. It was pointed out at that meeting that in view of the fact that increased production was being called for and that Canada must depend upon her export trade to meet obligations caused by the great war, anything such as increased freight rates, which makes a further tax upon the people is not justifiable. Moreover, Mr. Pepper pointed out that there were two sides to the question, and that the railroads were before the increase making a revenue sufficiently large to carry on their operations and leave them a reasonable return. He showed that

while operating expenses had increased, for the same reason earnings increased in some cases almost double the operating increase, and while the revenue per ton haulage decreased, and the cost per ton haulage increased the ton haulage per train increased fifty-eight per cent. from 1907 to 1916; and because the railroads worked more to capacity, the revenue per freight train mile increased from 1875 to 1916 two and three-quarter times, and the percentage to earnings per train mile ton haulage decreased twenty-four and a half per cent. which left the railway companies the gainers. While the war has increased operating expenses, it has increased earnings by nearly double the increased expense. The advance in rates would mean some \$40,000,000 annually to producers and consumers of this country. The people of Canada, according to Mr. Pepper, have donated close to a billion dollars to aid in building our railroads, and many millions more in building up harbors which are a valuable assistance to the earning power of the roads. Readers will be interested in the figures which he gives in a letter in another department of this issue. Objections to the proposed increase of rates are being raised all over Canada, and no doubt a reconsideration of the whole problem will result. Producers and consumers should not have to carry a heavier load if it is not necessary.

## Chinese Labor or do Without Luxuries?

A suggestion has been made that 100,000 Chinamen be brought into this country in bond for the purpose of increasing production until the close of the war, after which they would be shipped back to China. The suggestion does not and cannot meet with the approval of Canadians on farm or in factory. It would be a comparatively easy matter to get the Celestials into the country, but scatter them over Canada's wide areas and they would never be collected by any means for return to the congested centres from which they came. Canadian farmers would not take kindly to the idea and neither would the laboring men of this country. Moreover, we do not believe that employers of labor on a large scale would care to risk Canadian citizenship and Canadian ideals to such an extent. No, Canada does not want Oriental labor on such a proposition. True, it is necessary to produce all possible, but for this year the labor would be of little use in farm production, and we have more faith in other schemes to meet the situation. The President of the Experimental Union pointed out in his address before that body the fact that we have at the present time in this country too many unnecessary industries competing with those which are essential in the labor market. If we have reached the stage where Oriental labor in the scores of thousands is even contemplated, then we have come to that point where we can do without a large number of luxuries to which we have become so accustomed that we can almost fool ourselves into believing that they are essential. Food is necessary; munitions are essential; transportation, fuel and clothing are essential; and any industry which directly or indirectly furthers any of these should be maintained. We do not need to name non-essentials. If readers will stop a moment to think of the things we have now that our forefathers did without, and at the same time developed strong character and physique, they will be able to make a list which, if discontinued in use, would release considerable labor for those most necessary industries which must be pushed to the limit in order to bring the war to an early and satisfactory conclusion. Let us be as Sandy Fraser recently said of his forefathers, "proud of what we do and proud of what we do without."

As a general rule, it pays to do to the other fellow as you would have him do unto you. No man is so independent as to be able to get along without friends.

# The Farmer's Advocate and Home Magazine

PERSEVERE  
SUCCEED

ESTABLISHED  
1866

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875

LIII

LONDON, ONTARIO, JANUARY 24, 1918.

1321

## EDITORIAL.

The dairyman cannot afford to keep poor cows now. **Watch the feed.**

Plan to sow a little spring wheat this year. Marquis and Wild Canada are the best varieties.

Feed corn will be scarce and none too satisfactory. Sow your seed early and test before planting.

The hen that lays a large number of eggs never paid so well as now, while the poor layer never was so unprofitable.

The tuberculin test is a safe and reasonably sure guide in ascertaining whether or not the herd is free from tuberculosis.

In feeding cattle this winter use a maximum of roughage and a minimum of concentrates. In a time like this high feed may not be most profitable.

Prof. W. R. Graham, of the poultry department of the O. A. C., says, "Feed no wheat to hens." Replace it with screenings and mixed grains of the coarser kinds.

In the biggest hog-producing States of the Union, corn and virus are depended upon to combat hog cholera. Read the story in the live-stock department of this issue.

Lay plans to grow more grain than ever in 1918. Corns of all kinds are the most economical human food and can be grown with less labor than some other crops.

Experts tell us that Canada can produce as good seed as any other country can. This country must rely on itself in this regard in 1918, or the seed supply for 1919 may be practically nil.

The proposed increase in freight rates makes a difference of \$40,000,000 annually to the people of Canada, and the people will have this to pay as a further annual tax or increase in the already high cost of living.

For greater production without extra work, sow and plant the heaviest yielding varieties of all farm crops. Try O. A. C. 21 barley, O. A. C. 72, O. A. C. 3, or Banner oats, and Irish Cobbler and Green Mountain potatoes. There are other good varieties but these are among the best.

Canada could get along without some unnecessary industries in war time better than with 100,000 Chinamen, as has been suggested. This country has not yet reached the stage where it will tolerate Chinese labor in large numbers brought in in bond. Get them in and they will always be here.

Pastures will prove profitable in increasing pork production. Alfalfa, young clover, mixed grains sown thickly with red clover, are among the best for early feeding, and rape and corn may be used later in the season. Small pigs do not do as well on pasture as those weighing around 100 pounds or better.

The farm survey of a good township in Old Ontario has revealed the fact that the labor income of the farmer is not nearly as high as some who do not understand the cost of farm production believed it to be. Besides, it is clearly shown that good live stock is the great need of the district, and the small acreage is not nearly so profitable as the big farm.

### The Greatest Producers of all.

A great many people living in this country fail to realize the importance of the Canadian farmer in a crisis like that through which we are now passing. There is no place on earth where the labor of the farmer returns a greater production of foodstuffs, or even anywhere nearly as great, as right here in Canada. Production per capita in this country is higher than in any other country, which means that the farmer here produces more for export than the individual farmer in any other part of the globe. This has a direct bearing upon the efforts which are now being put forward to increase production in Canada. It is possible that one man producing to the limit on a Canadian farm would be worth several of his kind in the fighting line at the present time, in so far as national service is concerned. The food problem is grave, and is growing more acute each day. What would those people in our country who complain of the high cost of living do if it were not for the fact that experienced, competent men are in charge of the farm production of the country? It is all very well to talk about alien labor and the inexperienced help for the farms. We should make use of all available help, but the fact remains that the experienced men on the land are worth more on the farm than in any other capacity at the present moment. Dr. Zavitz gave out some very interesting figures at the Experimental Union meeting. They are worth pondering over. According to the United States Year Book for 1916, for the three years previous to the war, 1910-11-12, for six food crops, including wheat, corn, oats, barley, potatoes and rye, the estimated production per capita of these in terms of bushels of wheat was as follows: Canada, 70.4; Argentina, 56.3; the United States, 45.3; Australia, 24.7; the German Empire, 21.3; Austria-Hungary, 21; France, 17.9; Russia, 17.4; Italy, 9.6; India, 7.8; Great Britain and Ireland, 5.6. Canada, it will be seen, is the heaviest producer per capita from farm crops of all the principal countries of the world. And further, Sir William Hearst pointed out in a recent speech that the farmers of Ontario have increased their acreage considerably during the past two years, and the field crops of all Canada were worth upwards of one billion dollars in 1916. The Canadian farmer is an important factor in the winning of the war. The Canadian farmer is the heaviest producer and is the closest of all available heavy producers to the Old Lands, which need these foodstuffs now when transportation is the biggest problem facing them. Worth more to his country here than on the firing line? Yes, many times over! This is no question of the individual. It is a question of the Empire, of the Allies, of Democracy, of the World. Fighters would not last long on the lines without food. The man who abuses the Canadian farmer who honestly produces all he can in the interests of humanity at this time is a traitor to his country and to humanity. Shame on the cowards wherever they may be who attempt to set class against class in this our hour of trial. United we must stand for the good of our land.

### Organized Agriculture Objects to Increased Railway Rates.

As announced in last week's issue, an important meeting of stockmen was recently held in Toronto to discuss and protest against the proposed increase of fifteen per cent. on railway transportation rates. It was pointed out at that meeting that in view of the fact that increased production was being called for and that Canada must depend upon her export trade to meet obligations caused by the great war, anything such as increased freight rates, which makes a further tax upon the people is not justifiable. Moreover, Mr. Pepper pointed out that there were two sides to the question, and that the railroads were before the increase making a revenue sufficiently large to carry on their operations and leave them a reasonable return. He showed that

while operating expenses had increased, for the same reason earnings increased in some cases almost double the operating increase, and while the revenue per ton haulage decreased, and the cost per ton haulage increased the ton haulage per train increased fifty-eight per cent. from 1907 to 1916; and because the railways worked more to capacity, the revenue per freight train mile increased from 1875 to 1916 two and three-quarter times, and the percentage to earnings per train mile ton haulage decreased twenty-four and a half per cent. which left the railway companies the gainers. While the war has increased operating expenses, it has increased earnings by nearly double the increased expense. The advance in rates would mean some \$40,000,000 annually to producers and consumers of this country. The people of Canada, according to Mr. Pepper, have donated close to a billion dollars to aid in building our railways, and many millions more in building up harbors which are a valuable assistance to the earning power of the roads. Readers will be interested in the figures which he gives in a letter in another department of this issue. Objections to the proposed increase of rates are being raised all over Canada, and no doubt a reconsideration of the whole problem will result. Producers and consumers should not have to carry a heavier load if it is not necessary.

### Chinese Labor or do Without Luxuries?

A suggestion has been made that 100,000 Chinamen be brought into this country in bond for the purpose of increasing production until the close of the war, after which they would be shipped back to China. The suggestion does not and cannot meet with the approval of Canadians on farm or in factory. It would be a comparatively easy matter to get the Celestials into the country, but scatter them over Canada's wide areas and they would never be collected by any means for return to the congested centres from which they came. Canadian farmers would not take kindly to the idea and neither would the laboring men of this country. Moreover, we do not believe that employers of labor on a large scale would care to risk Canadian citizenship and Canadian ideals to such an extent. No, Canada does not want Oriental labor on such a proposition. True, it is necessary to produce all possible, but for this year the labor would be of little use in farm production, and we have more faith in other schemes to meet the situation. The President of the Experimental Union pointed out in his address before that body the fact that we have at the present time in this country too many unnecessary industries competing with those which are essential in the labor market. If we have reached the stage where Oriental labor in the scores of thousands is even contemplated, then we have come to that point where we can do without a large number of luxuries to which we have become so accustomed that we can almost fool ourselves into believing that they are essential. Food is necessary; munitions are essential; transportation, fuel and clothing are essential; and any industry which directly or indirectly furthers any of these should be maintained. We do not need to name non-essentials. If readers will stop a moment to think of the things we have now that our forefathers did without, and at the same time developed strong character and physique, they will be able to make a list which, if discontinued in use, would release considerable labor for those most necessary industries which must be pushed to the limit in order to bring the war to an early and satisfactory conclusion. Let us be as Sandy Fraser recently said of his forefathers, "proud of what we do and proud of what we do without."

As a general rule, it pays to do the other way as you would have him do unto you. No man is independent as to be able to get along with

Advertisement for a mechanical device, possibly a pump or engine, with technical details and a small illustration. The text is partially obscured and difficult to read, but includes words like 'WORK', 'MACHINE', and 'LIMITED'.

## The Farmer's Advocate AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE  
DOMINION.

Published weekly by

THE WILLIAM WELD COMPANY (Limited).

JOHN WELD, Manager.

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

1. THE FARMER'S ADVOCATE AND HOME MAGAZINE is published every Thursday. It is impartial and independent of all cliques and parties, handsomely illustrated with original engravings, and furnishes the most practical, reliable and profitable information for farmers, dairymen, gardeners, stockmen and home-makers of any publication in Canada.
2. TERMS OF SUBSCRIPTION.—In Canada, England, Ireland, Scotland, Newfoundland and New Zealand, \$1.50 per year, in advance; \$2.00 per year when not paid in advance. United States, \$2.50 per year; all other countries, 12s., in advance.
3. ADVERTISING RATES.—Single insertion, 20 cents per line, agate. Flat rate.
4. THE FARMER'S ADVOCATE is sent to subscribers until an explicit order is received for its discontinuance. All payments of arrears must be made as required by law.
5. THE LAW IS, that all subscribers to newspapers are held responsible until all arrears are paid, and their paper ordered to be discontinued.
6. REMITTANCES should be made direct to us, either by Money Order, Postal Note, Express Order or Registered Letter, which will be at our risk. When made otherwise we will not be responsible.
7. THE DATE ON YOUR LABEL shows to what time your subscription is paid.
8. ANONYMOUS communications will receive no attention. In every case the "Full Name and Post-office Address Must be Given."
9. WHEN A REPLY BY MAIL IS REQUIRED to Urgent Veterinary or Legal Enquiries, \$1.00 must be enclosed.
10. LETTERS intended for publication should be written on one side of the paper only.
11. CHANGE OF ADDRESS.—Subscribers when ordering a change of address should give the old as well as the new P. O. address.
12. WE INVITE FARMERS to write us on any agricultural topic. We are always pleased to receive practical articles. For such as we consider valuable we will pay ten cents per inch printed matter. Criticisms of Articles, Suggestions How to Improve "The Farmer's Advocate and Home Magazine," Descriptions of New Grains, Roots or Vegetables not generally known. Particulars of Experiments Tried, or Improved Methods of Cultivation, are each and all welcome. Contributions sent us must not be furnished other papers until after they have appeared in our columns. Rejected matter will be returned on receipt of postage.
13. ADDRESSES OF CORRESPONDENTS ARE CONSIDERED AS CONFIDENTIAL and will not be forwarded.
14. ALL COMMUNICATIONS in reference to any matter connected with this paper should be addressed as below, and not to any individual connected with the paper.

Address—THE FARMER'S ADVOCATE, or  
THE WILLIAM WELD COMPANY (Limited),  
London, Canada

### Secure Your Seed.

All indications point to a scarcity of seed, particularly for some important crops for the coming spring, and unless precautions are taken an even greater scarcity in 1919. Seed supplies are not as plentiful as those engaged in production would like to see them. Cereal grains are generally produced from local-grown seed, but for the coming spring there is likely to develop an unusually large demand for choice seed oats, and possibly for spring wheat. Choice barley may not be too plentiful, and red clover and alfalfa seed promises to be scarce and high in price. It would be good policy for readers to secure their supplies early.

At the present time the field root and vegetable seed situation gives cause for alarm. Those who know the condition of the market and are engaged in the seed business hope to be able to supply the demand for seeds this spring. However, it will be necessary that farmers and gardeners in this country grow a large proportion of the 1919 supply. Importations from Europe have been cut off. Canada can produce root seed. This being true, every farmer who has land in a climate which will mature mangel, sugar beet, turnip, carrot and other vegetable and root seed should plant enough roots or stockings this spring to at least secure his own seed. Right now, while the roots in the cellar are still sound, select a few of the desired type and put them away in one corner of the cellar for planting next spring in an effort to ensure seed for 1919.

The seed corn situation is similar. There will not be enough well-matured seed with high germinating power in Canada to meet the seed corn producing area. It will be necessary to go further south in the States than has been the custom to get seed to grow corn for silage purposes here. This being true, readers should order early and should thoroughly test, in fact, all seed which goes into the ground this spring should be tested as to germinating ability. Always buy good seed. This year secure it early.

### Helpful Hints on Production.

Farm production in Canada is destined to be one of the biggest factors in the war during 1918. The world is reaching the crucial point in this great conflict, and there is more talk at the present time about food supplies than about armies and munitions. True, men are being called to the colors in our own country and we read that the various Allied countries are combing their territory for more soldiers for the fighting lines, but never since the war began was the call for increased production more urgent and never was it as necessary that every effort be put forward to produce economically and in large quantities as it is now at the beginning of 1918. Those misguided people who think that farming is of comparatively little importance in the conflict, are growing fewer daily, but we still have too many of them. However, for the men on the land who know the problems as no one else does or can, any suggestions that will help in any way will be appreciated. The farmer is not looking for advice; he has had too much of that already, but he will gladly take and make the best use of any helpful hints no matter where they find their source.

At the Experimental Union meeting recently held in Guelph, some helpful suggestions were made by men who are in close touch with the situation. These were published in last week's issue of "The Farmer's Advocate," but some of the hints will bear repetition. No one who knows how hard farmers of this country have worked during the last two years would expect them to be able to do much more work in 1918. But, while their hours may remain the same, or practically so, as one speaker has said, two shifts of eight hours each—one before dinner and one after dinner—it may be possible to work to a little better advantage that the maximum production result from the efforts made. First of all, cooperate; work with your neighbor, because there are many jobs in the work of the farm which two or more men together can do to better advantage all around than where one works alone. Use power machinery where at all possible. Of course, we know that new machinery is expensive and in some cases difficult to procure, but where either horse-drawn or power-drawn implements and machines can be used to cut down the time necessary to handle the work and do it economically they should be used.

In stock feeding, Prof. Day advises using an abundance of roughage and as small amount of concentrates as possible. It is practicable, where plenty of clover hay with roots or silage is available, to make both meat and milk with a minimum of concentrates. This practice would release grain for sale for human food and would, at the same time, practically maintain the output of meat. With hogs, which are so necessary now, roughage again must be used. Pasture them to the best possible advantage on young alfalfa or red clover, or a mixture of spring grain sown thickly with which about seven pounds per acre of clover has been added. Plan for the fall by arranging a rape pasture, and for next winter by planning a patch of mangels or sugar beets to provide roots to pulp and mix with the meal ration.

With cereal grains it is important that a large acreage be sown. The acreage in Eastern Canada cannot be increased very much by spring efforts, but the land should be given the greatest possible amount of cultivation, and the seed sown should be of known high-yielding varieties and well cleaned. Now is the time to select and clean the seed. Get the maximum yields per acre by using large, plump, clean, pure seed of the heaviest-yielding sorts and sown as early as the land will work. It is important that seeding be done at the proper time. In this connection land that is rich and well prepared and will grow spring wheat might be sown to that crop, and any lands which will grow beans might well be planted to beans. Seed of cereal grains and more particularly of corn, should all be tested as to germinating qualities before being planted. Let us do everything to get a big yield from the acreage put in in 1918.

Dairymen have been experiencing no small amount of difficulty in obtaining supplies of dairy products, which have not advanced in price in comparison with cost of production and prices of other farm products. Prof. Dean recommends that more and better cows be kept, and that they be fed more and cheaper food, but with this will be necessary more labor or its equivalent in machinery. Also, a higher price must come for cheese production to increase in 1918. In his opinion larger quantities of dairy by-products should be manufactured into food for human consumption.

The poultry situation may be summed up briefly. Weed out all poor layers and keep only the heavy pro-

ducers, and in so far as is at all possible, substitute some other feeding stuff for wheat. Never was a good laying hen more profitable, and never was a poor layer more unprofitable than at the present time.

The fruit grower must carry on, but experts believe that orchards should get the minimum amount of care necessary to keep them clean and productive, that small fruit be grown in as large quantities as possible, and that the land in orchards to be cropped should be put in to some crop of vital necessity at the present time. There may be some food for thought in these suggestions.

### Nature's Diary.

A. B. KLUGH, M. A.

#### Canada From Ocean to Ocean—IV.

As we journey inland from the Maritime Provinces we first pass through a portion of Quebec which is mainly Spruce-Birch country, and then through Western Quebec which, in regard to fauna and flora, resembles the adjoining portion of Ontario.

Most of that part of Ontario which is generally known as Eastern Ontario and Central Ontario, or to define it more exactly, that portion between a line drawn from Ottawa to the middle of the east shore of Georgian Bay and a line drawn from a little south of Hamilton to Sarnia, was originally covered mainly by a Maple-Beech forest with a fair sprinkling of coniferous trees or in places by a pure, or practically pure, stand of Pine. To-day, since this district includes some of the very finest agricultural land in Canada, we naturally find conditions much changed. But we still have, over considerable areas, and occurring throughout the district in patches, (sugar bushes), stands of timber which approximate to original conditions.

The Maple-Beech forest is one of the best-marked habitats which we have in Canada. The main and predominating part of the flora, as the name indicates, is the stand of Maples and Beeches, with other deciduous trees such as the Yellow Birch, Paper Birch, Ironwood, Elm and Oak, interspersed.

The Maple-Beech forest has a very characteristic ground-cover, consisting of plants which, in the great majority of cases, send up their leaves and flowers in early spring, such as the Hepatica, Bloodroot, Dutchman's Breeches, Squirrel-corn, Yellow Adder's-tongue, Trilliums of several species, Blue Cohosh, Pepper-root, Spring Beauty, Jack-in-the-Pulpit, Wild Leek and Violets of many species. These plants are adapted to living in this particular habitat because they develop their leaves in early spring, before the leaves of the trees overhead have expanded sufficiently to cut off the light, manufacture their food and store it in some underground structure, such as a bulb, corm, tuber or root-stock, so that it is ready to nourish new leaves and flowers in the following spring. In summer and autumn the Beech-Maple forest is not at all rich in flowering plants, and such as do occur have leaves adapted to work under conditions of reduced light. A plant thus adapted is the Maiden-hair Fern, the most characteristic fern of this habitat, and if we examine under the microscope a section of a leaf of this plant we find it to have a very thin epidermis and an open arrangement of the green cells which carry on the manufacture of food.

Of the fungi which occur in this habitat the most characteristic are the "bracket-fungi" which grow on the trunks of both living and dead trees.

Insects are comparatively abundant in this forest, caterpillars which feed on the leaves of the trees, wood-boring larvae which bore into the trunks, ground-beetles which feed mainly on such insects as fall from the trees, carpenter ants which live in decaying trunks, bees and wasps of various kinds which visit the flowers in the spring, and mosquitoes which breed in the woodland pools.

The Maple-Beech forest is also the home of many species of birds. The Ruffed Grouse makes its nest among the fallen leaves, the Wilson's Thrush is abundant, the Crested Flycatcher announces its appearance by its harsh, screaming notes, the Oven-bird builds its dome-shaped nest on the ground, several species of Woodpeckers excavate nests in dead trees and render invaluable service by seeking out and devouring the destructive wood-boring larvae, the Cuckoos go quietly about their business of consuming hairy caterpillars which are left alone by many other birds, the Red-eyed Vireo sings persistently among the leafy branches from spring till fall, the Nuthatches climb about the trunks of the trees, head down, or head up as the fancy takes them, the Chickadee makes a nest in a cavity in some rotten stump, the brilliant Scarlet Tanager gleams like a fire-brand amid the green leaves, the Rose-breasted Grosbeak sends forth his rich, warbling carol, the Wood Pewee utters his doleful refrain, and numerous species of Warblers fit like flying gems amid the branches, and sing their quaint little ditties.

The most characteristic mammals of the Maple-Beech forest are the Northern Deer, the Groundhog, the Raccoon, the Chipmunk, the Red Squirrel and the Deer Mouse. Of these the former is still fairly common in parts of the district in which there are still large areas of woods left, and in some parts is rather increasing than diminishing owing to the reduction in numbers of its old enemy the Timber Wolf. In parts of the district which are sparsely settled this latter mammal is still by no means rare. The other mammals are still common, and of them all the commonest is the one least often seen—the Deer Mouse. It is not unless traps are set, or one camps in the woods and so hears them about at night, that the immense numbers of these little creatures present in these woods is realized.

For  
at me  
kitten,  
opened,

She  
over an  
heard th  
the aut  
"ye're g  
see that  
ye're av  
ahead."

That  
and Je  
I'd need  
the farm  
white co  
if I've g  
back," I  
on, "ye'  
Bonds in  
the rest  
"Dinna  
Ye'll be  
yer mon  
makin'  
tae tell  
jectors'  
an' that  
form."  
"objectio  
guid."

Well  
oot an'  
intae Un  
frae the  
Canada,  
braggin'  
over, ony

There  
countries  
a hundre  
they call  
they ever  
sic a que  
to the bl  
I've hear  
that can  
and I gu  
money fi  
muscle to  
that's ha  
the city  
there was  
the Yanl  
on us wh  
a lot o' p  
short o' r  
ground a  
twenty fe  
matter o  
lucky Jer  
around th  
nine acre  
an' I can  
so I'll ha  
didna' gi  
over to t  
I had to s  
I can tell  
ye doon,  
tryin' ta  
get rin o  
coal waga  
however.

want ta  
they keep  
But I wis  
took me t  
city in its  
at all, y  
There's a  
she wis l  
Uncle Sar  
her but th  
alangsidi  
somebody  
to "be su  
mysel", "I  
half-past  
dae chore  
ye got ye  
plate o' p  
There's  
half o' th  
days I wi  
yersel' an'  
ye'll not r  
nicht. Sh  
Woolwort  
feet high  
the looks  
they're no  
runnin' ar  
fall," says

Anithe  
by the nar  
bargains i  
ring or so  
Price that  
chunk o'

stitute some  
good laying  
layer more

berts believe  
ount of care  
; that small  
ossible, and  
uld be put  
resent time,  
ese sugges-

IV.  
Provinces  
h's mainly  
ern Quebec  
les the ad-

s generally  
een a line  
st shore of  
e south of  
mainly by  
coniferous  
ure, stand  
ome of the  
urally find  
ver con-  
the district  
which ap-

st-marked  
a and pre-  
dicates, is  
deciduous  
Ironwood,

characteristic  
the great  
flowers in-  
t, Dutch-  
s-tongue,  
pper-root,  
eek and  
lapt to  
develop-  
the trees  
the light,  
erground  
ot-stock,  
flowers in  
umn the  
g plants,  
rk under  
lapt is  
fern of  
oscope a  
e a very  
ne green

he most  
grow on  
s forest,  
s, wood-  
l-beetles  
he trees,  
ees and  
s in the  
oodland

of many  
its nest  
undant,  
e by its  
s dome-  
Wood-  
der in-  
the de-  
quietly  
pillars  
ed-eyed  
es from  
trunks  
y takes  
n some  
ms like  
reasted  
Wood  
species  
es, and

Maple-  
ndhog,  
nd the  
e com-  
ll large  
reases-  
numi-  
of the  
mal is  
e still  
e one  
unless  
hears  
ers of  
lized.

**A Visit to the City.**

BY SANDY FRASER.

For two or three years back my niece Jennie has been at me to pay a visit to the city. "You're like a wee kitten, Uncle Sandy," says she, "ye need to get yer eyes opened, and the city's the place to have it done."

She lives in New York, Jennie does, an' I wisna' over anxious tae be riskin' mysel' in a city where I've heard them say the Deil wis born an' brought up. But the auld wumman says, "Go on Sandy," says she, "ye're gettin' auld an' it's maybe yer last chance. I'll see that the bottom doesna' fall oot o' the place while ye're awa'. You need a change and sae do I, sae go ahead."

That settled it, sae I hunted up my auld carpet-bag and Jean packed it full o' a lot o' things that she said I'd need before I got back. "Remember it's not on the farm ye'll be," says she, pittin' in about a dozen white collars. "Not muckle danger o' me forgettin' it, if I've got tae pit all those on wi'oot help before I get back," I replied. "n case onything happens," I went on, "ye'll find my Insurance Policy an' the Victory Bonds in the upper lang drawer o' the dresser along wi' the rest o' the papers." "Hoot Sandy," says Jean, "Dinna be sae foolish. It's no' to France ye're gaein'. Ye'll be safe enough in New York if ye let them tak' yer money." "I heard Jennie say that they're great for makin' ye pay 'tips' doon there," I said. "I'm goin' tae tell them that I'm one o' these 'conscientious objectors' that dinna believe in gaein' to war an' so on, an' that my principles are against 'tips' in ony shape or form." "Weel," says Jean, "I wish ye luck wi' yer 'objections,' but I dinna think they'll dae ye muckle guid."

Well I finally got started after a lot o' trouble fillin' oot an' signin' papers sae that I could cross the lines intae Uncle Sam's country. Ye've got to get a permit frae the Government noo-a-days if ye want to leave Canada, so I'm thinkin' we may juist as weel quit braggin' about livin' in a free country till after the war's over, onyway.

There's no' muckle difference in the looks o' the two countries, sae far as I could see, until ye get within about a hundred miles o' New York. Then ye run into what they call the Jersey Mountains. I dinna ken how they ever had the courage tae build a railroad through sic a quarry o' granite as that. But they did it, even to the blastin' oot of the holes for the telegraph poles. I've heard it said that there isn't anything on earth that can't be done if there's money enough behind it, and I guess there's something in it. When a man wi' money finds a man wi' brains who can find a man wi' muscle to carry out his plans, you have a combination that's hard to beat. An' it wis when I finally got intae the city that I began tae understand how muckle truth there was in that same. Ye can say what ye like about the Yankees but they've certainly got a thing or twa on us when it comes tae buildin' a toon that will hold a lot o' people on a small piece o' ground. They're that short o' room there that they run their street cars under ground as weel as on tracks that are elevated aboot twenty feet in the air. But the first thing I saw, as a matter o' coorse, wis the Grand Central Station. It's lucky Jennie cam' tae meet me or I might be wanderin' around there yet. They tell me that it covers seventy-nine acres o' ground wi' its tracks an' switches an' all, an' I can well believe it. I didna' see it all anyway, so I'll have to take their word for it. However, Jennie didna' gie me lang tae look around. She hustled me over to the "subway" an' we took a car tae the hotel. I had to step pretty lively when we got up on the street, I can tell ye. Everybody seems tae be tryin' tae run ye doon, an' I thought I would be gettin' cross-eyed tryin' tae look both ways at once so that I wouldna' get rin over by an automobile when I wis dodgin' a coal wagon. There's not many horses in New York, however. They say that in five years frae noo, if ye want tae see a horse, ye'll have tae go to the park where they keep all kinds o' wild animals shut up in cages. But I wis goin' to tell ye about the hotel that Jennie took me to. It would no' hae made a bad excuse for a city in itsel'. Ony thing ye think ye want, within reason at all, ye can get it wi'oot goin' beyond its four walls. There's a telephone in ilka room an' Jennie says when she wis leavin' me, "If ye want yer breakfast in bed, Uncle Sandy, juist gie the waiter a call." I laughed at her but the next mornin' I heard the chap in the room alangside mine talkin' over the telephone an' tellin' somebody what kind o' a breakfast to bring him, an' to "be sure an' have it hot." "My boy," says I tae mysel', "it wad dae ye good tae have to get up aboot half-past four on some o' these winter mornings an' dae chores for a couple o' hours around the barn before ye got yer cornflakes. I'm thinkin' ye'd be orderin' a plate o' porridge instead."

There's not much use o' me tryin' tae tell ye aboot half o' the things I saw an' heard in the four or five days I wis in New York. Ye'd juist better go there yersel' an' get Jennie tae show ye afoond. I'll guarantee ye'll not miss much. She kept me on the trot day an' night. She took me tae the top o' what they call the Woolworth Building, which is seven hundred and fifty feet high if ye can believe them. However, judgin' by the looks o' the people on the sidewalk below I guess they're no far astray. They reminded me o' a lot o' flies runnin' around on a kitchen table. "Tak' care ye dinna' fall," says Jennie, "ye might hurt one o' them."

Anither place we went that same day wis to a chap's by the name o' Tiffany. "It's a place where ye can get bargains in jewelry," says Jennie, "Ye might buy a ring or something to take home to auntie, if ye like. Price that one," she said, pointin' tae one wi' quite a chunk o' a diamond in it, though it might hae been a

piece o' glass for all I could tell. Anyway I went up tae the chap behind the counter an' says I to him, "What'll ye tak' for that ring there wi' the white stane in it?" "Twenty-seven thousand five hundred dollars," he says wi'oot winkin' an' eye. "It canna' be the real thing at that price," I said, turning away an' walkin' over tae where Jennie had been standing an' watchin' me oot o' the corner o' her eye. "Did ye get auntie's ring?" she inquired. "No," I replied, "I dinna think she'd care for it. She never was much for rings anyway. Let's get oot o' this," says I.

But I see I canna' tak' the time noo tae tell ye o' ony o' the ither scrapes I got intae before I was safe hame again. If I get a spare hour next week I'll tell ye the rest.

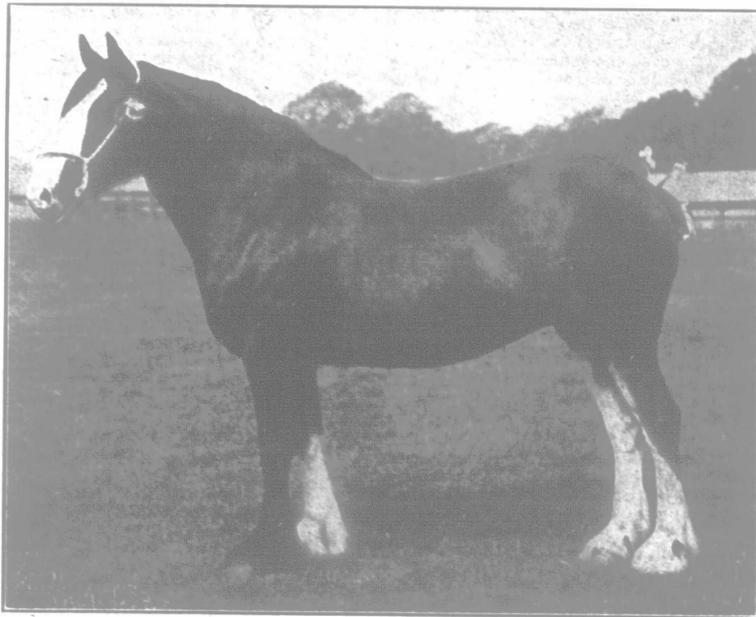
**THE HORSE.**

**Selecting a Sound Horse.**

The soundness of a horse should be as much the first consideration of a buyer as it should be that of a breeder. This is a sound maxim, and it has been followed out by the issue of some very useful hints bearing on it by the Bureau of Animal Industry. In these it is pointed out that if the animal is not sufficiently sound to withstand the use for which he is intended, the proper time to learn of this is before the purchase, and the selection should be based primarily on a thorough systematic examination, and this examination should be again based on a clear knowledge of desirable and undesirable qualities.

The advice given may be summarised somewhat as we give it here. Not only the presence of unsoundness, but also the condition or seriousness of the unsoundness, should be carefully noted. Temporary unfitness should be distinguished from permanent unsoundness. When these two matters are considered it will easily be seen that a hurried examination is likely to prove a disappointment. In the examination itself quite a number of points must be kept well in mind. Blemishes, vice, faulty conformation, unsoundness, and general characteristics must all be observed and noted. Common blemishes are scars from old wounds, poll evil, scratches, shoe boils, and small ruptures.

Common vices are halter pulling, cribbing, kicking, stall walking, weaving, and biting. Common faults of conformation are straight shoulders, crooked, weak, or improperly set legs, ewe neck, long, weak back and drooping croup. Common unsoundnesses are splints, thoroughpin, spavin, curb, extreme fistula, ringbone, side bones, extreme atrophy of muscles, contracted tendons, and broken wind. General characteristics include fleshing, temperament, quality, color, and age. After all these matters have been looked for the final selection must be made by weighing the good qualities against the defects.



**A Good Type of Mare to Work and Breed.**

Farm work is not too heavy for brood mares, and brood mares make the most profitable work horses.

The mere enumeration of these points to be observed shows how great must be the knowledge of a horse to anyone who would be perfect as a purchaser. This is well brought out in the general conclusions arrived at on the whole subject. In this we are told that "experience gained by examining large numbers of horses will aid in quickening the eye and judgment, thereby making it possible to perceive readily any unusual condition; but it should be remembered that a hurried examination is likely to prove a disappointment, consequently plenty of time should be taken in making the examination, because time is much cheaper than money tied up in an unsatisfactory horse. In some cases nine days are allowed by law to the purchaser in which to learn the serious forms of unsoundness or vice in a horse, so that it would seem fair to allow a day at least

for a fair trial when practicable. If possible, get a history of the animal from the person having it for sale. So many defects may be covered up by such unfair methods as drugging that it is a good plan to make purchases only from those with good reputations."—Live Stock Journal.

**Brood Mares Pay on the Farm.**

"The Farmer's Advocate" has time and again published articles drawing attention to the double chance which a farmer has who uses brood mares to do the work on the farm. As a general thing it pays better to sell the big geldings and keep the brood mares. When it becomes necessary to buy horses for the farm, we would favor draft mares and the heavier the better provided they have the quality with the weight. The light horse has not been in brisk demand since automobiles have been perfected to their present high state. Moreover, the light horse is not as easy to raise on the farm as is the heavier, more docile Clydesdale, Shire, Percheron or Belgian. Heavy colts are also of more value in doing farm work at an early age than are colts of the light breeds.

We recently visited a farm where the owner plans to do his farm work, in so far as possible, with brood mares, and to keep them raising colts where such does not interfere with the farm work to such an extent as to make the breeding dangerous. We asked him if he found that it paid better to depend on brood mares for his farm teams than to use geldings. He cited one particular case in reply. In 1911 he bought a three-year-old, pure-bred Clydesdale filly for \$250. This young mare was bred the same season and the next year raised a foal which, unfortunately, got trampled upon when a day or two old and permanently injured. However, the colt sold when at workable age for \$100. While in his possession this same mare raised two other foals, both fillies, and each of which sold for \$200 before being broken to harness. A buyer came along and purchased the mare for \$225, being \$25 less than the purchase price. It will be seen that this particular mare proved fairly profitable to the owner, even though horses have not been moving rapidly during recent years. In all, \$500 worth of colts were sold in the few years in which she was in the possession of the farmer, and the mare herself brought almost as much money as was paid for her in the beginning. Her owner figures that he was considerably over \$400 ahead on the deal because the mare was worked while raising the foals and was of considerable value in the production of farm crops as well as increased horse flesh. Of course it cost something to raise the colts, but they were run on pasture throughout the summer season and in the winter were fed principally on first-class clover hay, a few turnips and a very small oat ration. All the feed they got was grown on the farm and the bulk of it was roughage which was marketed to better advantage through the colts that it could have been had the colts not been on

the farm. Moreover, they were a sort of insurance against loss of the work horses. If one of the work mares had sickened and died a colt would have been coming on to take her place, which is sometimes very important because, after all, the best class of horses are not easy to pick up in the country.

There is another point that we might emphasize right here and that is quality. The dam of these colts was a big mare of good quality and was each time bred to a first-class stallion of the breed. Her colts met a fairly ready sale, even on a draggy market. It costs no more to feed a good horse than it does a poor one and the chances for financial returns are much better.

At the same time the mare previously spoken of was purchased a grade mare was also bought for \$160. This latter mare

was not of as high quality as the first, but it was said of her that had her papers been kept up she would have registered. However, she passed as a grade. She was bred to one of the best stallions in the country and produced a filly foal, which sold the past fall for \$200. The colt was of excellent type and conformation possessing not quite as much quality as the foals from the first-mentioned mare. However, this mare did a heavier share of the farm work and did not breed so regularly. The price received for her foal was \$40 more than paid for the mare and she is in foal again and worth more to-day than she was when first purchased. She has been one of the main farm team and has more than paid her way in work done, has raised a colt to meet her original cost and is in a fair way to repeat the performance. There is a point

right here, however, that we should like to mention. The owner wonders whether or not this mare has been worked too hard and this has interfered somewhat in her breeding. It is just possible that steady farm work may be a little heavy for the brood mare if kept at it all the time, and this may have some influence upon her failure to conceive. At any rate, even though working at the heaviest of the farm operations, it is paying her owner to raise colts.

Indications are that there will be, after the war, an increased demand for heavy draft horses. During the past months we have heard considerable about the horse market being dead. However, those who go out to look for the right quality of drafters find them scarce. We have in this country too many horses that are out-and-out misfits. They are not light horses, neither are they drafters, and it is the number of this class that has caused the market to be draggy and it is in no wise due to an over-supply of real high-class heavy drafters. The United States reports a scarcity of high-quality heavy horses. European stocks are being depleted by the war. There

is more work for heavy horses to do than ever before and they must be raised to meet the demand which unless all signs fail is sure to come in the not-very-distant future.

## LIVE STOCK.

### Proposal to Centralize Sale of Canada's Wool.

Co-operative wool grading has passed the experimental stage in most of the Provinces of Canada. The Western Provinces were pioneers in the movement and have done considerable good work. Last year Ontario handled 270,000 lbs. of wool co-operatively with satisfaction to all concerned. The wool industry is now one of Canada's very important lines of production and many of those who have experience in the work of co-operative

grading and selling believe that all Canada's wool output should be handled through one Federal co-operative. This would nationalize the work and the output. It would put Canada on the map in wool grading and sale. It should increase the amount of wool so handled, strengthen the work, and build up for Canada a reputation for wool by establishing uniform grades for the Dominion. The western horse, cattle, sheep and swine breeders associations recently met in Brandon, Man., and two hundred and fifty sheepmen there assembled favored united efforts and Dominion wide organization selling through one central instead of the Provincial organizations of the past. Three members were appointed a committee to meet the eastern breeders in conference during the week of the live stock meetings to be held in Toronto early in February. It would be a fine result to have the Canadian wool output practically all handled through the one organization. Those interested should attend the sheep breeders' meetings in Toronto in February and come prepared to discuss the project.

## Recent Hog-Cholera Investigation and the Outcome.

Canadian farmers who are interested in hogs to any extent and have endeavored to maintain herds of any considerable size, know the danger from cholera, or "swine plague," as it is sometimes called. Since vaccination has become so popular in the United States as a means of preventing this disease, Canadian breeders and farmers have been asking more or less persistently for similar protection here and their request culminated in a deputation being commissioned by the Canadian Swine Breeders' Association to visit and investigate conditions in the Corn Belt of the United States where many hogs are reared and the serum and virus treatment is most extensively used. The Committee thus appointed spent the week ending December 22, 1917, in the States of Illinois, Iowa and Indiana and were accompanied by a representative of "The Farmer's Advocate". We consider that Canadian farmers are entitled to a review of what was seen there and the impression gained by visiting one of the largest hog-producing districts of America. This article will not express the views entertained by any of the Swine Breeders' representatives after their tour of investigation was completed. Their views will probably be voiced at the annual meeting of the Canadian Swine Breeders' Association, and in the meantime the writer will set down only a short story of the itinerary and the impressions gained by himself as a result of the study of swine conditions in the Corn Belt. However, before proceeding further, it might be well to review briefly the history of hog cholera in Canada and its treatment by the Health of Animals Branch.

### Hog Cholera in Canada.

Since the early eighties hog cholera has been known in the Counties of Essex and Kent, in Ontario, where it would become serious at times only to be followed by seasons of comparatively few outbreaks. This, the Corn Belt of Canada, has suffered most owing not so much to the feed or care given as some suppose, as to the number of hogs reared in that district. As the hog population increases anywhere, so does the loss from infectious diseases. These two Counties mentioned, however, do not represent the extent of the hog industry in Canada, or the only area where cholera has appeared. Here and there outbreaks have occurred with more or less disastrous results, but they have usually been stamped out immediately by the thorough and speedy action of the Health of Animals Branch. For the fiscal year ending March 31, 1914, the number of hogs killed on account of cholera was 9,900, but throughout the season of 1914 the disease became more insidious and 31,779 had to be slaughtered to keep the scourge in check. There were probably something over 3,000,000 hogs in the whole Dominion that year, no more than the State of Indiana alone has at the present time. The history of hog cholera in Canada, and the United States as well, suggests that it periodically becomes serious and then follow seasons of comparative immunity from the plague.

The course pursued by the Health of Animals Branch of the Dominion Department of Agriculture has been to slaughter infected animals and partially compensate the owner. The farm is cleaned up and a strict quarantine maintained until the danger is past. Viewing the method retrospectively, there were many features which commend it. Looking into the future, such a policy seems altogether inadequate and unsuited to cope with conditions that are sure to arise.

### Serum and Virus.

Before proceeding with our story of what was seen in the States of Illinois, Iowa and Indiana, it seems necessary to explain a few terms which must necessarily be used in the text of this article. Two treatments are in vogue whereby hogs are immunized against cholera. The "single", or "serum alone," and the "double" or "simultaneous". These terms entail still further explanation. Serum is taken from the hog which has been not only immunized but hyper-immunized, and when injected into a pig it will render only a temporary immunity covering a period of five or six weeks. Serum is not considered capable of setting up the disease in healthy hogs, and consequently its use does not expose the herd to any danger. Virus, on the other hand, is a preparation of the blood taken from cholera hogs. It will, in susceptible pigs, set up a virulent form of the disease at once and it is not considered good virus if it will not.

The single, or serum alone, treatment consists in the inoculation of swine with serum to establish a temporary immunity. In the double, or simultaneous treatment serum and virus are injected at the same time, imparting to the hog a lasting immunity from cholera. It is the virus and the double treatment to which the authorities at Ottawa take objection, and which, with one exception, they have not allowed to be used.

Details regarding the manufacture of serum and virus will be given further on in this article when describing the visit to the laboratories of Pitman and Moore.

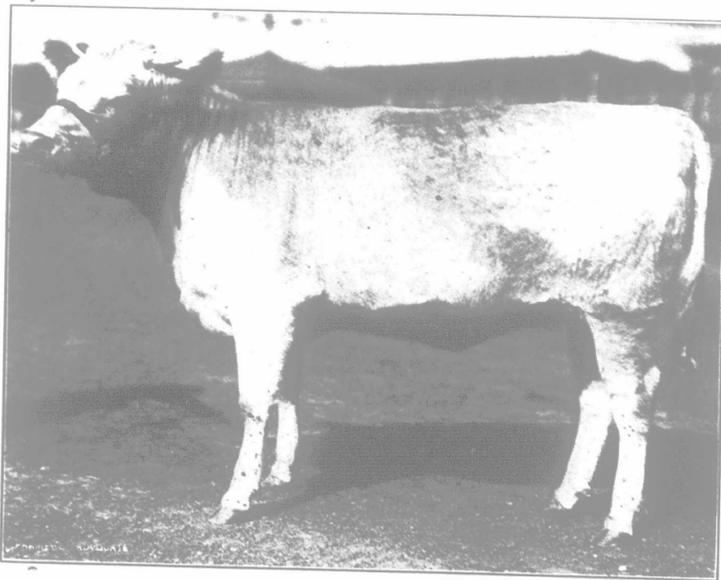
### A State With Nine Million Hogs.

After equipping themselves with information of a general character in Chicago, the Swine Breeders' Committee proceeded to the Iowa State College, at Ames. There they were taken in charge by Prof. Pew, Chief of the Animal Husbandry Division, and shown the herds and flocks on the College farm. Cholera treatment, however, was foremost in their minds so the greater part of the time was spent in the serum plant of the Veterinary Division. Dr. Stange, Dean of the Division of Veterinary Science at Ames, received the deputation and answered all questions in regard to cholera and its treatment in the State of Iowa very willingly and frankly. When asked for an expression of opinion on this subject, Dr. Stange replied: "Six years ago when we began to agitate for the double treatment, we were severely criticized but I answered

not enter. The losses in the pens the man entered and those he did not were in the same proportion: One case out of the seven pens not entered and two out of the fourteen pens exposed. In another case, pigeons were tested as carriers of the disease but here also the results did not verify the general contention regarding bird life as carriers. Dr. Stange did not belittle the value of sanitation and caution in respect to hog cholera, but he cited these cases to show that much was still to be learned regarding the means of spreading contagion. In reply to a question re the danger of using virus, he said: "You can't expect to double treat any great number of hogs without developing cases of cholera. These will be rare, but the only thing to do is to treat and isolate them." He also stated: "I have never found double-treated hogs to be carriers of the disease, unless they showed symptoms of the disease". Dr. Stange was then asked for his opinion regarding the position of the Canadian farmer or breeder who desired to import a double-treated hog for his herd. He replied to the effect that he considered the danger from a double-treated hog in a herd of swine which were not immunized less than from the ham and bacon rinds that were thrown about the country.

The Division of Veterinary Science, at Ames, maintains and operates a laboratory for the production of serum and virus. Dr. Cole, who has been in charge of this plant for four years, was interviewed on the subject which the committee were investigating and he imparted

a great many interesting facts; some of these were: "A vaccinated pig will not transmit the disease unless the vaccinated pig gets sick. —A country will never be absolutely clean of hog cholera so long as virus is used. —Vaccinated pigs should be held three weeks before shipping.—All imported, double-treated hogs should be kept with two or three susceptible pigs for thirty days before being released in the non-immune herd.—To be absolutely safe, a farmer or breeder should separate his vaccinated hogs from the others for a period of three weeks after treating.—The proper kind of serum and virus used on healthy hogs should produce one hundred per cent. immunity. However, a hog might be debilitated on account of lung worms or other causes and in consequence develop a chronic case of cholera, becoming a carrier of the disease.—All the showmen and 99 per cent. of the breeders of



Gainford Belle.

First-prize Shorthorn senior heifer calf at Toronto, 1917. Exhibited by J. A. Watt, Elora, Ont.

that criticism thus—'In spite of all the rules of sanitation and prevention known to practice and science which have been preached, cholera has increased. We now have something we know will prevent the disease, and if it is not a perfect instrument it is at least no worse than what we have been using, and it promises to be exceedingly better.' The results have substantiated our claim, for in 1914 sixty million cubic centimeters of serum and virus were distributed in Iowa, which would treat at least one and a half million hogs. In spite of this tremendous use of virus, hog cholera is constantly decreasing and we now have the lowest loss on record." The Dean of the Veterinary Division furthermore pointed out that the doctrine so long accepted in regard to the means of spreading the disease was none too well founded. In one experiment, including twenty-one pens of susceptible swine, it was shown that a man did not carry the disease on his boots as much as was generally supposed. To test this an attendant first walked through pens where hogs were dying with cholera, then he went direct to fourteen of the pens of susceptible pigs, walking through their pens and even putting his feet in their troughs. Seven pens he did

pure-bred hogs in Iowa double treat."

Both Dr. Cole and Dr. Stange expressed themselves wholeheartedly in favor of the double treatment, but neither tried to cover up any defects peculiar to this method of prevention. "In 999 cases out of 1,000," said Dr. Cole, "everything works satisfactorily, but that one other case in the 1,000 may break."

The information gleaned at Ames and what was to be seen there would tend to influence any unbiased mind in favor of the double treatment, but in setting down what was seen and heard there an effort has been made to do so absolutely without prejudice. In fact, the dark side of the story has been emphasized more than the other in order that readers may view it to better advantage and not come to any false conclusions in regard thereto.

Needless to say, the College herd of swine is double-treated, and only with serum and virus as a protection could they maintain their herd. Prof. Pew strongly endorsed its use.

From the report of the Iowa State Biological Laboratory for 1916, we take the following table, which de-

JAN

scrib

in th

Resu

1,756

209

112

291

2,368

26 p

No

swin

case

57; i

avera

avera

T

virus

are e

Comm

191

State

tor

To

Comm

191

State

tor

To

A

c. c. o

a larg

equiv

will c

doubl

port,

prop

genial

bred

devel

Iowan

such v

and d

The h

be all

thrifty

A rep

and fe

this a

hood o

stock

They

and n

of opi

ment,

"Six y

some

to ce

State

that t

inocul

We ha

our cu

hog ch

000 to

doubl

a larg

The

of the

Sw

The

Whitel

where

of ser

ideal o

the ev

Corsa

could r

in orde

In t

Comm

out fa

County

scribes the results from the use of virus in well herds in the State.

**Results of Simultaneous Treatment in Well Herds.**

1,756 herds	101,680 head	No loss
209 herds	15,147 head	One died each herd
112 herds	11,355 head	Two died each herd
291 herds	34,408 head	Three or more died each herd

2,368 herds, 162,590 hogs; 74 per cent. of herds no loss; 26 per cent. of herds some loss.

Notice should be taken of the average number of swine per herd, under Iowa conditions. In the first case where no loss resulted the average of each herd was 57; in the second case, where one died in each herd, the average was 72; in the third instance, 101 was the average for the herd, and in the last case each herd averaged 118 hogs.

The following will show the amount of serum and virus distributed in Iowa in 1915 and 1916. Quantities are expressed in cubic centimeters, abbreviated thus: c. c.

	Serum	Virus
Commercial Companies, 1915.....	26,718,925 c.c.	966,517 c.c.
State Biological Laboratory, 1915.....	3,607,110 c.c.	165,001 c.c.
Total.....	30,326,035 c.c.	1,131,518 c.c.

	Serum	Virus
Commercial Companies, 1916.....	32,970,632 c.c.	1,047,170 c.c.
State Biological Laboratory, 1916.....	2,635,125 c.c.	123,116 c.c.
Total.....	35,605,757 c.c.	1,170,286 c.c.

An 80 to 100-pound shot will require about 30 c. c. of serum and 2 c. c. of virus for a double treatment—a large pig more, and a smaller one less. One c. c. is equivalent to 15 drops. This and the foregoing table will convey some idea of the number of hogs annually double treated in the State of Iowa.

**A Swine Breeding Proposition.**

From Ames, the delegation journeyed to Davenport, Iowa, where they were met by the hospitable proprietor of Iowana Farms, Col. French, and the genial and efficient Superintendent, Dr. Smith. Pure-bred Holstein cattle and Berkshire swine have been developed to a remarkable standard of excellence at Iowana Farms, and it was indeed a pleasure to inspect such wonderful herds where the tuberculin test for cattle and double treatment for hogs is practiced so thoroughly. The herd of swine, about 500 in number, were said to be all immunized, and the writer never saw a more thrifty or healthy looking bunch of pigs anywhere. A report of the methods followed in housing, yarding and feeding would be instructive, but that is apart from this article and space will not permit. In the neighborhood of 100 sows are farrowed each year and all breeding stock sent out is guaranteed "cholera-immunized". They are shipped to practically all States of the Union and no one has suffered. When asked for an expression of opinion regarding the double or simultaneous treatment, Col. French made the following statement: "Six years ago I instructed my manager that unless some protection against hog cholera could be found to cease breeding swine. After investigation at our State College, and at Washington, we became convinced that the double treatment was trustworthy and we inoculated \$40,000 worth of hogs with serum and virus. We have had no outbreaks of the disease and none of our customers have suffered. In one year the loss from hog cholera in our State (Iowa) was reduced from \$30,000,000 to about \$3,000,000. Washington recommends the double treatment and without it we could not maintain a large herd of swine."

The Iowana herd was itself a remarkable endorsement of the double treatment.

**Swine Breeding and Laboratory Combined.**

The next stop was at the farm of W. S. Corsa, Whitehall, Illinois, where Berkshires are a specialty but where a laboratory is also operated in the production of serum and virus. The immense herd yarded under ideal conditions were all double treated and gave all the evidence required in support of the method. Mr. Corsa said that he would not continue breeding if he could not double treat and that he was obliged to treat in order to sell his stock.

**Farmers' Views in Indiana.**

In the State of Indiana the Canadian Swine Breeders' Committee endeavored to get the views of the out-and-out farmer in respect to double treatment. Boone County, the leading County for swine in the State, was visited and there two farmers were interviewed. It was learned that the farms averaged about 100 acres, and every farmer who keeps hogs at all carries about six brood sows. The general practice is to have all sows farrow in the spring, while about half of them are bred back to litter again in the fall. This works out in the neighborhood of three litters in two years per sow. Joseph Beelar, a farmer who buys and feeds quite extensively, spoke favorably of the double treatment and said that without it as an insurance he would have to double on his money in one year, for fear of losing

it all the next. If the pigs are not immune when he brings them home they are vaccinated and kept by themselves until danger from any breaks is past. J. W. Brendel, a feeder and judge of fat hogs as well as a breeder of pure-bred stock, endorsed serum and virus. He said that for a period of 30 years prior to the advent of the double treatment farmers lost as high as thirty per cent. of their hogs, but for the last six years in treated herds the loss would not exceed one per cent. "Everyone does not vaccinate in this County," Mr. Brendel said, "but the immune herds act as a buffer, checking the spread of the scourge and thus preventing heavy loss." Following are some of the arguments and opinions advanced by these two Boone County farmers: When breeding hogs can be rendered immune, there is greater opportunity to raise the standard of quality because the stock is not periodically destroyed. The foundation of the herd can be maintained.—When the veterinarian visits the farm to inspect or treat hogs, he often points out necessary changes in sanitation and conveniences that benefit the farmer and render the industry more profitable for him.—The sentiment or belief in Boone County is that immunized hogs are not carriers of the disease.—At auction sales many make the statement in their catalogues that the hogs to be sold are vaccinated. This helps rather than injures the sale and many farmers with non-immune herds are buyers.—Mr. Brendel himself did not vaccinate in 1917 and he considered that he lost fifteen dollars per head at his fall sale because he was not able to guarantee his young hogs immune.

**A State's Efforts to Increase Production.**

During 1917 the State of Indiana, through the State Veterinarian, Dr. Northrop, collected 55,000 shots in the stock yards where they were being offered for sale and sent them back to the country to be fed. These pigs averaged around 100 pounds each, and if a special effort had not been made they would have been sacrificed. They were all double treated, dipped and shipped in disinfected cars to farmers who would take them to finish. These shots gained 1½ pounds per day, on the average, and were usually returned to market after they had gained 120 pounds, or at the end of an 80-day feeding period. The spread in price was satisfactory and the farmers profited. The facts of the case bearing on the matter in hand are: that the loss in these double-treated hogs thus handled was less than one per cent., and this from all causes.

**A Serum and Virus Laboratory.**

While in the State of Indiana, the Swine Breeders' Deputation, under the guidance of Dr. F. V. Hawkins, visited the plant of Pitman and Moore where serum and virus are produced in large quantities. Here the Superintendent, Dr. Roberts, spared no efforts to demonstrate every operation in connection with the manufacture of the product, and showed the party through all branches of the institution that they might not fail to witness any step in the production of serum and virus. The cleanliness of the plant, as well as the sanitation of the surroundings, were beyond criticism. Lengthy comment on the equipment and methods used would be out of place here and somewhat technical, but the party were impressed very much by the despatch with which every operation was performed and the exhaustive efforts made to turn out a potent and clean product. Federal Government inspection was very rigid about the plant, as evidenced by the number of officials stationed in the different branches.

A few notes as to how serum and virus are made should suffice. To obtain virus young, healthy pigs are inoculated with virus alone, in order to set up the disease. In about seven days they are killed and the blood from them is filtered. The filtrate, which contains the disease-producing properties, is mixed with a percentage of alcohol as a preservative and stored in a cool place. Every hog has a number, and a chart is kept on which are recorded the temperature and all information concerning him when both dead and alive. After being bled he is "posted" (brief for post mortem examination) and sent to the tank. Any evidence of tuberculosis or other contagious diseases would at once condemn the product of his blood. To test the potency of the virus, a pen of eight pigs is used; six receive both serum and virus while two are injected with virus alone. The two virus pigs should develop the disease if the virus is potent, and if the virus is potent any breaks in the remaining six would show something wrong with the serum.

In the production of serum the hog is first immunized in the usual way by vaccination with serum and virus. In the vicinity of one hundred days he is hypered, or hyper-immunized, by injecting into a blood vessel of his body five cubic centimeters of virus per pound live weight. This amount to approximately one quart of virus to a 200-pound hog, and at the plant of Pitman and Moore it is injected through a blood vessel in the ear, by what is ostensibly a very simple operation. This produces a "hyper" or hyper-immunized hog, from whose blood the serum is obtained. About ten days after hypering, the hog is tail bled and four to five c. c. of blood is drawn per pound of live weight. In seven days the hyper is tail-bled again and a similar amount of blood is extracted. At the expiration of the next seven days the hyper is killed and all his blood is preserved. In killing about 2,600 c. c. of blood is obtained from a 240-pound hyper. The carcass is posted and after passing inspection goes into the cooling room and later is processed or cured for human consumption. It is Government-approved meat, healthful and wholesome in every detail. After a hog is hypered it must gain in weight until killed, in spite of the tail bleeding. The same record is kept of each individual as in the case of virus pigs. The charts are then copied into the office record and all serum and virus, which must have its serial number, can be traced to the animal from which it was taken. Laboratory-tests are then carried through and a thorough bacteriological examination made of the product. There appears to be absolutely no chance for a little germ to slip past this exhaustive system without showing his credentials, and if these are not satisfactory he is at once court-martialed. All hogs are prepared for bleeding or killing just as carefully as a human patient is "processed" before an operation. The Federal Government sits constantly on the job and cleanliness, sanitation and disinfection are a religion with Dr. Roberts.

**Conclusions.**

We have told the story of the investigation more or less in detail, but the impression left on the writer has not been referred to definitely. In the Corn Belt there are millions of hogs. Indiana alone last year had three and a half millions; Iowa has a hog population of around nine millions, and Illinois produces swine in great numbers. They have hogs, and consequently, hog cholera. If virus entails danger, one would expect the bad results from it to be worse where the hogs are most numerous, if it is used in correspondingly large quantities. Such does not appear to be the case. Virus is considered a protection, rather than a danger, throughout the Corn Belt. The disease has been worse in the Counties of Essex and Kent, in Ontario, simply because that is a hog district. If Canada doubled her hog population, disease would increase correspondingly, but in 1914 when the number of swine in Canada was perhaps at high-water mark, it was necessary to slaughter 34,779 hogs to keep the scourge in check and the compensation is far from satisfactory. We have had cholera in Canada for more than thirty years, so the introduction of virus is no new danger. Breeders and farmers in the United States, even those who do not treat, want a "cholera-immunized" hog when they purchase, so it is evident that they do not look on an immunized pig as a carrier of contagion.

A farmer in Canada runs considerable risk when he maintains a large herd of swine without treatment. Extensive breeders in the United States would go out of the business if they did not have this protection. We are asked for an increased production of hogs in Canada but should the farmers take this risk? In Essex and Kent they know the danger and are clamoring for this insurance.

Breeders of pure-bred Berkshires, Hampshires, Duroc-Jerseys, and Chester Whites would profit by the liberty to purchase herd sires in the United States. They cannot do so now to any extent because practically all the breeders there double-treat. Canadian Berkshires, particularly, are in need of an infusion of new blood.

The ideas expressed by the Boone County farmers are particularly applicable to Canada. Breeders of pure-bred swine should be allowed to immunize their breeding stock to avoid the danger of having it wiped out. The loss of an entire herd has happened several times in this country and there is no evidence that the present system of control will not prevent it happening many times again. Everyone knows what it means to have the foundation of a good herd shot and buried. An improvement of the breeding stock in this country could



**Champion Pen of Long-Wooled Sheep at Guelph.**  
Exhibited by E. Brien & Son, Ridgetown, Ont.

be brought about through a Government-supervised system of immunization.

The Essex County seed farms, in Essex County, Ontario, which turn off around 500 hogs annually, have been double-treating since 1915. They claim to have had no breaks and the neighbors have not suffered in one instance. The farm has been under quarantine, of course, and all stock goes to the slaughter house.

If the Government would take full control of serum and virus used in this country and enforce what rules they might consider necessary to ensure safety, as rigidly as they have their quarantine regulations in the past, the danger to the industry would be no greater than it is now through stock cars coming from the other side, improperly disinfected; from ham and bacon rinds and from divers other acknowledged carriers of the disease.

Less than three million hogs is a woefully small swine population for a country the size of Canada, and with the possibilities that are ours. However, as we increase our hogs we increase our losses.

Looking back, the quarantine regulations of the Health of Animals Branch appear to have been sound, well-adapted to the situation up to very recent years, and well enforced. However, after reviewing the conditions at home, and in the United States where they have developed to a stage requiring more advanced methods of control, the writer cannot help but feel that we are on the threshold of a new era and our breeders are entitled to make use of modern, scientific methods for the protection of their swine herds.

#### The Outcome.

On January 5, 1918, after their return from the trip, the Swine Breeders' Committee interviewed the Veterinary Director General in his office at Ottawa, and presented their case. Dr. Torrance said he was in favor of modifying existing import regulations to allow double-treated hogs to enter Canada subject to a thirty-day quarantine after treating on the original owners' farm, and a thirty-day quarantine at the border. He stated that where any county or counties in Canada desire to double-treat he would favor such treatment, subject to special quarantine regulations and supervision by the Health of Animals Branch.

### Diseases of the Feet—IX.

#### Foul in the Feet of Cattle.

Foul in the foot is a quite common disease in cattle. The term is applied, somewhat indefinitely to soreness, or the formation of abscesses between the clouts, resulting in disorganization of structure. This condition may be attributed either to common causes or specific influences. The latter are scrofulous, tubercular, and perhaps rheumatic conditions. Scrofulous, or tubercular arthritis may affect the bones and joints of the foot, causing such disease of them as of other parts of the skeleton. The disease may be caused by the presence of foreign bodies fixed between the clouts, giving rise to inflammation; by over-growth of the hoof horn on the inner side; by injuries of various kinds as severe sprain of the pastern joint or the joint of the foot. The most common cause is filth or irritation between the clouts. It most frequently affects the hind feet, caused by the animal continuously or repeatedly standing in or walking through irritating substances, as when cattle stand in stalls that are not regularly cleaned out, hence are compelled to stand in liquid or semi-liquid manure; when cattle, especially in the early spring, are turned out into the barnyard, more or less regularly for exercise, hence walk through or stand in the manure that is more or less wet from melted snow or ice, or from rain. This being repeated frequently, the alternate wetting with irritating liquid and drying sets up an inflammation which usually results in suppuration. Cattle pasturing on marshy land, or land where rushes abound, are liable to the trouble from the irritation caused by the wetness of the ground, or the repeated irritation caused by the rushes passing between the clouts as the cattle progress. The disease is also frequently noticed in cattle that are compelled to walk through even a slight extent of wet, muddy land in order to get water. In fact, any condition that causes continuous or often repeated irritation to the parts is liable to cause the trouble. When the disease is caused by stable conditions, the hind feet are most frequently involved, but when due to outside conditions the fore feet are nearly as liable as the hind.

**Symptoms.**—The patient is noticed going lame or sore on one or more of the feet. An examination usually reveals the clouts or digits more or less separated from each other. There is usually more or less swelling and tenderness of the coronet. When the foot is cleaned the tissues on the inner surface of each clout will be noticed to be swollen and tender to the touch. As the disease advances the lameness becomes more acute, the swelling and tenderness increased, and eruptions are very liable to appear, the surface of the affected parts become raw, or there is the formation of an abscess or abscesses. The animal holds the foot up with a jerky motion when standing, and in most cases it is a difficult matter to examine sufficiently to determine the degree of the trouble without casting and securing the patient. In some cases, especially in those that have been neglected, and the cause allowed to continue for considerable time after the first symptoms are noticeable, the inflammation extends upwards and involves the pastern joint, as well as the joint in the foot. In such cases the symptoms are very acute. There is well marked swelling and soreness of the pastern joint. If but one foot be involved the patient refuses to put it to the ground; if two or more feet be affected, he will be most of the time. He suffers acutely. There is considerable sympathetic fever, a well-marked increase in temperature, the pulse becomes full and frequent, appetite impaired, and a rapid loss in condition. In some cases

the patient succumbs to the pain of the disorder very quickly.

**Treatment.**—When the disease is due to a scrofulous or tubercular condition, little can be done. When due to removable causes, if treated in the early stages it usually yields readily to treatment. The cause must be removed. This is best done by keeping the patient as quiet as possible in thoroughly dry, comfortable quarters. All foreign substances, dirt and filth, must be removed from between the clouts, by washing thoroughly with warm water to which has been added a little carbolic acid or one of the coal-tar antiseptics. The too common practice of cleansing the parts by pulling a rope back and forth between the clouts is extremely cruel and should not be tolerated. After thoroughly cleaning the parts apply hot poultices of linseed meal or boiled turnips until the acute inflammation and soreness are allayed. If any proud flesh be present it should then be dressed once daily for two or three days with butter of antimony applied with a feather, and then dressed three times daily until healed with one part carbolic acid to thirty parts sweet oil, or, in hot weather, a lotion made of one ounce each of sulphate of zinc and acetate of lead to a pint of water. In cases where the joints have become acutely involved, it is sometimes necessary to amputate at the joint, in order to save the animal's life. This operation, of course, should be attempted only by a veterinarian. As with most diseases, prevention is the better treatment. This, of course, consists in seeing that cattle are not exposed to the ordinary exciting causes.

W.H.P.

### Dates of Live Stock Meetings.

#### MONDAY.

- Feb. 4, 2.00 P.M.—Canadian Thoroughbred Horse Society, Directors' Meeting.  
 " 4, 2.00 " —Canadian Swine Breeders' Association, Directors' Meeting.  
 " 4, 3.00 " —Canadian Thoroughbred Horse Society, Annual Meeting.  
 " 4, 4.00 " —Canadian Pony Society, Directors' Meeting.  
 " 4, 8.00 " —Canadian Jersey Cattle Club, Directors' Meeting.  
 " 4, 8.00 " —Dominion Shorthorn Breeders' Association, Directors' Meeting.  
 " 4, 8.00 " —Canadian Swine Breeders' Association, Annual Meeting.  
 " 4, 8.00 " —Canadian Pony Society, Annual Meeting.

#### TUESDAY.

- Feb. 5, 9.00 A.M.—Ontario Swine Breeders' Association, Directors' Meeting.  
 " 5, 9.30 " —Canadian Trotting Association, Directors' Meeting.  
 " 5, 10.00 " —Ontario Swine Breeders' Association, Annual Meeting.  
 " 5, 10.00 " —Dominion Shorthorn Breeders' Association, Annual Meeting, Temple Building.  
 " 5, 11.00 " —Canadian Jersey Cattle Club, Annual Meeting.  
 " 5, 11.00 " —Canadian Standard-bred Horse Society, Directors' Meeting.  
 " 5, 1.00 P.M.—Ontario Berkshire Club.  
 " 5, 2.00 " —Ontario Yorkshire Club.  
 " 5, 2.00 " —Canadian Trotting Association, Annual Meeting.  
 " 5, 4.00 " —Canadian Sheep Breeders' Association, Directors' Meeting.  
 " 5, 8.00 " —Canadian Sheep Breeders' Association, Annual Meeting.  
 " 5, 8.00 " —Canadian Standard-bred Horse Society, Annual Meeting.

#### WEDNESDAY.

- Feb. 6, 9.00 A.M.—Ontario Sheep Breeders' Association, Directors' Meeting.  
 " 6, 10.00 " —Ontario Sheep Breeders' Association, Annual Meeting.  
 " 6, 10.00 " —Canadian Ayrshire Breeders' Association, Directors' Meeting.  
 " 6, 2.00 P.M.—Canadian Kennel Club, Directors' Meeting.  
 " 6, 2.00 " —Clydesdale Horse Association of Canada, Directors' Meeting.  
 " 6, 4.00 " —Canadian Hackney Horse Society, Directors' Meeting.  
 " 6, 6.30 " —Holstein-Friesian Association Banquet, Cate Royal, 14 King St., E.  
 " 6, Evening—Ayrshire Breeders' Banquet.  
 " 6, 8.00 " —Canadian Hackney Horse Society, Annual Meeting.  
 " 6, 8.00 " —Canadian Kennel Club, Annual Meeting.

#### THURSDAY.

- Feb. 7, 9.30 A.M.—Canadian Shire Horse Association, Directors' Meeting.  
 " 7, 9.30 " —Holstein-Friesian Association, Annual Meeting, Foresters' Hall, 22 College St.  
 " 7, 10.00 " —Canadian Shire Horse Association, Annual Meeting.  
 " 7, 10.00 " —Canadian Ayrshire Breeders' Association, Annual Meeting.  
 " 7, 10.30 " —Clydesdale Horse Association of Canada, Annual Meeting.  
 " 7, 2.00 P.M.—Canadian Hereford Association, Directors' Meeting.  
 " 7, 3.00 " —Canadian Hereford Association, Annual Meeting.  
 " 7, 7.30 " —Ontario Horse Breeders, Directors' Meeting.  
 " 7, 8.00 " —Ontario Horse Breeders, Annual Meeting.

#### FRIDAY.

- Feb. 8, 9.00 A.M.—Dominion Cattle Breeders' Association, Directors' Meeting.  
 " 8, 10.00 " —Dominion Cattle Breeders' Association, Annual Meeting.  
 " 8, 1.00 P.M.—Eastern Canada Live-Stock Union.

All these meetings will be held at the Carls-Rite Hotel, with the exception of the Shorthorn and Holstein annual meetings.

## THE FARM.

### Lessons From the Election.

EDITOR "THE FARMER'S ADVOCATE":

Now that the election is a thing of the past would it not be worth while to set down some lessons to be learned from it, bearing in mind, as has been well said, that "History is Philosophy teaching by Experience."

1. The first thing that strikes me as noteworthy is the relative permanence of straight party voting. In so far as this is so it shows the innate conservatism of human nature. Many members of both parties are truly conservative because they are disinclined to change. A friend of mine once told me that a Liberal would, on sufficient provocation, leave his party and vote for the other side, but a Conservative would never do so. I disputed his contention at the time but on second thought I am inclined to admit its truth, remarking only that there are many conservative "Liberals" and also many liberal "Conservatives". The question is largely one of temperament, outlook and mental attitude, complicated by the force of tradition.

So far as farmers are concerned I am more than ever convinced that they must eschew party politics if they hope to obtain recognition and justice. Again I have seen farmer voters by the thousands whose interests are identical and who should be united at the polls if they are ever going to get what is their due, divided into opposing camps and killing one another's votes. The situation would be ludicrous if it were not so tragic—Smith going to the polls and killing the influence of his neighbor Jones whose interests are identical with his own in every possible respect, while the shrewd politician laughs in his sleeve, knowing that both Smith and Jones will be loyal to their parties and that the constituency is a "safe" one. How long will we tolerate this absurd tragedy? So long, I take it, as the shrewd politician can convince Smith and Jones that they should not discuss political questions for fear of offending one another's feelings; and that political questions must not be discussed in their club meetings for fear of breaking up the organization. How in the name of reason and common sense are Smith and Jones to discover that their interests are identical and that they ought to combine and not divide their votes, except by discussing those matters which are involved in the elections? It is impossible. Smith and Jones ought to be brave enough and friendly enough to face the situation and make an honest effort to unite their forces. It is true that they may fail to agree, even after full, free and frank discussion. We cannot all see eye to eye. But I venture to say that for ten cases of disagreement under our present system of "politics taboo," we should not have more than one case of disagreement if free discussion were engaged in. The policy of silence is naturally enough enjoined by those who have selfish interests to serve but it is essentially cowardly, and will lead nowhere. Let us be strong enough to put it from us.

2. The second thing which seems to me worth recording is that the recent election was conspicuous for three-cornered fights, and that such a situation puts the voter in a most embarrassing position. What he ought to do depends not only upon his choice of a candidate, but upon his estimate of how the vote is likely to turn out, and in any event a minority of the total vote may elect a representative. All this is most unfortunate, and, moreover, quite unnecessary. A very slight change in our methods would remedy the evils and give general satisfaction. I propose to suggest such a change, but first let me take a concrete case to make the whole matter plain: Smith, Jones and Brown are candidates in my constituency. Only one of them is to be elected, and I am entitled to vote for one and only one of the three. My first choice is Smith; my second is Jones, and I desire above all things that Brown be not elected; what can I do with my single vote? My first impulse would be to cast it for Smith. But if I think that Jones will in any event poll a larger vote than Smith I would consider my vote wasted if given to Smith. I must rather give it to Jones in order to swell his vote and prevent the election of Brown. In this way I vote for my second choice and discover, when it is all over, that Smith did better than I expected, and would have won if he had only got a few more votes from such as myself. As a matter of fact Brown is elected by slightly over one-third of the total vote and the majority has no representation. Thus my whole purpose is defeated by a situation for which no provision has been made in our electoral system, and my vote counts for naught.

Now see what a change would be wrought through the simple expedient of giving me a single transferable vote. In that event my ballot would be marked thus:

Smith—1  
 Jones—2  
 Brown—

which would mean that I desired that my vote should be counted for Smith first. In the event of Smith's not getting a sufficient vote to be elected, however, I

desired but the consider on the ing off countir first co all thos another It wou Brown would as mus Thus b the ma siderati An constitu large, w this m as well will be shades How th another 3. with th every g and on issues a the resu is con stitute ough t be don from ot democr effort t results No one the syst modern

ple of Peppere problem It is question earning Domini lars per placed h at pres of Trade their ad the pro

At Northern intimate expense lars, by strange the sam million million the sta greatly portatio ped, jus as he st has inc increase of the r per fre 2 3/4 tim ton hau railway

Mr. Pacific Credit i sent a transpor the adv this year their re that if ing exp in their

The operatin by near penses, markabl of Trade posed in appear operatio they hav transpor ing plac what re This lars and these tv way and

desired that my vote should be transferred to Jones, but that I did not wish to vote for Brown under any consideration. Having thus indicated my preferences on the ballot paper it would only remain for the returning officer to give expression to these preferences in counting the ballots. Suppose that Jones fell on the first count. He would therefore be out of the race and all those ballots which had him marked as their choice would be redistributed according to their second choices. It would probably happen then that Smith instead of Brown would be elected; and in any event the winner would have a clear majority and not a mere plurality, as must often be the case under our present system. Thus by a very simple device representation is given to the majority instead of to the minority, and due consideration is given to every man's vote.

An even better thing would be to group constituencies and elect several members therein *at large*, with the same system of transferable votes. By this means we can give representation to minorities as well as to majorities and our representative body will be really representative, i. e., it will represent all shades of opinion and not merely the majority alone. How this can be worked out in detail must be left to another time.

3. In the third place one cannot fail to be impressed with the desirability of the Referendum System. In every general election a number of issues are blended, and one cannot tell in what proportions the various issues affect the vote. An accurate interpretation of the result is, therefore, so far as any particular question is concerned, quite impossible. Blended issues constitute a serious danger. Each great public question ought to be decided on its own merits; and this cannot be done unless it is singled out and considered apart from other questions. Under our present system real democracy is impossible. That is to say the people's effort to make their will felt in regard to one issue results in a defeat of their will in regard to other issues. No one in particular is to blame for this state of affairs: the system we use is out of date, and not in accord with modern democracy. And the situation is rendered worse

by reason of the blind party vote, which, being given to a name rather than to a cause, is practically unintelligible so far as policy goes.

4. In the fourth place the question has arisen in many constituencies as to how far the voter is justified in voting for a party candidate irrespective of his personal character and qualifications. If a voter judges that the supremely important question is the putting of one set of men out of office and another set in, then he is justified in largely ignoring the personal character of a candidate. He may even justify himself in voting "for a yellow dog" who will be faithful to the party. Moreover, the yellower and more irrationally devoted the dog is, the more one is justified in voting for him. In this case, however, a rubber stamp would be just as effective and a deal cheaper, for the "dog" must be fed and housed and may, in addition, claim a few bones on the side.

5. Fifthly and lastly, I question whether we are so far away from the party system as current newspaper talk would make us think. There is now the Unionist party and the Opposition, in somewhat the same proportions as formerly existed between the Conservatives and the Liberals. Is there not practically a realignment? Whereas there was formerly so to speak a division from North to South, is there not now a division from East to West? So far as patronage is concerned there is at all events exactly the same temptation to give the plums to Unionist supporters as there was formerly to give them to Conservative supporters. Patronage abominations will be abolished by an imperative public demand, and not by any political realignment. This much must be said, however. The recent breaking away from party lines creates an opportunity for introducing better things. People are generally more disposed to be open minded. There is therefore all the more need to strike while the iron is hot so that the temptation to re-establish patronage under a different form may be successfully withstood. "The old order changeth", let us see to it that another just as bad does not take its place.

Brant Co., Ont.

W. C. Good.

subsidiary companies whose returns are paid into the gross earnings of this railway corporation. With this working capital we find that the C. P. R. corporation earned one hundred and twenty-nine million dollars gross last year, at a working cost of eighty million dollars, leaving them a net profit of forty-nine million dollars. Out of these net earnings they paid fixed charges, \$10,306,196, and interest on preferred bonds, \$3,267,276, leaving a balance of \$35,560,448 for dividends—22 per cent. on the one hundred and sixty million dollars actually invested by the stockholders of that corporation and being used by the Company in railway earnings.

To substantiate this contention, within the past seven years they got permission to increase their stock issue by some hundred million dollars, to improve their plant and build new lines. To show how this money has been used see page 10, Annual Statement:

Advance on lines and steamships under construction, \$42,852,519; advance on investments, \$9,639,472; temporary investment in war loans, \$5,272,690; cash on hand, \$41,581,680; total, \$99,356,361.

Take this from their capital of \$260,000,000 and you have \$160,000,000, the actual capital working in railway earnings.

The revenue from all other investments, with whatever revenue is obtained on this \$99,356,361, is credited to their special income account, in which only stockholders appear to have a right to participate. Until this \$100,000,000 is properly used to make railway earnings, dividends should not be declared on it to the disadvantage of the public not knowing the revenue now being earned from our present railway rates on legitimate investments.

By reference to the Government statistics, you will see that of the \$261,000,000, the total earnings of all roads, \$200,000,000 was earned by the C. P. R. and the lines principally controlled by them. Our rates have enabled the C. P. R. to pay 10 per cent. dividends and create a juicy surplus, which they show as a liability to their stockholders:

Receipts from sale of land, \$68,255,803; balance due from sale of land, \$51,050,523; lands, etc., on hand, \$127,129,135; profits on sale of stock, \$45,000,000; surplus from earnings, \$100,604,596; total \$392,040,057.

Surplus in other assets \$121,215,174.00, a lovely melon, soon to be divided or become a heavy tax on our shipping interests. So far this year's revenue on all lines has increased about 15 per cent., with their operating expenses increasing much less, nothing to warrant any increase in rates. The marvelous success of this company, and the fact that both the C. N. R. and G. T. P., have to-day better prospects and have a greater revenue than the C. P. R. had at the same time in its history, this, to me intimates that the question of aid in financing these corporations, the C. N. R. and G. T. P. now being completed, to develop our national resources and provide shipping facilities for future producers, is possibly the business of the Government. The companies that are earning this \$200,000,000.00 and making money, own 22,223 miles, principally working in our most thickly populated districts. The companies not so well situated, the Government, C. N. R. and G. T. P., have in mileage 15,211, of which 9,648 is owned by the C. N. R., and it shows every indication of being self-supporting within the next few years.

For comparison as to the earning powers of our railroads we should separate the mileage of the corporations that are really seeking relief, representing only the total earnings of \$58,562,852.00. To aid these companies to add \$8,784,427.00 to their earnings you are asked to make rates that will saddle our producers and consumers with the annual tax of 15 per cent. on \$261,000,000, in all \$39,283,298.00, and add \$30,498,761.00 to the earnings of their other companies now making not less than 10 to 20 per cent. on their real capital entitled to consideration. Can this be justified?

History repeats itself. In 1897 the total earnings of all roads was \$52,353,276.00, operating \$35,168,665.00, net earnings \$17,184,611—50 per cent. on operating expenses. In 1916 the Canadian Northern's earnings, \$35,476,275; operating and maintenance expenses were \$25,244,186; net earnings, \$10,232,088—net 40 per cent. on operating expenses. This will enable a properly conducted corporation to be successful when their entire mileage is completed and in revenue-earning operation.

The operating and maintenance costs of the C. P. R., \$80,255,965; net profit on this earning was, \$49,125,819; or 61 per cent., and this made 22 per cent. on capital.

The President of the Grand Trunk said, "Relieve us of our obligation re the G. T. P. and we are satisfied with our present position."

Their operating and maintenance expenses were \$28,782,012; net earnings over these expenses, \$10,373,027, or 37 per cent. These facts would warrant us in taking this position—any corporation earning net over 30 per cent. on their operating expenses, which includes maintenance of plant and equipment, should, from the facts set out above, pay 10 to 12 per cent. on any capital necessary to operate a successful corporation. Believing these conclusions are justifiable, by the statistics, we find the earnings of all Canadian roads were over 45 per cent. net, over operation and maintenance expense.

This would again indicate that the C. N. R. is today in a much better position than the C. P. R. was at the same year of its history. The money they require to-day is for building and equipping lines not now in actual use, and it should be provided for by capital not by earnings through freight and other rates.

Now, having to your satisfaction, we hope, fully proven that our railway earnings from our present rates are more than sufficient to pay handsome returns on all judiciously made investments, why tax the public

## The Proposed Increase of 15 per cent. on All Railway Transportation Rates.

The following is from a letter addressed to the people of Canada, and recently received from George Pepper, a man who has investigated Canada's railway problems as perhaps no other has:

It is remarkable to note how little this most important question of railway transportation rates, revenues and earnings, affecting the producers and consumers of the Dominion of Canada to the extent of forty million dollars per annum, seems to be understood, or properly placed before the public by the press; by those interests at present demanding an increase and by the Boards of Trade, and Manufacturers' Associations, who, by their advice and consent, are supporting the adoption of the proposed increase.

At Toronto D. B. Hanna, of the Canadian Northern, presented the case on behalf of the road, and intimated to the Board that their increase in operating expenses for this year would be some five million dollars, by reason of the war. He stopped there, and, strange to say, did not proceed farther and say: "For the same reason our earnings will increase eight to ten million dollars. The income increase to date is seven million dollars." Mr. Hanna also made strong use of the statement that the return, per ton haulage, had greatly decreased and the wages and expenses of transportation were rapidly increasing. Here he again stopped, just short of this fact—the revenue per ton haulage, as he states, has decreased and cost of per ton haulage has increased some, but the ton haulage per train has increased 58 per cent. from 1907 to 1916, and, by reason of the railroads working more to capacity, their revenue per freight train mile has increased, from 1875 to 1916, 2 3/4 times and the percentage to earnings per train mile ton haulage has decreased 24 1/2 per cent. In this the railway companies are the gainers.

Mr. Dalrymple of the Grand Trunk and Grand Trunk Pacific presented his claim much in the same way. Credit is due the Canadian Pacific, which was well represented and doing over 50 per cent. of the Dominion's transportation business. They said nothing in favor of the advance, knowing that during the first six months of this year their operating expenses were increasing and their revenue increasing more rapidly. They realize that if the war is responsible for the increased operating expenses it is only fair to credit it with the increase in their earnings.

The true facts show that the war has increased their operating expenses, so it has increased their earnings by nearly double the increase in their operating expenses, and, therefore, they are the gainers. It is remarkable how strongly the representatives of the Boards of Trade and the Manufacturers are supporting the proposed increase. These able, shrewd business men are, apparently, so much engaged with their own business operations (which are at present most profitable) that they have not the time to delve into the facts re railway transportation and history to see what has and is taking place in connection with the earnings of our railways; what returns are being made from their investments.

This increase means to take some forty million dollars annually out of producers and consumers so that these two corporations, the Canadian Northern Railway and the Grand Trunk Pacific, may be aided to the

extent of from eight to ten million dollars and placed on a paying basis, the other thirty odd million dollars going to the Canadian Pacific Railway and other corporations that are now, from our rates, very prosperous and making money. One thing certain, it is not good business to increase railway rates, which will be an annual tax and a very great factor re increasing our already high cost of living. It will be much better to aid the Canadian Northern Railway and the Grand Trunk Pacific by further loans which we can reasonably expect them to return, taking for a guide the history of the development of the Canadian Pacific Railway and their success in earning dividends and creating surpluses.

Now, what are the facts and history of our transportation problem by which we can reasonably be guided re the future? The Dominion Government, the Provincial Legislatures, County Councils, Municipalities, in all, the people of Canada have donated close to a billion dollars to aid in building our railways, and many "millions more in building up our harbors;" all valuable assistance to their earning powers. It was not the intention of the Government, the Legislatures, the County Councils, Municipalities, or any of the donors; of these grants that they should hereafter be called upon to pay dividends or interest on any of these grants, or that the railways should hereafter receive any returns from the earnings of these donations. It was the intention of the donors that those grants, etc., should be given free to aid the builders of railways to accomplish their good work, and enable them to make their stockholders' investments safe and remunerative.

The Canadian Pacific Railway promoters of that day apparently agreed with this understanding, and it is so shown by their agreement to reimburse the public by concessions just so soon as the net earnings of the Canadian Pacific Railway would pay 10 per cent. to their stockholders. This understanding worked satisfactorily until the prosperity of our country and railway exceeded all expectations, whereby the railways' returns were showing evidence of growing into an asset necessary to be preserved. Then a new body of railway executives began to take such steps necessary to turn all surpluses to the interests of their stockholders. It is not justice to the people of Canada that the directors or stockholders of this corporation should be permitted to conserve and create surpluses from these donations of money and land with the excessive revenue from our present rates over what is required to pay 10 per cent. on their working capital used in railway transportation. This they have been doing, and putting the earnings in a special income account. The Government of that day evidently realized the growth of this situation and appointed the Railway Board, with great power, to protect the interests of the people. This I believe to be the true "horse sense" view re our railway situation, and from this point I propose to present objections to the proposed advance in rates.

Take the C. P. R., they have in "paid-up" capital two hundred and sixty million dollars of which, by their annual statement, it is clearly shown only one hundred and sixty million dollars has been or is being used in connection with railway transportation earnings, or in

for mistakes of energetic promoters? Taking a horse-sense view of the statistics and the comparisons of earnings by mileage in the railway commission report and statistics, the U. S. capital in railroads is 10 $\frac{3}{4}$  times greater than ours, or 11 times, if you deduct the \$256,000,000 of borrowed money of the C. P. R. and considered as capital by the Government Statistics. Their population is about 14 times greater, their earnings 11 $\frac{1}{4}$  times greater, their operating expenses 11 $\frac{1}{4}$  times greater, their railway miles only 6 times greater, with fully 7,000 miles of ours under construction, and not completed or fitted for traffic, and not now being used in earnings. We must, therefore, for honest guidance and comparison, make the calculations on 30,000 miles of rail, which is all that should be taken into calculation in making our comparisons. The other 7,000 miles should be considered as capital, being invested and not yet entitled to be classed as revenue earning. Taking this, and we believe it to be the honest business view, what would our present statistics show re our railway earnings? On page XIV Government Statistics, it shows the average earnings per train mile from 1875 to 1916 increased from .988 to 2.686, an increase of 2 $\frac{3}{4}$  times. On page 28 it shows the percentage of operating expenses on earnings decreased from 81.1 to 68.9—12 per cent. Here they may claim the one represents only the freight earnings, while the other represents the total operating expenses. Yet, we say it does truly represent the facts. In 1875 the earnings were \$19,470,539, in 1916 \$263,527,157, an increase of 13.6 10 times. The operating expenses in 1875 were \$15,075,532, in 1916 \$180,542,259, or an increase of 11.9 10 times. So you will see by all these comparisons the increases from revenue have been favorable to the railway companies' interests.

Up to war conditions rates of interest on money had been decreasing. The returns of the present year are

more favorable than ever. Everything going their way, how can any increase in rates be justified?

One more fact, table 11, pages 108 and 944, show the revenue train mileage of the Canadian Northern 16,340,999. This mileage earned \$35,476,275—\$2.11 $\frac{1}{2}$  per mile. Their operating expenses were \$25,244,186, cost \$1.55 to run per mile per train, net earnings \$10,232,088, or 62 cents net per mile for the earning train mile. The average miles run to miles of road was 171. Total mileage made was 16,340,999 over 9,648 miles of road. The C. P. R. revenue train mileage was 45,623,585. The earnings \$124,654,570, earnings per train mile \$2.73. Their operating expenses \$78,237,827, costing \$1.71 per train mile, net earnings \$1.02 per mile, \$46,416,743. The average earning train mile was 353 $\frac{3}{4}$  to mile of road. Total mileage made 45,623,585, total road mileage 12,900.

What the Canadian Northern and our Government roads require is more trains per mile and greater tonnage. Increasing rates won't help them, and it will add to the burden of all producers and consumers.

Now take the Railways Investigating Commission, summing. On page LXXIV, the amount required to take care of these growing corporations is some \$70,000,000 or \$12,902,333 per year. Why add 15 per cent. to all rates and take \$40,000,000 from the public to pay this \$12,902,333?

I need not refer to the G. T. R. They say, "Relieve us of the G. T. P. obligations and we will take care of ourselves." Let them do so. Take over the G. T. P. and C. N. R., or aid the C. N. R. by loans which they will be able to repay and take care of themselves later on. By this policy the country will save \$40,000,000 per year on transportation rates.

Note these facts: the conservation of the C. P. R.

millions as referred to earlier, together with their remarkable success, was never anticipated by the most sanguine of its promoters. To-day the necessity and opportunity of Canada is great. She must meet the obligations made to aid her development and for war of some \$500,000,000 per year. This must come from our natural and agricultural production, and principally from our great West, and it should travel over our own lines of railway. Then watch these youngsters grow. But remember, cheap transportation makes production possible, and exportation in volume makes dividends for transportation companies. Let all work for volume, not to increase rates that make it unprofitable to produce volume. By the statistics the natural production tonnage, including agricultural production, for 1916 was 85,420,683 tons as against 24,283,404 of manufacturers and miscellaneous in the total tonnage of 109,659,087, and in the manufacturing tonnage 882,829 tons were agricultural implements. From 1907 to 1917 the natural production tonnage increased 2 $\frac{1}{4}$  times, the manufacturing tonnage only 1 $\frac{1}{2}$ , and the rates ultimately are all paid by the greater tonnage of natural production. We should certainly protect our national natural producing interests from rates or taxes of any kind that would have a tendency to stop their development.

What the railways want is increased tonnage, better distribution of haulage. This increased production and tonnage will come from the West. The C. N. R. and Government roads will be the greatest benefactors. Canada must have increased production to increase exports, to meet her war and other obligations. Increasing rates will not help but retard the bringing of this about, and it will add \$40,000,000 to our producers' and consumers' burdens, \$30,000,000 of which would go into a full feed box. Don't allow it! It is not good business!

## Automobiles, Farm Machinery and Farm Motors.

### Lesson From the Show.

The biggest annual event in motordom, the New York Automobile Show, is over. It proved the most inspiring mechanical event of a decade. Perhaps the greatest feature was the effect the war has had upon the industry in general. American and Canadian manufacturers have always possessed an elastic temperament. They proved this more than ever by quickly adapting themselves to the new conditions. The present day tendency is towards economical operation in all lines of trade. The building of automobiles is the third largest enterprise on the North American continent and so it was only natural that this great commercial undertaking should respond readily to the demands of a world at war. Automobiles are to-day a great system of transportation. They are saving millions of tons of coal. From the cars shown at the exhibition it can be easily seen that the auto engineers in general have been studying every contrivance calculated to save gasoline and oil. They have even gone so far in some cases as to perfect a condenser, which operates in connection with the radiator. Everyone knows that alcohol has proven itself the best anti-freeze mixture, but alcohol evaporates and so in order to save it a condenser has been attached to the radiators of some cars. When the alcohol heats it passes over this condenser and is restored to the radiator without loss. Another interesting mechanical economy is being effected by what is known as a progressive exhaust

heated manifold. It consists of three separate but connecting jackets by means of which three different degrees of heat are developed at three different points. The first jacket heats the gasoline where it is distributed to the cylinders; the second takes care of the heating around the throttle chamber and the third installed at the low speed throat of the carburetor. In the summer time when carburetion is not a difficult problem the heat can be turned off through the medium of a butterfly valve. This device will make for easier operation, greater saving of fuel and less trouble in winter driving.

Inventors have also perfected devices for the rapid heating of the manifold by means of electricity. There are also a number of different gasoline sprays being installed in order that starting in zero weather may be facilitated. One could not help but be impressed with the variety of primers that have recently come upon the market. Nearly all of them are beyond the experimental stage and should prove extremely useful. Attention has also been given to carburetors which can utilize heavier grades of fuel. Such mechanisms are of a saving nature because the heavier the fuel the lighter the price.

The bodies of the new automobiles are more compact and tidier than ever before. It was thought that the 1917 models had reached the maximum of streamline beauty, but we now find that the manufacturers have been able to go several steps farther in developing a

body free from encumbrances. You will notice this year that freak machines have practically disappeared from current production. A number of medium-priced cars are using divided front seats and also utilizing the steering column for starting and lighting switches as well as for spark and throttle levers. A rather striking general feature is the increase in the average wheel base from 113 $\frac{3}{4}$  inches to 120 $\frac{3}{4}$  inches. A great many power plants have been enlarged and the average piston displacement is now 269 cubic inches where last year it was only 222.

The tops of the cars include in almost every instance curtains that open with the doors. This feature contributes greatly to the general comfort of motoring. Some years ago the lights in the back of the tops were uniformly oval, but a great many different models are being used this year. Some of the smartest designs include bevelled plate glass windows set in nickel frames. The addition of these as well as other small openings are based upon the fact that while the passengers can see through them with comfort it is difficult for outsiders to look through them into the tonneau.

The New York Show was a great success and settled all details regarding the many fears of the automobile business. The industry has volunteered to take on all the war orders that the allied governments desire it to handle. This inevitably means a smaller production of machines for 1918 but the quality of the models will not deteriorate, the only reduction being in numbers.

AUTO.

## Canada's Young Farmers and Future Leaders.

### Food For Thought.

Give every man a square deal.

"Every failure teaches a man something if he will only learn."—Dickens.

Those who think will govern those who toil.

"I'll do it to-morrow" is responsible for many failures in life; "I'll do it to-day" may be spelled with even letters—"Success".

Half an hour's planning at the start of the day's work makes it two hours better for you.

It is not what a person says so much as how it is said that oftentimes cuts deep and causes heartache.

Don't stand waiting for something to turn up. "Providence helps those who help themselves."

Mistakes are largely the result of ignorance. Young men and women should avail themselves of every opportunity to improve their education. It doesn't cost anything to carry it with you once you have secured it and a good education is a great asset to anyone.

### The Back to the Lander.

EDITOR "THE FARMER'S ADVOCATE":

This article is written for the express benefit of those who are seriously contemplating a farm-ward movement; a movement that should be given every encouragement. That wild and bitter cry of "Back to the

Land," is not a thing to be lightly noticed, nor must it be regarded as a mere symptom of a high-cost-of-living disease that will disappear when that specialist, the food controller, gets his machine started. I think it is a very genuine cry resulting from a species of farm fever, which may be innocently contracted from gazing too long at some pictorial illustration of a peaceful farm scene. This kind of fever is somewhat peculiar in that the sufferers seek relief by eagerly devouring all kinds of farm literature which, as a rule, sends the temperature still higher; a somewhat lamentable fact when a judicious and timely dose of appropriate and helpful hints from the vast experience of a farm specialist would go a long way towards cooling the blood, and inducing a more equable frame of mind. As, however, there doesn't appear to be anyone ready and willing to administer such helpful hints I will, with some temerity I'll admit, undertake the business myself. Probably it will prove a thankless job, but, if there be but one who lives to bless my name, then, I am rewarded.

In the first place then, Sir Would-be-farmer you must have a farm to farm on. That is understood I hope. This being so, and assuming that you wish to buy the land, and that you have arrived at the proper stage of impatience and splutter, so eager are you to be at it, your obvious course is to buy a newspaper and run your optics down the "Farms-for-sale" columns until they become fixed and glaring on something like this:

"For Sale—Grasshopper farm, a dandy fifty acres, never been rented; situated within ten miles of the buoyant town of Hope, and within sight of the town of Despair. Soil is a choice sandy gravel, just the thing for the growing of enormous crops of sweet clover; well

watered, especially in early spring. Good accommodating house that allows all the winds of heaven to pass through, which is an inestimable boon in summer, and a joy forever in winter. The little stars, too, know they are welcome, and they often shyly peep through the places where shingles used to be. There is also a haven of rest for weary sparrows, the barn, which, despite the ravages of time, will stand indefinitely, if nothing be allowed to rub against it. Fences are in first-class repair as present owner, like his father before him, has been repairing them for years, and years, and years; said owner retiring on account of permanent bankruptcy. Snap. Five hundred dollars."

Snap? Well I should say so. Goggle eyed you will read it once, twice, thrice. Your feelings are almost sure to get the better of you, and you will gasp for breath—"Great Scott on tin wheels, was there ever such an opportunity." You will call to your wife, Matilda! Matilda-a-a! Matilda-a-a-a! and when she arrives wild-eyed and breathless, you will proudly point to your discovery, and then lean against the piano, lap one foot over the other, stick your chest out, fold your arms and try to look as much as you can like the picture of Napoleon on the Bellerophon while you pensively whistle a bar or two of "When the Roll is called up Yonder." Your calm exterior will give no indication of the fiery emotions under which you are laboring as you wait in seeming patience until Matilda in hysterical delight respects your dignified pose by throwing her arms round your brawny neck and hailing you as a true deliverer. You will then celebrate the event by setting your ancient gramophone to work scratching out a few rounds of "See the Conquering Hero Comes."

The preliminaries over, your next best move is to hunt for some foolscap—What'll you do with foolscap?

Well now have patience, have patience, for, if you are to be a farmer, that is a virtue you must acquire. The idea is this: You have always held a belief, gathered largely from hearsay, that farming was the game at which to get rich. As to this, however, you have no real proof, and so now that you have arrived at the actual point of jumping into the farmer's world you must use pencil and foolscap to ascertain to what extent facts of calculation will bear out hearsay, and incidentally, a few of your own pet theories.

As, however, all processes of calculation are somewhat wearisome it is of the utmost importance that you give a little thought to comfort. You positively must be comfortable to withstand the severe strain upon your mental resources. With this end in view you will trundle your ownest own arm chair up to the table, let yourself sink into its luxurious depth, look benignly at your wife, and intimate that you need pencil, paper, cigars, matches, a large jugful of something drinkable and your carpet slippers. When she has attended to these simple requirements, taken your boots off and otherwise shown her loving ability, and her great faith in your omniscience, you will be ready for business.

Now, it is quite possible that you have been paying forty, or maybe fifty cents per dozen for eggs, and in consequence you have acquired a strong inclination towards hens as money-makers. You will reason that if one Brahma hen can lay one egg in one day without working overtime she will be able, quite easily, to lay three hundred and sixty-five eggs in one year; and at this rate of going if you owned one hundred Brahmas and there were no casualties they would lay for you 36,000 eggs per annum, which at forty cents per dozen would—here you will get busy with pencil and paper—net you 1,216 dollars and 66 $\frac{2}{3}$  cents. At this point, in true farmer style, you will give vent to an excited and jubilant "Gosh!" The prospect of such riches will make you feel extraordinarily charitable, and you will decide on the spot that each year you will give that superfluous two-thirds of a cent to the poor. This done, thoughts of butter will begin to trouble you, and, as you have some idea that butter is, in some way connected with the bovine species, you will turn your attention to cows.

You may approach the cow business in much the same manner that proved so successful with hens: If one—but hold awhile. Before going any further your proper course is to determine what breed of cows shall have the privilege of belonging to you. If you take my advice you will invest your money in something that can boast of the bluest of blood in its veins; something whose ancestry may be traced along a line of King Cornpatches, DeSols, Count DeWillies, Lady Echoes, and Princess Mays directly back to where the first pair are just emerging from the ark, you will then have something warranted to drown you in milk or choke

you with butter-fat about every ten seconds. Now you may proceed with your calculations. If one King Cornpatch cow, which we will call Lady Echo, is capable of supplying you with the wherewithal to make four or more pounds of butter a day, then five Lady Echoes will give you, each day, twenty pounds which, multiplied by fifty cents and the number of days in a year will amount to the grand annual total of \$3,650.00. Simple, isn't it? "By jove!" you will exclaim delightedly, "why didn't I get back to the land years ago!" And Matilda, whom you had forgotten, will chime in, "Isn't it just too perfectly beautiful. We'll be able to buy a car now!"

I don't think there is any need to coach you further, you'll do very nicely by yourself now. You have proved that a handsome profit may be realized from cows and hens; you have dispelled all doubt in regard to the cry that there is no money in farming; you have acquired a superb confidence in your ability to work a farm profitably, and incidentally, to show those whiskered "Rubes" a thing or two; consequently, I can do but very little more. I might, I suppose, advance a few hints regarding pigs, but what's the use when your process of calculation will show you that turning pigs into dollars is mere child's play.

And so, put away your pencil and paper. For awhile you may dream a dream in which no harsh thing shall intrude; no burning July and August suns, blinding flash and rolling thunder, torrential rains, destroying hail and shrieking winds. Such rude elements will disturb not your dreaming spirit as it glides through a pleasant land where softly glowing suns prevail, where rains fall gently, and where little whispering breezes rustle through stately waving crops of grain.

In fancy you will see yourself brown of face, and mighty of chest and arm, stepping out into the fresh and dewy morn to be greeted by your faithful dog who cares not a rap for the liquid, God-given notes pouring from the throat of the little gray bird on the old rail fence; nor for the piping robin in the apple tree, the chattering sparrows in the eaves, and the "roosters" which far and near are trying, some sharp and shrill, others deep and booming, to out-crow one another in their efforts to give adequate praise to a new day—a new day into which shall presently burst the happy cries of your children, and the sight of them playing in the green fields, gathering wild flowers, and feeding downy chicks and ducklings. In due course this halcyon day shall be crowned with a glorious eventide, and your mind's eye will be gladdened by a vision of your wife standing at the pasture gate softly calling, "Ko-boss, ko-boss."

"Ah, glory be, Utopia at last!" you will exclaim, and your heart will surge up in the back of your neck, or some other place, causing a sentimental lump in your throat, and deliriously you will cry, "Grasshopper farm shall be mine!"

And it shall be so. You will go next day with a bag-

ful of dollars, part with them, and return home the proud possessor of a farm. Your canary, poodle dog, prize Persian cat, and the rest of your belongings will be moved thereon, and you will get down to business so earnestly and enthusiastically that at the end of a year you'll probably find that you have allowed enthusiasm to overrule good judgment and common-sense, whereat you will sit down, have a good cry, and then bravely reach for a pen, and write as follows.

For Sale—Grasshopper farm, a truly wonderful fifty acres that has hopped all over me, jumped on me, robbed me and otherwise ill-treated me: If so desired prospective purchaser may take over all stock and implements. The implements are a sight worth seeing, which is a very exact description of them. The stock consists of two weary-looking horses which know not the word die, or they would have died long ago. One asthmatical cow which gives sufficient milk to nourish one baby; a one-time frisky heifer; one single barrelled pig and one Shanghai rooster, which has been pretty well hen-pecked by his three wives. Send or bring your check for four hundred and ninety-nine dollars, and all is yours, with, if you care about such things, a nanny goat and a guinea pig thrown in for luck. Apply Tired Farmer, township of Despair, and apply quickly. "Then you may lay me low in the mold, and think no more of me."

York Co., Ont.

THE HIRED MAN.

## THE DAIRY.

When the price of cheese was under discussion at the E. O. D. A., a Northfield dairyman requested to know how they were to make ends meet this year with the cost of production greatly increased, when, but a small profit was made under last year's prices. Commercial men seldom continue in a line that is less profitable than some other and why should the farmer be asked to do so? He cannot be blamed if he changes his method of farming in order that he may be engaged in the most profitable line. In fact, it would be called good business. An Iroquois dairyman admitted that 21 $\frac{3}{4}$  cents for cheese was a fair price last June, but contended that it was not fair last fall and that a decline in production of cheese was due to this fact. If the price is not increased this spring, farmers will turn their attention to other lines and there will be a further decline in cheese. Wheat, beans, etc., will be grown instead of feeds for dairy cows. If that is what is wanted, this particular dairyman advised leaving cheese prices as they were.

It would be a national calamity to allow the cheese industry to go the way of the wall, but no one can compel dairy-men to feed and milk cows at a loss.—Prof. H. H. Dean.

## Fifty-first Annual Meeting of the Western Ontario Dairymen's Association.

The fifty-first annual convention of the Western Ontario Dairymen's Association was held in Stratford, January 16 and 17. Owing to the severe storm which blocked the roads early in the week, many regular attendants at the Convention were prevented from being present and some of the cheese and butter entries did not reach Stratford until the last day of the Convention. However, considering the handicap the attendance at the different sessions was all that could be expected; in fact, the hall was practically filled at two of the sessions. A splendid program was given. Practical subjects of interest to both producers and manufacturers were ably dealt with by authorities in their various lines. Those present secured first-hand information, which should assist them in their work the coming season, from men who have been carrying on experiments and tests the past year. Grading of cream and butter, paying for milk by test, comparative prices of dairy products, the importation of oleo, pepsin as a coagulant, the shortage of tin sheets for making dairy supplies, scarcity of labor affecting the farm, were among some of the problems freely discussed by those present, as they met from time to time during the Convention, and besides the regular program these subjects were touched upon from the platform. It was a splendid Convention and those unable to be present were the losers. The following resolution was passed by the meeting. It was to the effect that the Association believes that it is in the best interest of both the producer and consumer of dairy products to immediately upon the conclusion of the war rescind the present Federal order-in-council which allows, as a war measure only, the importation, manufacture and sale of oleomargarine in Canada, and they respectfully petition the Federal Minister of Agriculture, through the Federal Government to again put into force the restrictions against oleomargarine as they appear in the Dairy Industry Act. The Association was also in sympathy with any movement tending to support the creameries in a change of business policy which will, under present conditions, discontinue the supplying of cream cans free of charge to cream shippers.

### President's Address.

R. W. Stratton, President of the Association, on opening the Convention commented on the fact that the 1917 prices of milk and milk products had reached the highest average on record. However, he believed that the cheesemen had a grievance in the unrestricted prices paid for milk by condenseries when the price of cheese was set. It enabled condenseries to pay about one dollar more per hundred pounds for milk than

was paid for cheese. He believed that this had a tendency to discourage cheese production. The buttermen also had a grievance in the removal of the ban on the manufacture and importation of oleomargarine. The speaker believed that ninety per cent. of the agitation for its introduction was inspired by those interested in its manufacture. The order-in-council allowing the use of oleo was put through at a time when the members who had been looking after the matter were absent from the Capitol. The numerous petitions and thousands of signatures registered against the importation and manufacture of oleo in Canada apparently had no effect. While oleo was allowed in as a war measure only, Mr. Stratton believed that if it is controlled it will be the first time in its history. He advised dairymen to see to it that the end of the war also ends the life of oleo in Canada. The President thought that the present was an opportune time for some steps to be taken to remedy the wasteful and extravagant system of furnishing cans to patrons of creameries. Owing to the great shortage of material for making cans an effort should be made to conserve the present supply as much as possible and to prevent the loss by cans rusting out on the station platforms.

### Directors' Report.

The directors reported that the past season had been favorable for milk production, as there was no prolonged period of dry weather. However, the price of cows, feed and labor was so high that it affected the total production of dairy products. The directors doubted the wisdom of increasing the number of cream-buying stations, on account of the probable effect on the quality of butter, as well as on economic grounds, as the system merely places another middleman between producer and consumer. The directors appreciated the increased number of entries of cheese and butter from Western Ontario at the large fall exhibitions, and urged the cheese and buttermakers to make still further efforts to exhibit their products at these fairs, as it was considered to be an excellent means of advertising the good quality of Western Ontario dairy products. The removing of the ban against oleo will have a detrimental effect on the local butter markets, and it is also feared that it will be difficult, if not impossible, to properly enforce the regulations so as to prevent the fraudulent sale of this substitute of genuine butter. The high price paid for milk by condenseries resulted in a considerable

### Instructor's Report.

Frank Hens, Chief Dairy Instructor and Sanitary Inspector for Western Ontario, gave a comprehensive report regarding the amount of cheese and butter manufactured in the district during the year. He also gave an account of the experimental work which has been done in the grading of cheese and butter. The quality of both cheese and butter has reached a particularly high standard in Western Ontario, due in a large extent to dairy instruction work which has been carried on. The 140 cheese factories manufactured 29,206,290 pounds of cheese in 1916, which was nearly three million pounds less than in 1915. There were 10,969 patrons supplying milk to the factories, and the average test of the milk which they delivered during the season was 3.34. This was a trifle less than the previous year and the loss of fat in the whey was .25, or a little higher than the past year. It required 11.35 pounds of milk to make a pound of cheese in 1916, and the average price per pound was 18.2 cents. The price received in 1917 was

the highest on record, averaging around 21 cents per pound. The instructors made 349 full-day visits and 452 call visits to the factories; 98 of the patrons were also visited. Mr. Hens reported that the quality of cheese was well maintained throughout the season, with the exception of that manufactured during two weeks in July, when there were a few defective cheese owing to warm weather conditions. Some of the makers had a little difficulty with the rennet substitutes. Mr. Hens found that the pure rennet gave the best results, but while the present shortage continues rennet substitutes have to be used and he advised that care be taken when using substitutes not to "set" the milk too sweet or too ripe. Under the first mentioned condition, the result would be abnormally slow coagulation, soft curds, and high fat loss in the whey. If the milk is too ripe there is danger of the cheese being coarse in texture.

During the season, 2,705 sediment tests were made. Thirteen of the factories have ice-cooled curing rooms, and the same number had septic tanks for the disposal of sewage. Thirty-two of the factories paid for milk by test, which was ten more than the previous year; 59 pasteurized the whey; 5 made whey butter; 1 made casein, and 80 turned the cheese in hoops. Fewer patrons were found guilty of delivering deteriorated milk to the cheese factories than in the past years. However, twenty-four pleaded guilty and were fined. Between November 1, 1916, and October 31, 1917, Mr. Hens and the instructors attended 77 factory meetings, at which there was a total attendance of 4,229.

Further effort was made to secure information regarding the fat content of the milk delivered by the patrons to the various cheese factories. This required a good deal of extra work on account of the factorymen and instructors. The results of 8,857 tests showed a variation in the percentage of fat in milk from 2.6 per cent. to 5 per cent. There were 102 samples of 2.6 per cent. milk; 1,222 of 3 per cent.; 1,682 of 3.2 per cent.; this was the largest number of samples of the same test and it varied from there to one sample testing 4.9, and two samples 5 per cent.

There were 127 creameries and 98 cream-buying stations in operation last year. The creamery instructors made 291 full-day visits and 89 call visits, besides 124 special visits to the cream-buying stations. During the year one new creamery was built, but two were closed. The estimates indicate a decrease of about twelve per cent. in the output of butter as compared with 1916. However, the prices were the highest in record. In 1916 the Western Ontario creameries made 21,952,948 pounds of butter. Owing to the comparatively cool season the quality of butter manufactured was considered good. If anything, the cream was delivered in better condition than in former years. The creameries had 38,982 patrons and the average per cent. of fat in the cream delivered was 29. A large number of samples of butter were examined for moisture content and 652 of the samples contained 14.75 per cent., and 67 samples over 16 per cent. moisture. The average amount of salt used and retained in the butter was 5.1 per cent. and 3.15 per cent., respectively. Thirty-two of the creameries pasteurized the cream all or part of the time; this is an increase of seven over the previous year. A cooler was used in 66 creameries and a pure culture was used by nine. Only eight creameries graded the cream for churning, and but one paid for the cream by grade. This is a very small percentage but it is a start and undoubtedly ere long the majority of the creameries will realize the benefit derived from buying cream on grade and selling butter on grade.

Further work was done in an endeavor to determine the practicability of grading cream by sample. The instructors accompanied the cream hauler over certain routes, took notes and graded various lots of cream supplied by the producer. Samples were taken by the hauler in the ordinary way. On arrival at the creamery these samples were graded by the buttermaker and the instructor without referring to the previous grade of the cream made by the instructor at the farm. Seventy-eight of the 101 samples taken graded first; 23 samples, second, and one graded third. Practically 85 per cent. of the samples were placed at the creamery in the same grade in which the cream was graded at the farm. Some of the conclusions drawn from the experiments were that if reasonable precautions were taken in keeping the sample bottles clean and the cream samples cool during transit, there is every reason to believe that under Ontario conditions the grading may be done closely enough by sample for all practical purposes.

The system of grading butter which was followed last year was outlined by Mr. Hens, and it was believed that the grading plan was practical under Canadian conditions provided it received the support of creamerymen and dealers. Besides grading the butter of the creameries engaged in the grading service, samples of butter from August and September made from a number of creameries were forwarded to the grading commission, and, while a large percentage scored fairly high, there was lack of uniformity in the moisture and salt content of the butter. Uniformity of flavor, moisture, salt, etc., is essential if Ontario butter is to attain to the position it deserves.

#### Pepsin as a Coagulant.

The scarcity of rennet has compelled a number of cheese factories to use pepsin as a coagulant. It was with doubts as to the practicability of pepsin that many made the change last spring. However, the quality of cheese has apparently maintained the high standard formerly set. Geo. H. Barr, Chief of the Dairy Division, gave an account of experiments which had been carried on during the past season with pepsin, and he found that as good cheese could be made with pepsin as with rennet extract but that as a rule there was a greater loss of fat in the whey. Experiments have been carried

on to determine the percentage fat in the whey when "setting" milk at different temperatures and using different quantities of the coagulating material. It was found that setting milk at a temperature slightly under 86 degrees, with a sufficient quantity of pepsin to coagulate the milk ready to cut in less than thirty minutes, gave practically as good results in the whey as when rennet extract was used. Mr. Barr advised using enough pepsin to coagulate the milk ready to cut in about twenty-five minutes, and that cutting should not be commenced until the curds would break clean over the finger. The speaker believed that it required greater skill on the part of the cheesemaker to make cheese successfully with pepsin than with rennet extract, but if the milk was set at the proper temperature and the curd handled properly immediately after cutting, there need be no greater loss of fat in the whey than if the rennet extract were used. A number of different brands of pepsin have been experimented with, with satisfactory results, but the speaker advised cheesemakers that there was danger in using any brand of coagulant that had not been carefully tested.

#### The Effects of War on the Dairy Industry.

J. A. Ruddick, Dairy Commissioner, dealt with a number of problems affecting the dairy industry under the present abnormal conditions. He explained the work of the Cheese Commission, and clearly showed that if it had not been for the work of the Commission cheese patrons and cheesemakers might have been a good deal worse off than they are to-day. Mr. Ruddick's address on the work of the Cheese Commission was given in the report of the Eastern Ontario Dairymen's Convention, which appeared in the January 17 issue of "The Farmer's Advocate." In commenting on the rennet supply, Mr. Ruddick advised cheesemakers to be content with sufficient coagulating material to carry them for a few weeks at a time and not to stock up for the season. If this is done, it is believed there will be no difficulty in meeting all the requirements. It is a source of gratification that pepsin can be used as a substitute without deteriorating the quality of the cheese. However, the supply is none too plentiful. The speaker cautioned cheesemakers to "under no circumstance use any brand of coagulant unless they know that it has been thoroughly tested by some competent authority. We have made it as plain as possible to all vendors of coagulants or substitutes for rennet that the Dairy Branch is ready to stand between the cheesemakers and any irresponsible dealers to see that no inferior article is foisted on the industry, and that we will always be ready to make careful tests of any new coagulant which may be offered for sale, and to take steps to prevent its sale if it proves to be unsatisfactory. Every effort should be made to help out the situation by saving the stomachs of calves which are slaughtered at the age when their stomachs are useful for this purpose. The local manufacturers of rennet extract are prepared to take all that are offered. As near as I can determine, there is no occasion for alarm over this matter, but we should not neglect any source of supply in sight. The substitution of pepsin for rennet was effected with so little trouble, and without any of the factories experiencing any real shortage, that it is doubtful if it is generally realized how near the cheese industry was to a serious interruption. Without pepsin 75 per cent. of the factories would now be closed."

Another problem which the war has brought about is that of shortage of "tinned" sheets for making dairy apparatus and utensils. These have been procured in the past from the United Kingdom, but in the interest of the supply of munitions the export of all such material is prohibited except under license. Mr. Ruddick reported that the stock of "tinned" sheets in Canada has become practically exhausted. Every effort has been made to get a sufficient quantity to meet the requirements of the dairy industry in this country for the next season but without any marked results. The situation in regard to steel in the United Kingdom is very serious, and it looks as though Canadians may have to do without this material. It is even very difficult to secure it from the United States; consequently, the speaker advised the conservation as far as possible of vats and milk cans and suggested that any factory having spare cheese vats or milk cans which are not needed for the coming season's make, let the fact be known so that others in need of such may be able to secure them. In discussing this question at the close of the address, a manufacturer of dairy utensils believed that copper could be used in place of tin. This would come more expensive at the start but as it would not deteriorate as fast as the tin, it would be cheaper in the end. The possibility of using small tin plate or even wooden vats was discussed.

Mr. Ruddick dwelt at some length on the condensed milk industry and explained why condenseries were able to pay more for milk than the cheese factories. The speaker believed that some of the complaints in regard to what was considered to be unfair competition, in which patrons of cheese factories were placed, were based on a false assumption. Mr. Ruddick stated "that the difference in price is not due to the fact that the price of cheese is limited, but because the demand for condensed milk is so great that no matter how high the price of cheese went the condenseries would be able to exceed it and get the milk just the same. Of course, the obvious reply is that condensed milk should have been dealt with in the same manner that cheese was; that is reasonable, but there are difficulties in the way. Some of them apparent, perhaps, others not so well known to the public at large. The trade in condensed milk, in its international aspect, is quite different from that of cheese. The United Kingdom is practically the world's market for cheese. We sell fully 99 per cent. of our surplus in that market, and New Zealand has no other

outlet. Every country with an export cheese trade looks to old England as her chief if not her only customer. In the case of condensed milk it is quite different. We have been exporting about one-half of our output to the United States, only about one-third to the United Kingdom, and the remainder to some 25 different countries. The difficulties of control are obvious. You may be sure the matter has not been overlooked, for I happen to know that it has been, and no doubt is yet, under consideration.

"I do not suppose that there is any kick coming from those milk producers who are so fortunately situated as to be able to take advantage of the high price being paid for milk at the condenseries, and it would be a sort of 'dog in the manger' policy for the patrons of cheese factories to object, seeing that control of condensed milk prices would not give them any more for their cheese. It is the owners of cheese factories who are hardest hit and have a grievance if any one has. There is this to be said, however, if the demand for condensed milk is to be a permanent one, then the passing of the cheese factory in certain districts is a matter of evolution and is bound to be upsetting to some interests as evolution always is. The manufacture of cheese is only a means to an end, that end being the profitable use of milk. If a better means is offered to reach the same end, and the right thing to do ordinarily is to take advantage of it. There is an element of doubt, however, in the present case, for it is more than probable that the demand for condensed milk will fall off after the war, and in that event some of the milk now going to the condenseries will revert to the cheese factory or some other outlet. If that occurs the disorganization of the cheese factories which is now going on will be a serious disadvantage.

"There is another aspect of the situation which is of importance in the present circumstance, and that is the lack of by-products from condensed milk for stock raising. It is possible that the value of the skim-milk and whey is somewhat overlooked when comparing returns for the milk alone. There is still another thing to be considered, and it is this, that when the condensed milk business monopolizes any particular territory the necessity for paying a premium to draw the milk from the cheese factory or the creamery will cease to exist. I am not prepared to say that the milk condenseries will take advantage of such a situation, should it arise, but experience teaches us that it generally happens that way. These are some of the things which should be considered by those who are tempted to desert the old cheese factory."

#### The Farm Survey.

An account of the farm survey held in Peel County last year was given by A. Leitch, of Ontario Agricultural College. This was a very interesting address, and the deduction arrived at from the information secured in the survey was to the effect that a number of farmers are working for less than hired men's wages. This survey was conducted for the purpose of ascertaining the factors which make for success or failure in farm operations. Average farm conditions prevailed in the district selected, and the information secured showed that farming is not as lucrative a business as some city folk have been prone to believe. Small farms with heavy overhead expenses, poor stock and infertile land are factors which tend to keep the returns low. Mr. Leitch defined labor income as "what is left of the farm income after the paying of running expenses of the farm, allowing reasonable amount for unpaid members of the family and paying for interest on investment." Out of this labor income the family must be clothed and fed and other sundry expenses met. While over a hundred farms were included in the survey, the figures were only tabulated for sixty-seven at the time of the meeting. The following table shows the size of farms, capital invested and the labor income from the same:

No. of farms	Size of farms	Capital invested	Labor income
32	Under 85	\$ 6,770	\$ 408
15	86 to 100	9,135	811
14	101 to 150	13,535	1,074
16	151 to 240	15,680	1,619

From above it will be seen that the small farms give the smallest labor income. This can be partially accounted for by the fact that more money would be invested in implements, horse-power, etc., in comparison with the larger farm. Poor stock is also a factor which tends to keep the income low. The survey showed that on fifteen farms of an average size of 102 acres where crops below average were harvested and poor live stock was kept the labor income was \$366; while on twelve farms, of the average size of 116 acres, where the crops were good and good stock was kept, the labor income was \$1,305. Mr. Leitch considered that the survey has been satisfactory and plans are being made to extend the work into Oxford County in the near future so that a study might be made of the dairyman's problem.

#### Increased Crop Production.

Dr. C. A. Zavitz, of the Ontario Agricultural College, outlined methods of increasing crop yields without necessarily increasing the labor involved. Better seed, more thorough cultivation, underdrainage, increased fertility and rotation of crops were mentioned as factors tending to increased yields. The speaker emphasized the fact that it was more necessary now than ever before to have the best seed that can be procured for this spring's seeding. Culling out mediocre varieties and using those which have proven the best was strongly

cheese trade...ly customer...erent. We...r output to...the United...25 different...vious. You...ooked, for I...oubt is yet,

ck coming...ately situ...e high price...it would be...patrons of...ol of cony...ore for...ctories who...y one has...nd for con...the passing...a matter of...e interests...e profitable...o reach the...y is to take...doubt, how...n probable...ll off after...now going...ese factory...disorganiza...ng on will

n which is...nd that is...k for stock...skim-milk...paring re...thing to...condensed...ritory the...milk from...e to exist...nderies...ld it arise...happens...ch should...desert the

el County...Agricul...address...rmation...number of...s wages...ascertain...re in farm...ed in the...d showed...some city...ms with...rtille land...ow. Mr...the farm...the farm...rs of the...Out of...and fed...hundred...ere only...meeting...pital in-

labor...come...408...811...074...619

ms give...ally ac...d be in...mparison...r which...red that...s where...re stock...twelve...e crops...income...survey...e to ex...future...problem.

al Col...without...er seed...reased...as fac...empha...n ever...red for...varieties...tongly

advised. The value of Ontario's crops is much greater this year than in the past, and it was pointed out that there was a tendency for certain varieties of the different classes of grain to lead in crop competitions and at exhibitions. This resulted in these particular varieties being more extensively grown with beneficial results to agriculturists. Canada's place in food production was outlined by Dr. Zavitz, and it was to the effect that the Dominion was tenth in crop production in the world; was second in number of acres per individual, and first in yield per acre per capita. Canada exports about six times as much wheat as does the United States, owing largely to the increased production per capita.

Dr. Zavitz sounded a note of warning regarding the 1918 supply of corn and root seeds. The supply is limited and the price is high. Growing root seed on the farm was advised, as mangel seed in particular can be grown successfully in Ontario. Turnip seed is slightly more difficult to grow. Attention should also be given to the germination and quality of seed to be sown.

When planning a rotation, one crop should be a preparation for the crop which is to follow. For instance, when seeding down a good nurse crop should be used in order to give the young seeds a chance. The cultivating crop cleans the land. Planning and preparation for spring planting are necessary in order that the largest possible crops may be grown under existing conditions.

**Why the Price of Dairy Produce Has Advanced.**

Prof. Dean, of the Ontario Agricultural College, gave a number of very plausible reasons why dairy produce has advanced in price since the war began. Plain as are the causes, some of the consumers severely criticize dairymen because butter, cheese and milk cost them more now than they did in pre-war days. The speaker claimed that the producer must justify the increase in price by laying the facts before the consumer. Every effect has a cause, and the present situation has caused the dollar to decrease in its purchasing power, or, as the speaker stated, "Dollars are more plentiful than food in the form of milk, butter and cheese." It was pointed out that practically all food comes out of the soil through the agency of plants and animals, and in order that these may work to the best advantage in food production it is necessary that men apply labor to the soil in the growing of the plants, and afterwards in the feeding of these plants to animals. Prof. Dean quoted an American writer as saying: "There is but a single method of procedure by means of which we can be certain that the nutrition of our people will be safeguarded; that is to maintain our dairy industry at its present extent of development. Actually it should be considerably increased, but it must not be permitted to decline. If it does the United States will not long maintain its position of supremacy in the fields of human endeavor, requiring both physical and intellectual vigor." The same might be applied to Canada, but the speaker asked, "How can this be done unless our dairy industry be supplied with plenty of skilled labor on the farm and in the factory?" If dairying is not profitable for milk producer, manufacturer and distributor, they will go out of the business and go into other lines of business which are more profitable. The difficulty of securing suitable labor and the increased cost of all kinds of labor were given as the first causes of the increased price of dairy products.

Advancing prices of feed, cows, capital and overhead expenses are also factors which must be considered. In the last three years, oats have advanced from about 40 cents a bushel to double that price. Other concentrates used in feeding dairy cows have advanced in about the same proportion. Pasture, hay and silage have not advanced so much, but it requires labor to produce the last two. The price of dairy stock has by no means remained stationary. Machinery, needed more now than ever before in the growing and harvesting of crops, has not failed to advance in price; in fact, every operation on the farm has advanced out of all proportion to the advance in price received for dairy products.

The cheese and butter manufacturers have had to contend with advanced prices the same as has the producer. All utensils used in the factories are expensive at any time, and are difficult to secure at present. Cheese coloring, rennet, cotton used in cheese-making, cheese caps, sulphuric acid for testing, have all gone up in price anywhere from one hundred to three hundred per cent.

Stringent regulations by the Board of Health in producing and distributing milk were also factors which brought the price of milk to the consumer a little higher. To have cleaner cows, cleaner stables and pasteurization of milk costs money and the consumer must pay, but Prof. Dean considered that it was worth the extra price as these things tended to protect the public health, and nothing is so important as good health.

The method of distribution of milk was one of the unnecessary causes of increased cost to the consumer. Prof. Dean said, "The city milk business must find some better method of distributing milk than in having ten or twelve milk wagons passing over a street which can so well be served by one wagon at one-half the expense. Municipal control of the milk supply similar to the plan followed for supplying water, gas, electric light, etc., would seem to be the best solution. Failing this, the milk sellers might divide the city into districts and have one distributor only for each district. With a standardized product and a watchful Board of Health there is no reason why this system should not result in a lessened cost of at least one cent per quart to the consumer, and a similar supply of good milk to all. Dairy farming and the manufacture of dairy products are among the foundations of national prosperity; milk

and its products are among the cheapest foods which can be purchased at the present time. Milk at twelve cents per quart represents 699 calories, while steak at 55 cents per pound represents 290 calories." Instead of finding fault with the price of milk, consumers should encourage the dairy farmer by paying cheerfully the additional prices asked for milk, butter and cheese, which would tend to ensure a supply of these important food products.

**Cow Testing Pays.**

"To-day cows are appealed to as Empire necessities," said C. F. Whitley, in his address dealing with cow-testing work. It is true that there is no substitute for milk, and it is believed that the nation requires every drop that can be produced. One way of increasing the milk supply without necessarily increasing the labor is to keep better herds. Undoubtedly, cow testing has enabled the producer to cull out the unprofitable cows and to feed the good ones according to production. In answer to the question, does it pay to keep records, the speaker cited a case of an auction sale where two herds of equally well-bred cows were disposed of. The one with no records averaged \$145, while the other herd which had made good records, averaged \$303. This is an indication that it pays to consider weighing and testing of milk as part of the daily work. Mr. Whitley suggested that owing to the fact that some dairymen were over-stocked and others could feed more cattle, that a dairy-cow exchange might be established so that the useful cow could be placed with some farmer who wants her instead of being sent to the slaughterhouse. An exchange of this nature might also prevent many good pure-bred sires from being sent to the shambles. The speaker considered that it was good policy to save rather than kill these sires before their real value was known. He mentioned a case of where \$1,000 was offered for a fine prepotent sire whose worth was undiscovered till he was simmered down for beef extract. "Is the modern dairyman to risk any kind of pure-bred sire before time discriminates dairy merit, or, worse still, should he use a grade?" asked the speaker. "You remember" he said "we have an Ontario law against the grade stallion; it is but a step now towards regulating scrub, dairy sires. Let us remember we cannot expect improvement from the grade; we rightly demand it from the pure-bred. Our recorders in thirty-five districts report that out of a total of 5,620 sires in use, 47 per cent. are grades, and out of the remaining pure-breds one-third are poor and undesirable. We all know that the richly-bred sire presenting finest individuality, combined with extreme dairy capacity, a triumph for the Canadian breeder, is worth big money when records show that he has forty or fifty daughters that have given over 2,500 pounds of milk in a month, or, when mated with grade cows, he has more than doubled their yield of fat in two generations." Undoubtedly, dairymen should bend their energies towards increasing the production of their herds as it has been proven that it can be done through the use of the right kind of sire. The speaker pointed out that record work enables the dairyman to make useful comparisons between animals in his herd, and points out the cows that do not respond to increased feed and care. It has been proven that a little extra feed and better care have given returns worth twice the original cost. In one of the record centres extra feed in the form of clover hay and meal, which was valued at \$605, for 100 cows produced over \$1,670 worth more milk, or the investment made about 170 per cent. The keeping of dairy records tends to eliminate the poor cows from the herd, thus preventing putting in time working for the unprofitable animal.

Mr. Whitley cited one group of 180 cows which gave a million and a half pounds of milk, and claimed that according to their records there were some cows that were earning from \$200 to \$250. There is a great difference in the milk yield of different herds; for instance, in one district 250 cows gave 170,206 pounds of milk more than the same number of cows in another district. Another comparison showed that if 500 cows in one locality had done as well as 500 cows in another, there would have been an extra yield of 48,015 pounds of fat. True, it would require more feed for the latter herd, but we doubt if the labor would be increased very much. Cow testing has been gradually increasing and is bound to spread, because it is one means of ascertaining definitely what each member of the herd is doing, and it enables the feeder to study his animals and feed according to production. On many farms the low-producing cow still has a place. The aim should be to breed and feed so that the average production will gradually increase. As time goes on we have every reason to believe that fewer of the poor milkers will find a place on Ontario farms.

**Butter Grading.**

The question of grading butter received considerable attention at the convention. The work is new as yet, it having been inaugurated only a year ago. John H. Scott, of Toronto, who was the official butter grader last year, gave an address which dealt with the work which had been done during the past season. The scores of the butter from the different creameries showed a considerable variation, which might naturally be expected. However, 82.16 per cent. of the samples graded scored over 92 points, which put them in first grade. Mr. Scott gave practically the same address as he did at the Eastern Ontario Dairymen's Convention, a report of which appeared in the January 17 issue of "The Farmer's Advocate." Mr. Scott considered that marketing on a quality basis is the only fair way for butter to be bought and sold. Ontario has been rather slow in getting started at the grading system, but now that it has been introduced it is expected that the movement

will go forward quite rapidly. There have been criticisms of the system which tend to point out mistakes and suggest new ideas that may be of benefit in the future. It is believed that creameries making an inferior quality of butter will find it more difficult as time goes on to compete with creameries that are taking advantage of progressive methods. While 26 creameries took advantage of the grading system last year, there should be double or treble that number next year.

**Butter Grading From a Creamery Owner's Standpoint.**

Holding cream for too long a period under improper conditions was given by W. Waddell, of Kerwood, as possibly the chief reason for the quality of Ontario butter being lower than it should be for the greatest success of the butter industry. It is not uncommon for cream to be held at a comparatively high temperature, in surroundings which are not as sanitary as they should be. An educational campaign has been carried on for some years, and it has borne fruit to a certain extent at least. Mr. Waddell considered the grading of dairy products as a step in the right direction, and stated "that he could scarcely conceive of anything more satisfactory for a creamery owner or operator than to have every churning of butter scored and recorded by a capable, efficient and disinterested man appointed for that purpose." The grading provides a medium of sale, as the maker can send his butter forward knowing that he will get a square deal, and the buyer can safely purchase on the score of the official grader. The speaker mentioned a case in which having his butter graded was decidedly to his advantage. A number of boxes of butter had been purchased by a dealer who complained that it did not score as high as it had been represented, but, when informed that the score was that of the official grader, no more was said about the matter and the cheque was forwarded. The system induces the maker to put forth every effort to have high-scoring butter. He takes greater care in churning and working the butter. He is more particular about the cream used; thus, there is a tendency for the product to be higher in quality than if the grading was not in vogue. The speaker claimed that the report of each sample, pointing out the weaknesses, was a help to the maker, as it enabled him to locate and remedy deficiencies. A high-scoring butter cannot be made from poor cream; consequently, the grading of butter will eventually lead to the grading of cream. Mr. Waddell has found grading to be an advantage and advised every creamery to adopt the system the coming season.

I. W. Steinhoff discussed the grading service from a butter dealer's standpoint. He considered the grading of butter a step in the right direction, and was sorry that the creamerymen had not taken greater advantage of the system. Even those who had their butter graded did not always separate the grades and sell on a graded basis. However, the speaker claimed that graded butter was attracting attention, and the system should be the means of a more uniform quality of butter being marketed in Ontario. Mr. Steinhoff was one of the butter judges at the exhibition held in connection with the convention, and stated that he was rather disappointed with the quality of butter shown. He advised closer co-operation between creamery men and markets.

**What Grading Has Done For Manitoba.**

L. A. Gibson, Dairy Commissioner of Manitoba, brought greetings from the Western Provinces. Grading of cream and butter has done a good deal for the dairymen of Manitoba. For four years the grading system has been practiced, and the results have been very gratifying. Five years ago fifty-five cars of creamery butter were imported into Manitoba to meet the demands, while in 1917 one hundred carloads of creamery butter were exported from the Province, besides supplying the local demand. Mr. Gibson commended Ontario dairymen in inaugurating the grading system, but informed them that they could not accomplish all that they would like to in one, two or three years, and he advised them to keep up the grading of butter and cream. In Manitoba a difference of two cents a pound is made between Specials and No. 1, and three cents between No. 1 and No. 2. The cream is pasteurized by heating to 165 or 170 degrees and holding it for ten minutes. The speaker contended that the cream-buying stations were a curse to the business. Three years ago there were one hundred such stations in Manitoba, but by enforcing stringent regulations regarding the stations, shipping, etc., the number was reduced to twenty-two last year.

**Cream Gathering Stations.**

A. McKay, who is in charge of a large creamery at Winnipeg, also claimed that the cream-buying station was detrimental to the production of good butter. It simply introduced an extra middleman who cared little for the quality of cream delivered. The grading of cream, he believed, would do a good deal toward eliminating the cream-buying stations. The method of handling cans by the creameries in Ontario was considered to be very wasteful, as the shipper not owning the cans was not very careful in the way he handled them. The creameries in the West purchase cream cans in quantity and then sell them to the patrons at cost price.

**A Dominion-Wide Organization Needed.**

W. A. McKay, Superintendent of Dairying in Nova Scotia, gave a short address in which he stated that dairymen are the most disorganized business men in Canada, as there was no central working body of the dairy industry to champion the cause of dairying. Mr. McKay would like to see a central organization which would be Dominion-wide, with an executive formed of representatives of associations interested in dairying.

He believed that a working organization, democratic in character, would be able to deal with problems as they arise much more satisfactorily than they are being dealt with at the present time. Instead of each local organization petitioning for or against something, the claims of the entire dairy industry could be presented to the authorities by one representative body, and he believed that it would carry a good deal more weight than with separate petitions being presented.

#### Lengthen the Life of Cream Cans.

Prof. Bouska, of Chicago, in commenting on the dairy situation in regard to supplies, etc., claimed that many of the vats which were beginning to show wear might be re-tinned at slight expense and made almost as good as new. At the present time when material for making vats is scarce, this method might prove satisfactory. The speaker advised that greater care of cream cans be taken. Cleaning, sterilizing and drying would prolong the life of the can. The speaker contended that there was a waste in many creameries due to the fact that the cream was not all gotten out of the can or off the lid. The amount of fat lost by this leak was believed to be more than most people have any idea of.

#### Dairy Herd Competitions.

There were only two entries in the dairy herd competition for 1917. This was rather unfortunate, as to enter the competition does not entail much extra work. Barnly Bros., of Lambeth, had the only entry in the cheese-factory section. His herd of sixteen grade cows averaged 4,912 pounds of milk per cow. Allan C. Hallman, of New Dundee, won the prize in the creamery section of the competition. His sixteen grade cows averaged 122 pounds of fat per cow from May 1st to October 31st.

#### Officers for 1918.

The following officers were elected for the ensuing year: President, J. Donaldson, Atwood; First Vice-President, F. Boyes, Dorchester; Second Vice-President, W. G. Medd, Winchelsea; Third Vice-President, J. Scott, Innerkip; Secretary-Treasurer, Frank Hens, London. The Executive of the Association was composed of the above-mentioned officers, together with R. W. Stratton, Guelph.

The evening session was well attended, not only by the dairymen from the surrounding district but by the residents of Stratford. Sir William Hearst, Premier of Ontario, was the speaker of the evening.

## HORTICULTURE.

### Information for Fruit Shippers.

The following information for shippers of fruit is sent out by the Transportation Department of the Dominion Fruit Branch. Forwarding the product is now one of the important branches of the industry, and all growers and shippers should keep in touch with the regulations.

**CHANGING DESTINATION OF CARS IN TRANSIT.**—(a) Request for diversion must be accompanied by original bill of lading and evidence that the change is owing to consignee's refusal to accept shipment, or error in consigning.

(b) When requested under above circumstances and accomplished, a charge of \$3.00 per car for such service will be made, in addition to the current freight rate in effect from shipping point to ultimate destination. In the event of a car being hauled out of the direct line of transit from shipping point to destination a charge of 1 cent per ton per mile (minimum 20 miles) will be made for such extra haul.

(c) The carrier does not assume any responsibility for failure to comply with any request for diversion.

(d) The tariff rate applicable to and from the original billed destination will be charged on all carload shipments which reach the original billed destination.

(e) The original bill of lading must be held until advice of diversion is received. Bill of lading must then be corrected accordingly and surrendered to owner.

**DEMURRAGE CHARGES.**—Forty-eight hours' free time (exclusive of Sundays and legal holidays) shall be allowed for loading or unloading all commodities.

After the expiration of the free time allowed, the following charges shall be made for each day until the car is released:

\$1.00 for the first day or fraction thereof.

\$2.00 for the second day or fraction thereof.

\$3.00 for the third day or fraction thereof.

\$4.00 for the fourth day or fraction thereof.

\$5.00 for the fifth and each succeeding day or fraction thereof.

The detention charges of \$2.00 per day for the first two days, and \$3 per day thereafter, are in addition to above.

**SHIPMENTS SHOWING FROST INJURY.**—Should bulk freight be so frozen in transit or before placement, as to render unloading impossible within prescribed free time, such additional time shall be granted as may be necessary.

**LOSS AND DAMAGE DECISIONS.**—A railway company is liable for failure to furnish a shipper safe and secure cars in which to transport freight delivered by him to it.

A railroad company is bound to furnish a suitable car for the transportation of freight and is not relieved of such liability because the shipper examined the car and did not object to its fitness.

Where a shipment of fruit or vegetables is made in a month when freezing weather is not unusual, and the shipper directs the carrier to leave open a ventilator in the car, he cannot recover for loss caused by severe, but not unprecedented, cold weather.

## POULTRY.

### A Decrease in Egg Receipts.

According to the report of the Poultry Division, Live Stock Branch, Dominion Department of Agriculture, there has been a very great decrease in the number of cases of eggs received at Montreal during 1917, as compared with 1916. The following gives the Montreal egg receipts by months, for the two years:

	1916 cases	1917 cases
January	11,950	2,703
February	15,742	12,120
March	37,233	35,489
April	63,876	50,896
May	80,886	82,441
June	93,446	70,829
July	76,540	22,764
August	37,911	24,909
September	85,181	30,583
October	99,131	29,951
November	148,516	25,632
December	8,114	14,884
Totals	754,526	403,201

If the above table is any criterion of the egg situation over the Dominion, the flocks of this country must have been greatly depleted last year, or else the feed situation has caused a reduction of rations to such an extent that they were not conducive to heavy production. Climatic conditions may also be responsible for a reduced egg yield. It requires extra care and attention to have hens lay during the cold weather, but this has not been forthcoming on many farms. Favorable weather is also needed in the spring for the raising of chicks. Feed has been so high priced that many have kept their hens on little more than a maintenance ration during the past season, with the result that the egg yield has fallen considerably below normal even during the spring and summer months. In many cases slight addition to the ration would no doubt have meant a fair production. The high price of feed has caused many poultrymen to reduce their flocks, and this would naturally cause a falling off in production. A decrease of around 350,000 cases of eggs in 1917 as compared with 1916, on one market alone, is cause for alarm. True, the local consumption may have been greater than usual owing to the high price of meats. What may we expect for next year? Feed prices are, if anything, higher; in fact, some of the most valuable grains for poultry feeding are not available at present. Then, too, in many sections of the country there was a small number of chickens hatched and raised last spring. Many of the pullets were hatched late in May or in June, owing to the fact that hens did not go broody early in the spring. Experience has shown that in order to get a high percentage production during the winter months, pullets should be hatched in April or early in May. Thus we have this factor working against the large egg yield during the early part of 1918. The late-hatched pullets as a rule give a heavy production during the spring, but their yearly egg yield does not compare with that of early-hatched pullets. If the situation along this line is to be improved, the aim should be to hatch the chicks at a comparatively early date this spring and then feed them well throughout the summer. Eggs are a concentrated food product for which there is a demand both at home and abroad. The feed question is a problem, but if the poultryman can get the production from his flock he will come out on the right side of the ledger, even under present high prices. Some men who have kept track of the feed and egg yield during the year have in many cases made a nice profit from their flocks. There are some, however, who through not having a laying strain, or the proper accommodation, have found that the birds did not pay their way. Plans should be made now for next winter's production.

If the birds are not producing no one can be blamed for killing them. By so doing there is a saving in feed and fowl take the place of beef and pork on the table. However, it has been proven by more than one poultryman that poultry raising is profitable as when feed prices are high eggs are also high. It depends largely on whether or not eggs are laid. Thus, a little more efficient management of the flock, more careful selection of breeding stock, feeding a proper ration, etc., might tend to a little heavier production this year.

## FARM BULLETIN.

### An Important Conference on Farm Labor.

From meagre reports which the press was able to obtain of the closed meeting of representatives from every Province in the Dominion with the Hon. T. A. Crerar, Federal Minister of Agriculture, held last week to discuss the farm labor situation, we are led to believe that some really efficient if not quite drastic methods for the solution of the problem are under contemplation and likely to be in effect before very long. We understand that the Provincial representative men were called to Ottawa to discuss with the Dominion Minister of Agriculture ways and means of overcoming some of the labor difficulties with which agriculture is faced at this critical time when men are scarcer than ever before and foodstuffs produced on the farm are more urgently needed. From our understanding of the reports published in the press certain recommendations were made to

the Hon. Mr. Crerar and these will be thoroughly considered and discussed by the Federal Cabinet, with a view to early action satisfactory to all.

At the same time this conference on labor for the farms was in progress, representatives of organized labor were in conference with members of the War Cabinet and from the two meetings an equitable and satisfactory system of supplying labor to necessary industries should be evolved.

Those present at the meetings in connection with the farm labor problem were: Hon. T. A. Crerar, Minister of Agriculture; J. D. McLean, of British Columbia; Hon. Duncan Marshall and Dean A. E. Howes, of Alberta; Hon. W. R. Motherwell and F. H. Auld, of Saskatchewan, Louis Kon, of Manitoba; C. F. Bailey and Dr. W. R. Riddell, of Ontario; J. A. Grenier, of Quebec; Hon. J. F. Tweeddale, of New Brunswick; H. M. Tory, of Nova Scotia, and Hon. A. E. Arseneault of Prince Edward Island.

The meeting opposed the idea of bringing Chinese coolies into this country, as did also the labor delegation. It is just possible, however, that the suggestion that 100,000 of these laborers be brought into Canada for the duration of the war may be some good after all. If it does nothing else, it has awakened organized labor to the seriousness of the situation and by discussion will surely bring about action which will make it wholly unnecessary to take such an unwise step.

Mr. Auld, of Saskatchewan, believed that by the judicious use of traction machinery the acreage under cultivation in the West could be materially increased and in this connection he advocated action to reduce the tariff on farm machinery. He also thought the Government should lose no time in fixing the price of the 1918 wheat crop to encourage the sowing of a large acreage this spring. Live stock could be increased greatly in the Northern portions of the three Prairie Provinces. He also favored nationalization of coal mines, packing plants, storages, and possibly railroads.

The utilization of High School boys on the farms was favored, and in this connection C. F. Bailey, Assistant Deputy Minister of Agriculture in Ontario, went a little farther and suggested a plan to reach the 80,000 boys in Ontario, between 17 and 20 years old, who are not in school but are clerking or at other work which could be done by girls. He estimated that at least three-fifths of these could be replaced by female labor and release these lads, many of whom were born on the farm, for farm work. He suggested the renting of a building in Toronto as a recruiting place. Suitable signs and banners could be used to show the importance of the boys enlisting to do their bit in the fields. Returned soldiers could be employed to do the recruiting and if the plan worked it could be spread to other cities and towns. He believed that a large number of boys anxious to help, but too young for the army, could be obtained in this way.

The Conference, as previously stated, opposed the idea of bringing in Chinese labor, holding that it would be of little use for two years if obtained, and that once here Canada would never be rid of it so that eventually it would prove a curse instead of a blessing. On the other hand, those present favored the mobilization of the entire man, woman, boy and girl power of the country, which means putting all at what they can do best in the interests of the country and which virtually means conscription for the farm. There are thousands of men in the first class who have had farm experience and physically fit to do some farm work, if not to fight. Plans might be made to get these on the land. Also, men who are actually engaged in farm work or professional agricultural work which is beneficial at these times should, in the opinion of those at the Conference, not be taken into the army, but alien labor should be forced to work.

Campaigns for increased production are likely to be put on again this year and the Federal Government will likely co-operate with the various Provincial Governments to work this out to the best advantage in all the provinces. The problem is so different in the various provinces that it becomes practically necessary for the provinces to handle separate campaigns with the help of the Dominion.

When labor is so scarce the Conference was of the opinion that non-essential industries should be closed up until the end of the war, and that all construction work be left over unless absolutely needed. Contractors might be asked to get permits before they could go ahead with building or other work of that nature.

In view of the fact that tractors and such machines are so important in production at this time, those present thought that they, with the necessary oils and parts, should be allowed to enter Canada duty free.

The meeting decided that all help available should be used on the farms. Some university girls who had experience on fruit farms last year are now desirous of going on mixed farms this year and are at present learning to milk cows, harness and drive horses, clean out stables, and do all kinds of work on the farm of Jos. Kilgour, near Toronto. In the opinion of the Conference, such girls anxious to help should be given a chance.

Canada is at war and until the end can do without circuses and side shows. These, in the opinion of those present, should be barred from entering this country for the duration of the war. The public would back up a move in this direction.

Some thought a maximum wage should be fixed for farm labor; others opposed the idea.

So far as could be learned, the labor delegation was sympathetic toward the needs of agriculture, but of course desired that organized labor should not be interfered with without being consulted. The public will await with interest the outcome of the Conference. Action is urgently needed.

ghly con-  
net, with

or for the  
organized  
the War  
table and  
necessary

n with the  
Minister of  
bia; Hon.  
Alberta;  
atchewan,  
Dr. W. R.  
ec; Hon.  
Tory, of  
of Prince

y Chinese  
legation,  
tion that  
Canada for  
after all.  
zed labor  
discussion  
it wholly

t by the  
ge under  
increased  
duce the  
Govern-  
the 1918  
acreage  
greatly  
rovinces.  
packing

arms was  
Assistant  
went a  
e 80,000  
who are  
rk which  
at least  
le labor  
on the  
ing of a  
Suitable  
portance  
ds. Re-  
cruiting  
er cities  
of boys  
uld be

osed the  
t would  
at once  
entually  
On the  
on of the  
country,  
best in  
y means  
ands of  
erience  
o fight.  
Also,  
or prot-  
at these  
ference,  
ould be

y to be  
ent will  
Govern-  
all the  
various  
ary for  
with the

of the  
osed up  
on work  
ractors  
uld go  
re.  
achines  
resent  
parts,  
should  
o had  
esirous  
resent  
clean  
of Jos.  
e Con-  
iven a  
without  
those  
untry  
ck up a  
ed for  
on was  
out of  
inter-  
ic will  
erence.

# Toronto, Montreal, Buffalo, and Other Leading Markets

Week Ending January 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 Jan. 17	Same Week 1917	Week Ending Jan. 10	Week Ending Jan. 17	Same Week 1917	Week Ending Jan. 10	Week Ending Jan. 17	Same Week 1917	Week Ending Jan. 10	Week Ending Jan. 17	Same Week 1917	Week Ending Jan. 10
Toronto (Union Stock Yards)	1,994	5,943	4,993	\$12.35	\$10.35	\$12.00	142	630	598	\$16.00	\$13.00	\$16.00
Montreal (Pt. St. Charles)	718	908	857	11.60	10.15	11.25	137	242	243	17.00	11.00	16.50
Montreal (East End)	654	986	978	11.60	10.15	11.25	77	323	230	17.00	11.00	16.50
Winnipeg	2,162	1,494	1,957	12.00	8.15	11.00	40	56	62	12.00	9.00	10.00
Calgary	1,208	1,171	1,237	10.75	7.50	10.10						

	HOGS						SHEEP					
	Receipts		Top Price Selects				Receipts		Top Price Good Lambs			
	Week Ending Jan. 17	Same Week 1917	Week Ending Jan. 10	Week Ending Jan. 17	Same Week 1917	Week Ending Jan. 10	Week Ending Jan. 17	Same Week 1917	Week Ending Jan. 10	Week Ending Jan. 17	Same Week 1917	Week Ending Jan. 10
Toronto (Union Stock Yards)	3,321	10,659	9,863	\$19.50	\$12.75	\$18.75	470	1,554	2,813	\$19.50	\$14.25	\$19.25
Montreal (Pt. St. Charles)	800	2,551	1,972	19.75	13.75	19.50	1,829	1,893	841	16.50	13.50	16.50
Montreal (East End)	548	1,062	1,181	19.75	13.75	19.50	879	1,627	1,600	16.50	13.50	16.50
Winnipeg	9,600	9,223	9,853	19.00	12.50	17.75	47	82	92	16.50	12.50	17.75
Calgary	4,390	2,877	5,405	18.25	11.25	17.60		322	72		11.50	15.75

## Market Comments.

### Toronto (Union Stock Yards)

Owing to the severe storm that swept over Ontario Saturday and Sunday, the markets this week were characterized by exceptionally light offerings of live stock, the total number of cattle on sale during the week barely reaching two thousand head; seven hundred of these were on the Monday market, while on Tuesday and Wednesday, the only stock on sale was a few belated cars that were shipped Friday and were delayed en route by the storm. A few shipments were accepted for the Thursday market, when about five hundred cattle and one thousand six hundred hogs were on sale. If the weather continues fair, moderate runs may be expected for next week. With such light supplies of cattle available, scarcely sufficient to go around, buyers were forced to make liberal advances on all classes of stock. Cattle were selling throughout the week at fifty and, in some cases, seventy-five cents above last week's closing prices. However, this advance will not likely be maintained when supplies again become normal. No heavy cattle were on sale Monday, but Tuesday twelve head of one thousand four hundred pounds, each shipped from Ridgeway, sold at \$13.00 per hundred, while a few other heavy steers sold at \$12.50. Butcher steers of ten hundred to eleven hundred pounds sold from \$11.50 to \$12.35, fourteen head of ten hundred and of a similar weight sold at \$12.20, and fourteen head at \$11.85. Light handy-weight steers and heifers reached \$11.50, fourteen head of eight hundred and fifty pounds bringing this price. Twenty-six head of eight hundred and ninety pounds brought \$11. Cows advanced in sympathy with other grades, choice cows selling up to \$11.25, with a number of sales being made at \$10.50, good cows bringing from \$9.75 to \$10.50, and medium from \$8.50 to \$9.50 per hundred. One choice bull of thirteen hundred pounds sold at \$11.25, a number of sales being made at \$10.50. Medium bulls sold at \$8.50 to \$9.50 per hundred, while Bologna bulls realized \$7.50 to \$8. No trading was transacted in stockers and feeders this week. Calves were at premium, the bulk of the best veal selling from \$15 to \$16, with a choice calf reaching \$17 per hundred.

Lamb and sheep receipts were limited to about three hundred head, and but little change occurred in prices. A few choice lambs sold as high as \$19.50 per hundred, the bulk selling from \$18.50 to \$19.25. Sheep were a trifle stronger than last week's quotations.

All the hogs on the Monday market were contracted for at last week's closing prices of \$19 per hundred, and practically no further hogs were received except those consigned to the local abattoirs, until Thursday, when sixteen hundred were on sale. Buyers were forced to bid up on these, sales being made at \$19.25 to \$19.50 per hundred, the bulk moving at the latter price.

Of the disposition from the Yards for the week ending January 10th, Canadian packing houses bought 233 calves, 40 bulls, 3,875 butcher cattle, 10,584 hogs, and 2,380 sheep and lambs. Local butchers purchased 295 calves, 562 butcher cattle, 265 hogs, and 366 sheep and lambs. Canadian shipments were made up of 23 calves, 28 milch cows, 152

TORONTO (Union Stock Yards)					MONTREAL (Pt. St. Charles)				
CLASSIFICATION	No.	Avg. Price	Price Range Bulk Sales	Top Price	No.	Avg. Price	Price Range Bulk Sales	Top Price	
STEERS heavy finished	13	\$12.75	\$12.50-\$13.00	\$13.00					
STEERS 1,000-1,200 good	49	11.75	11.25-12.25	12.35	23	\$11.60	\$11.50-\$12.00	\$12.00	
STEERS 700-1,000 common					26	10.85	10.70-11.00	11.00	
HEIFERS good	372	11.25	10.75-11.50	11.75	49	11.10	11.00-11.50	11.50	
HEIFERS common	99	9.59	8.75-10.50	10.50	109	9.75	9.25-10.00	10.25	
COWS good	141	11.47	10.75-12.00	12.00	22	11.25	11.25-	11.25	
COWS common	291	9.86	9.25-10.50	10.50	22	9.25	8.50-9.50	9.50	
BULLS good	22	8.59	8.00-9.00	9.00	47	7.90	7.75-8.25	8.25	
BULLS common	160	9.76	9.00-10.50	11.25	19	10.00	9.50-10.75	10.75	
CANNERS & CUTTERS	401	7.80	7.50-9.00	9.50	147	9.00	8.50-9.50	9.50	
OXEN	47	9.90	9.90-10.50	11.25	26	10.75	10.25-11.50	11.50	
CALVES veal	37	7.84	7.00-8.50	9.75	63	7.75	7.50-9.50	10.00	
CALVES grass	270	6.25	5.75-6.50	6.50	148	6.50	6.00-6.75	6.75	
STOCKERS 450-800 good	10				10				
STOCKERS 450-800 fair	133	14.17	13.00-16.00	16.00	87	14.00	12.00-17.00	17.00	
FEEDERS 800-1,000 good	9	7.00	6.00-9.00	9.00	50	7.00	7.00-	7.00	
FEEDERS 800-1,000 fair	17	8.50	8.00-8.75	9.00					
HOGS (fed and watered) selects	37	7.51	7.00-8.00	8.25					
HOGS (fed and watered) heavies	36	9.75	9.25-10.00	10.00	609	19.65	19.50-19.75	19.75	
HOGS (fed and watered) lights	2	9.00	8.50-9.50	9.50	1				
HOGS (fed and watered) sows	3,255	19.29	19.00-19.50	19.50	163	18.65	18.50-19.00	19.00	
HOGS (fed and watered) stags	10	19.40	19.00-19.50	19.50	26	17.25	17.25-	17.25	
LAMBS good	30	18.00	17.00-18.50	18.50	1				
LAMBS common	23	17.30	17.00-18.50	18.50	1,099	16.50	16.50-	16.50	
SHEEP heavy	3	15.25	15.00-15.50	15.50	418	15.50	15.00-16.00	16.00	
SHEEP light	365	18.88	18.00-19.50	19.50					
SHEEP common	69	17.00	16.00-17.50	18.00	230	12.75	12.50-13.00	13.00	
	5	11.00	10.00-12.00	12.00	82	11.50	10.00-12.00	12.00	

butcher cattle, 278 stockers, 46 feeders, and 243 hogs. No shipments were made to the United States during the week.

The receipts of live stock at the Yards from January 1st to January 10th, inclusive, were 6,818 cattle, 912 calves, 3,513 sheep, and 14,502 hogs; compared to 8,785 cattle, 1,328 calves, 3,162 sheep and 17,526 hogs, received during the corresponding period of 1917.

### Montreal.

Receipts of butcher cattle were slightly fewer than last week, totalling thirteen hundred and seventy-two head. The snow blockade on the railway was responsible for the light receipts, a number of drovers not being able to ship their stock, as some of the railway lines remained closed to all freight movement until Thursday. The market opened steady at firm prices and continued so throughout the week, all classes and grades bringing exceptionally good values. Butcher steers weighing from one thousand to twelve hundred pounds sold from \$11.50 to \$12 for the best. Fifty head of steers weighing around one thousand pounds sold from \$10.75 to \$11.50, twenty-five head at \$9.25, and the majority from \$9.25 to \$10.25. Very few good quality heifers were received, and those offered were weighed up with the steers at \$11.25 per hundred, while

those of common to medium quality sold from \$8.50 to \$9.50. The best sales for butcher cows were made at \$10.75, while most of the good ones sold at \$9, and common from \$7 to \$8. A strong demand exists for big, heavy cows that will kill out well. Some exceptionally good quality bulls were offered and prices were strong, the best animals selling at a top of \$11.50, while the majority sold from \$8.50 to \$10. Calves were advanced 50 cents per hundred in a strong market, those of good quality selling up to \$17, while the range for the week was from \$10 to \$17.

Receipts of lambs were much increased over those of last week, over twenty-seven hundred being on sale. Despite this material increase, demand was strong and prices unchanged from those prevailing at the close of last week, good lambs selling at \$16.50 per hundred, and common from \$15 to \$16. A large percentage of the receipts were bucks. Sheep remained unchanged from \$12 to \$13 per hundred.

Hogs were scarce all week and those received contained a large number of lights, the per cent. of which is increasing weekly. Demand was strong and prices were advanced 25 cents over those of last week, selects selling from \$19.50 to \$19.75, fed and watered. Very few sows were offered; those on sale brought \$2.50 per hundred below the price of selects.

**PT. ST. CHARLES.**—Of the disposition from the Yards for the week ending January 10th, Canadian packing houses and local butchers purchased 243 calves, 232 canners and cutters, 63 bulls, 502 butcher cattle, 861 lambs and 1,972 hogs. Canadian shipments were made up of 34 canners and cutters, and 21 butcher cattle.

The receipts of live stock from January 1st to January 10th, inclusive, were 883 cattle, 269 calves, 878 sheep and 2,125 hogs; compared to 1,648 cattle, 490 calves, 1,893 sheep, and 2,551 hogs, received during the corresponding period of 1917.

**EAST END.**—Of the disposition from the Yards for the week ending January 10th, Canadian packing houses and local butchers purchased 230 calves, 922 butcher cattle, 1,181 hogs and 989 lambs. Canadian shipments consisted of 56 butcher cattle, and 611 lambs.

The receipts of live stock from January 1st to January 10th were 1,093 cattle, 230 calves, 1,623 sheep, and 1,229 hogs; compared to 1,955 cattle, 539 calves, 2,460 sheep and 2,403 hogs, received during the corresponding period of 1917.

### Winnipeg.

An exceptionally good demand prevails in all quarters for large supplies of beef, and forecasts on the market are

Incorporated 1855

**Farmers Who Call**  
at any of the Branches of  
**THE MOLSONS BANK**  
are always made welcome.

Especially at this time when increased production is so essential, our Managers will cheerfully discuss with farmers their financial situation.

Savings Department at all Branches  
Interest at Highest Current Rate

most encouraging to shippers. Cattle dealers contend that the quality of the present run of cattle has not the same high standard as last year. Prices, however, are easily \$2 to \$3 per hundred higher than in January, 1917, and \$1 in advance of the prices of last month. The majority of the run this week consisted of rough, hay-fed cattle, while few choice, grain-fed steers were available. One steer weighing thirteen hundred and fifty pounds sold at \$12.50 per hundred, and three steers of similar weights at \$12; twenty-three head averaging eleven hundred and sixty pounds sold at \$11.75, and a number at \$11; most of those weighing over one thousand pounds sold from \$9.75 to \$11.30. Light, handy-weight steers sold well, a number being weighed up at \$10.75, while eleven head averaging eight hundred and sixty pounds brought \$10 per hundred; most of those of good quality from \$9 to \$10.20. Medium sold from \$7.50 to \$8.60. The female classes were unchanged in price. Strong prices featured the trading in heifers, thirty-six head averaging twelve hundred and eighty pounds selling at \$11, most of the best from \$9.80 to \$11, and those of fair quality from \$8.60 to \$9.25. Good, fleshy cows made a top price of \$10.50, and sold from \$8.25 to \$9.25 for those of good quality, and \$7 to \$8 for fair. Very few good milkers and springers were offered, and only those of good promise are in demand; they sell from \$75 to \$125 each. Canners and cutters sell from \$5 to \$6. Bulls and oxen continued in excellent demand, one bull selling at \$10 per hundred. The majority of those of good quality brought from \$7.50 to \$9, and those of medium quality from \$6 to \$7.50.

Hog receipts showed a decrease from the previous week of two hundred and fifty head. The quality of the run was good. The market opened steady on Friday at \$18 per hundred for selects, fed and watered, and advanced 25 cents per hundred on Monday.

#### Calgary.

Twelve hundred and eight butcher cattle were on sale during the week, being slightly fewer in number than those of the previous week. The top price of the week was \$10.75 per hundred, which price was paid on a steer weighing over fifteen hundred pounds. Twenty-four cows averaging eleven hundred and fifty pounds sold at \$8.25. On Tuesday fourteen steers averaging thirteen hundred pounds brought \$9.75, and two oxen of eighteen hundred and eighty pounds each, \$9.50. On Wednesday twenty steers of eleven hundred and thirty pounds sold at \$10 per hundred, while on Thursday twenty steers averaging eleven hundred sold at \$9.90. The stocker market remains slow.

No sheep or lambs were received during the week.

The market for hogs showed exceptional strength, and prices advanced to \$18.25 per hundred for selects, fed and watered. Later deliveries are reported to have been contracted for at higher prices. Receipts for the week were forty-three hundred and ninety-two.

The total receipts from January 1st to January 10th, inclusive, were 1,745 cattle, (including calves), 284 sheep and 7,477 hogs; compared to 2,757 cattle, (including calves), 447 sheep and 9,301 hogs, received during the corresponding period of 1917.

#### Edmonton.

Light receipts of cattle were on hand

during the week, and the majority of the offerings were of medium quality, consisting largely of stocker cattle. Considerable activity existed for breeding stock on Tuesday, on which day all holdings were cleaned up through the medium of a well-advertised auction sale. A considerable number of farmers were on the market and were keen buyers of both stockers and breeding females, for which high prices were paid. Most of the stockers sold by the head, and would average from \$7.50 to \$8 per hundred. Fifteen females were shipped out under the Free Freight Policy, and twenty cars under the Car-Lot Policy during the week. The majority of the heavy steers offered sold as feeders. Ten butcher steers weighing nine hundred and forty pounds sold at \$9, and four steers of nine hundred and sixty sold at \$8.75. Cows were firm in price from \$7 to \$7.50, while a number of good quality and dairy type, sold by auction from \$90 to \$120 each.

Sheep receipts were light, and no market was established.

The hog market remained firm all week with fairly liberal offerings on hand. Selects sold on the opening market at \$17.60 fed and watered, advanced steadily throughout the week and closed on Thursday at \$18.40, the highest prices on record for the Edmonton Stock Yards. A strong demand exists for breeding sows of which class forty-two were shipped from the Yards during the week under the terms of the Free Freight Policy. These were all purchased by one breeder.

Of the disposition from the Yards for the week ending January 10th, Canadian packing houses purchased 20 butcher cattle, and 755 hogs. Canadian shipments consisted of 58 butcher cattle, 87 stockers and 116 hogs. Shipments to United States points were made up of 24 stockers.

#### Buffalo.

Cattle.—Unprecedented cold weather, demoralizing railway transportation had the effect of shooting cattle prices at Buffalo last week, values on steers showing an advance of from \$1 to \$2 per hundred, while fully a dollar a hundred and better advance was had on all classes of cows and heifers, excepting possibly canner and cutter stuff, which rules a quarter to half dollar per hundred above the preceding week's prices. Receipts, as the result of the terrific blizzard, were light and killers, locally, as well as from the outside, jumped the fences for cattle. Light handy steers sold higher than for anytime within a very long period, handy grades on the fairish to good reaching up to \$13.60 to \$14 per hundred. Any class of cattle was ready sale at the fictitious values. With normal conditions restored, there is reason to expect a substantial lowering of values but there is hardly reason to expect better runs next week, as the railways are in bad shape and are moving stuff very slowly and at some stations decline to accept live stock. Offerings for the week totaled 1,950 head, as against 3,800 head for the previous week and 4,825 head as compared with the corresponding week a year ago.

Quotations:  
Shipping Steers—Natives—Choice to prime, \$13.60 to \$14; fair to good, \$12 to \$13.35; plain, \$10 to \$11; very coarse and common, \$9.25 to \$9.75.

Shipping Steers—Canadians—Best grass, \$12 to \$12.50; fair to good, \$11.50 to \$11.75; common and plain, \$9.75 to \$10.25.

Butchering Steers.—Choice heavy, \$11.75 to \$12.25; fair to good, \$10.50 to \$10.75; best handy, \$12.75 to \$14; fair to good, \$10.25 to \$10.75; light and common, \$9 to \$9.75; yearlings, choice to prime \$12 to \$12.50; fair to good, \$10.50 to \$11.25.

Cows and Heifers.—Best heavy heifers, \$10 to \$10.50; good butchering heifers, \$8.60 to \$9.50; fair butchering heifers, \$8.25 to \$8.50; common to fair, \$6.50 to \$7.75; very fancy fat cows, \$10 to \$10.25; best heavy fat cows, \$9 to \$9.50; good butchering cows, \$8.25 to \$8.75; medium to fair, \$6.50 to \$7.50; cutters, \$6 to \$6.25; canners, \$1.50 to \$5.75.

Bulls.—Best heavy, \$9.25 to \$10.50; good butchering, \$8.50 to \$9.25.

Stocker and Feeders.—Best feeders, \$9 to \$9.25; common to fair, \$7.25 to \$8.50; best stockers, \$7.50 to \$8; fair to good, \$6 to \$7; common, \$5 to \$5.75.

Milchers and Springers.—Good to best, in small lots, \$90 to \$135; in car loads, \$80 to \$100.

Hogs.—Owing to the severe storm receipts last week were exceedingly

light and as a result prices showed a sharp advance from day to day. Monday, with only 35 cars, top at Buffalo was \$18.15, bulk sold at \$18 and \$18.10 and pigs mostly at \$17. These prices were from 50 to 60 cents higher than the closing day of the week previous. Tuesday and Wednesday best hogs brought up to \$18.50 and 18.60, Thursday they brought \$18.75 and Friday, with enough orders here to handle a Monday supply, better weight grades were jumped up to \$19.25 and pigs reached \$18.25. Roughs sold from \$16.50 to \$17, and stags \$15.50 down. Last week receipts totalled only 10,900 head, as against 28,384 head for the week before and 32,000 head for the same week a year ago.

Sheep and Lambs.—This department of the trade also showed light receipts and a higher trade last week. Best lambs sold up to \$19.25 to \$19.50 and cull lambs reached \$18.50. Heavy yearlings made \$16.50, choice handy ones were quoted up to \$17, wether sheep were ranged as high as \$14 and ewes sold from \$13 down. Receipts last week totalled 7,400 head, as compared with 11,556 head for the week before and 16,500 head for the same week a year ago.

Calves.—Prices struck the highest level in the history of the trade last week. Monday choice lots sold at \$18, Tuesday and Wednesday the quality was not very good and none sold above \$17.50, Thursday tops again brought up to \$18 and Friday, which was the highest market on record, best veals made \$18.50 and \$19. Cull grades sold from \$16.50 down and light fed calves were ranged up to \$9. Last week receipts were 1,250 head, as against 1,959 head for the previous week and 1,850 head for the same week a year ago.

#### Toronto Produce.

Live-stock receipts at Union Stock Yards, West Toronto, Monday, January 21, were 221 cars, 3,794 cattle, 185 calves, 3,776 hogs, 630 sheep and lambs. Slow market. Butchers good 50 cents lower; good cows 25 cents lower; medium cows one dollar lower; bulls steady, milkers, springers, stockers, feeders, sheep, lambs and calves steady. Hogs, \$19.25, fed and watered.

#### Breadstuffs.

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

Oats.—Ontario, according to freights outside, No. 2 white, 83c. to 84c., nominal; No. 3 white, 82c. to 83c., nominal; Manitoba oats (in store, Fort William)—No. 2 C. W., 90c.; No. 3 C. W., 82½c.; extra No. 1 feed, 81½c.; No. 1 feed, 77½c.

Barley.—(According to freights outside) malting, \$1.43 to \$1.45.

Peas.—(According to freights outside No. 2, \$3.70 to \$3.80.

Buckwheat.—(According to freights outside) \$1.55 to \$1.58.

Rye.—(According to freights outside) No. 2, \$1.78.

Flour.—Manitoba first patents in jute bags, \$11.50; second patents, in jute bags, \$11; strong bakers, \$10.60; Ontario winter wheat flour, according to sample in bags, \$10.10, Montreal; \$9.95, Toronto; \$9.90, bulk, seaboard.

#### Hay and Millfeeds.

Hay.—Track, Toronto, No. 1, new, per ton, \$15.50 to \$16.50; mixed, per ton, \$13 to \$15.

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

Bran.—Per ton, \$35.

Shorts.—Per ton, \$10; middlings, per ton, \$45 to \$46. Good feed flour, per bag, \$3.25.

#### Hides and Wool.

City Hides.—City butcher hides, green, flat, 20c.; calf skins, green, flat, 23c.; veal kip, 20c.; horse hides, city take-off, \$5 to \$6; city lamb skins, shearings and pelts, \$1.50 to \$2.25; sheep, \$2.50 to \$4.

Country Markets.—Beef hides, flat, cured, 18c. to 19c.; deacons or bob calf, \$1.50 to \$1.75 each; horse hides, country take-off, No. 1, \$5.50 to \$6; No. 2, \$5 to \$6. No. 1 sheep skins, \$2.50 to \$3.50. Horse hair, farmers' stock, \$25.

Tallow.—City rendered, solids, in barrels, 13c. to 14c.; country solids, in barrels, No. 1, 12c. to 16c.; cakes, No. 1, 14c. to 16c.

Wool.—Unwashed fleece wool, as to quality, fine, 60c.; coarse, 58c.; washed wool, fine, 70c.; coarse, 65c.

#### Country Produce.

Butter.—Creamery butter firmed slightly in price on the wholesales during the past week, the dairy varieties remaining stationary. Creamery fresh-made pound squares, 50c. to 51c. per lb.; creamery solids at 46c. to 47c. per lb.; dairy at 35c. to 40c. per lb.

Oleomargarine.—32c. per lb.  
Eggs.—New-laid eggs declined slightly, the cold storage remaining stationary, selling as follows, wholesale: New laid 65c. per doz.; No. 1's selling at 47c. per dozen and selects at 51c. per dozen.

Cheese.—New, large, 24c.; twins, 24½c.; old, 30c. to 31c.; twins, 31c.

Poultry.—Live weight prices advanced during the past week. The prices now being paid to the producers being as follows: Chickens, milk-fed, 25c. per lb.; chickens, ordinary fed, 22c. per lb.; fowl, 3½ lbs. and under, 20c. per lb.; fowl, 5 lbs. and over, 27c. per lb.; ducklings, 24c. per lb.; geese, 18c. per lb.; turkeys, young, 25c. per lb.; turkeys, old, 22c. per lb.

#### Wholesale Fruits and Vegetables.

There has been very little business done on the wholesales during the past week owing to the delayed arrivals of fruits, etc., due to the heavy storms.

Potatoes have become very scarce—The few Ontarios on hand being offered at \$2.25 to \$2.40 per bag.

#### Montreal.

Horses.—Dealers reported absence of demand, and very light offerings of horses with steady prices. Heavy draft, weighing 1,500 to 1,700 lbs., \$225 to \$275 each; light draft, weighing 1,400 to 1,500 lbs., \$175 to \$225 each; small horses, \$150 to \$200 each; culls, \$75 to \$125. Good saddle and carriage horses, \$200 to \$250 each.

Poultry.—Demand for turkeys and chickens continued fair, and the market was quite firm, at around 34c. to 35c. per lb. for turkeys, with chickens and ducks ranging from 25c. to 29c., and geese and fowl at from 19c. to 23c.

Dressed Hogs.—Offerings of dressed hogs from the country were about the same as usual, and prices ranged from 25¼c. to 25¾c. per lb. Abattoir-killed stock sold at 27c. to 27½c. per lb.

Potatoes.—Food Controller Hanna denies that he fixed the price of potatoes at \$2.25 per barrel. There is a surplus of 7,000,000 bushels in Canada, and 100,000,000 bushels in the U. S. Sales of Green Mountain potatoes were being made here at \$2.25; Ontario stock \$2.15 for white, and \$2.05 for red, this being per 80-lbs. ex-store. The tendency of the market was easier.

Honey and Maple Syrup.—Very little maple syrup is available, but the quotation ranged from \$1.40 to \$1.80 per gallon, for syrup, and 15c. to 20c. per lb. for sugar. Honey was 19c. to 22c. for white clover comb, and 17c. to 19c. for brown comb, or white extracted.

Eggs.—The price of eggs advanced, and consumption of the better grades is falling off. New laid eggs were quoted at 70c.—but they were not new laid. So-called fresh eggs were 58c.; selected, cold storage 52c.; No. 1 cold storage 48c. and No. 2 45c.

Butter.—The price of butter tended upwards for the finest September and October makes, these ranging from 46c. to 47c., with fine at 1 cent under. Current receipts could be had at 44½c. to 45c., and fine dairies at 38c. to 39c. Margarine sold at about 34c. to 37c. in a retail way.

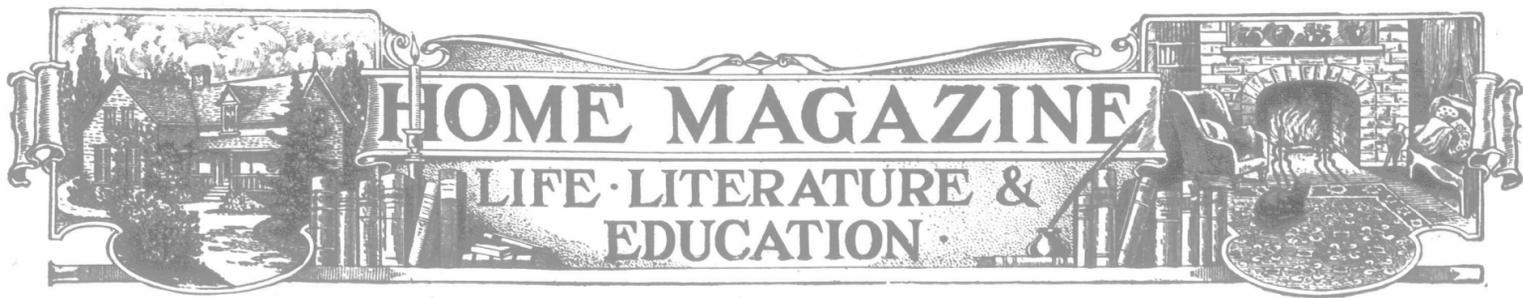
Cheese.—The price remained unchanged at 21¾c. per lb. for No. 1 white, 21¼c. for No. 2; 20¾c. for No. 3.

Grain.—No. 3 Canadian Western oats were quoted at 98c. to 98½c. per bushel; No. 1 feed was quoted at 95c. to 95½c.; No. 2 feed 91½c. to 92c.; Ontario No. 2 white oats, 92c. to 92½c.; No. 3, 91c. to 91½c.; No. 4, 89½c. to 90c. per bushel, ex-store. No. 2 Canadian Western quoted on a basis of 99½c. track, Montreal. The price of Ontario malting barley was firm at \$1.56 per bushel, ex-track.

Flour.—The market was unchanged at \$11.60 per barrel for Manitoba first patents; \$11.10 for seconds and \$10.90 for strong bakers, in bags. Ontario winter wheat flour was steady at \$10.70 to \$11 per barrel, for 90% patents in wood, and \$5.25 to \$5.40 per bag.

Milled.—Prices were unchanged at \$35 per ton for bran; \$40 for shorts; \$48 to \$50 for middlings; \$56 to \$58 for mixed

Continued on page 134.



**Wanted.**

BY J. G. HOLLAND

'God give us men. The time demands  
Strong minds, great hearts, true faith  
and willing hands.  
Men whom the lust of office does not kill;  
Men whom the spoils of office cannot buy  
Men who possess opinions and a will;  
Men who have honor; men who will not  
lie;  
Men who can stand before a demagogue  
And dam his treacherous flatteries with-  
out winking;  
Tall men, sun-crowned, who live above the  
fog  
In public duty and in private think-  
ing.'

**Shadows of War.**

BY MARKARID GARODIAN,  
IN "THE INDEPENDENT."

[Markarid Garodian is an Armenian girl thirteen years old. She is one of the two and a half million refugees in the Near East for whom the American Committee for Armenian and Syrian Relief are attempting to provide the necessities of life. Markarid's father was massacred, her mother driven out in the desert, her baby sister starved to death. She was taken into a harem. She escaped, joined her brothers in a long trip over the Dersim Mountains to a relief station in Erenzum, Russia. Two of the children died on the way. Two brothers, and this girl, finally reached safety and joined the throng of homeless people who daily gathered about the fire at the relief soup kitchen for their steaming bowls of vegetable soup and coarse bread.—THE EDITOR.]

MY father was a merchant at Harpoot. He bought and sold beautiful Oriental rugs. Many American people came to him because my father was a Christian and a merchant whose word they could depend upon. He could speak English and he had studied in America when he was a young man.

We had a beautiful home and were very happy then. Our home was shut off from the street by a high wall. A little gate opened from the street into the courtyard in front of our home. This court was a lovely place. There were shady trees and bright-colored flowers all about. In one corner was a fountain or pool of cool running water.

Our house was two stories high. A hallway opened in the front, running through the house. My mother had made this place very beautiful with draperies and plants. Here our father often received his friends and our mother served coffee to them.

On either side of this hall were rooms with divans and many colored rugs. Our very prettiest rooms were on the second floor. To reach our second-story rooms we went up steps outside the house on to a balcony that hung over the garden. We children used to have happy times playing there.

The smaller children went to the American Mission School and my brother and I were in the American College, where our uncle was professor. In the school there were five hundred students. We studied history, mathematics, literature and languages. My brother and I speak English and French as well as Armenian and Turkish.

We lived happy, peaceful lives until two years ago. Our father took us for delightful picnics on holidays. He was very good to us and had planned that our oldest brother should study medicine in America when he grew up.

But my father is gone now; everything is gone except my two brothers.

One day two years ago we came home from school early in the afternoon. The day was Hrand's birthday and Hovanis and I knew that mother had planned a

surprise for him. We hurried home from school so that we might help her with the preparations.

We found our father at home, although it was only mid-afternoon. One of the city police was with him. The man was telling my father that he must leave his store, his home and his family, and go away to work on the roads.

My mother was crying and clinging to father's arm.

"You cannot go, you must not go," she kept saying over and over.

We children began to cry, too.

Our father, turning to us, bid us keep still. Then he talked with our mother, telling her that she must be very brave.

The officer stood impatiently waiting and said, "You must come now."

Our father kissed us good-bye and went away.

We never saw him again.

We heard that fifty Armenian business men, our father with them, were driven out to work for days and days building roads and then later killed.

A week after our father was taken away our uncle and all of the men of the town, including the professors in the colleges and all the rest of the business men were thrown into prison and tortured. We could sometimes hear their screams as we passed by the prison.

The head of our mathematics teacher was cut off and put out on a stick outside the prison wall.

After our father had gone away with the officer our mother did not send us to school. We were very sad and lonely. We thought we were very, very unhappy then, but we were comfortable and had plenty to eat because our father had left two bags of money and we could go out and buy things in the market place.

Then one day a terrible thing happened. An officer came to the house and said our mother would have to go away and leave us.

my long hair, she cut my eyebrows and tried to make me less beautiful. I did not know why then, but I know now. She knew what would happen to all the pretty Armenian girls.

My brother and I tried to be brave after our mother had gone because of the little ones. My mother had told us we must care for them. We made up games and amused them in the daytime.

I did my best to prepare the food that Hovanis bought in the market with our money. Our house was very lonely and empty, but we had plenty to eat and were warm and comfortable.

A few weeks after my mother was taken away all of the twenty-five thousand Armenian people remaining in Harpoot were ordered deported. We were told in the evening that we must be ready to go the next morning. We got together a little bundle of food to carry with us. In the morning we were driven southward toward the desert. The sun was very hot and beat upon the sand so that it burned our feet.

The soldiers drove us on and on, lashing whips over the people who lagged behind. There were women with little children in their arms and aged people who could scarcely walk. Our little brother and sister grew too weary to walk so Hovanis and I had to carry them struggling on as best we could. Sometimes we would stop because we could walk no farther. Then we would be commanded to go on.

The food we carried with us from home was soon gone. The children cried for bread. Sometimes we found berries and sometimes brother pulled up plants and we ate the roots.

We passed the bodies of other people who had dropt dead in other deportations.

We were all driven on until I was taken away from the others by a Turkish officer. He promised me he would permit Hovanis to go back home with the children. I finally made my escape but I could not find the

After he had gone home, Hovanis had secured the money from where my mother had hid it in the ground. Then they had started over the mountains to look for safety in Russia.

The baby sister, Staturig, had died before they reached Harpoot when they were returning from the desert. The little brother, Hrand, was blind from want of food. Blindness is one of the most terrible things about starvation. On the desert and here in the relief station I have seen so many people who had gone blind because they had had no food.

Hovanis had bought some food from a Kurd. We shared it. Then we struggled on over the mountains together.

We slept on the ground at night. It was bitter cold. We had no food except roots of plants and now and then something that we bought from the Kurds.

We escaped death miraculously many times. Twice Kurdish mountaineers captured us but they were willing to help us on our way when we gave them money.

The youngest brother died before we reached the relief station. The exposure and the hunger were too hard for him to bear. The ground was frozen so that we could not bury our brother. We waited two days hoping that he was not dead but at last we had to go on and leave him.

The man in charge of the relief station saw us coming. He took us into his house and gave each of us a bowl of soup. We warmed ourselves by the fire. We watch every day hoping our mother will come. We hope that all the others who are struggling across the desert will come. The hardest thing is that there is not enough food for everybody when they do come. Some days little children have to be turned away without bread or soup because there is not enough.

**The Memory of Burns.**

BY MARGARET RAIN.

ALL over the world, wherever English is spoken, in Great Britain, Canada, Australia, South Africa and India, perhaps as enthusiastically as anywhere else in the United States of America as the twenty-fifth of January comes round men meet together and celebrate each year the "Immortal Memory of Burns"—Everyone his influence makes more keenly felt that brotherhood, that national pride, in which the Scotsman glories, but his influence is more than national; it has made 'man to man' the world o'er as brothers, at least once in every year. We suppose these meetings were at first an efflorescence of patriotism first as the banquets on St. Andrew's Day are. We know numbers of Scottish boys who could not tell you when St. Andrew's day was, had only a hazy idea that St. Andrew was their country's patron saint, but let those lads go to even London, much more to India, or the Cape and they blossom into Presidents or Vice-Presidents or lesser office-bearers of St. Andrew's Societies and Burns' Clubs.

The ceremonies are similar, though St. Andrew died a martyr death and Burns was no saint, though maybe not so black as he was painted. They consist in eating sheep's head and haggis in imbibing perhaps too freely "Scotch drink" and by making speeches, the most exuberant and enthusiastic, if not always the wisest that ever were spoken. On the menu on each occasion are quotations from the poetry of Burns. We suppose if St. Andrew left any literary remains they are unsuitable for such convivial entertainments as kindly Scots hold in his memory and for their own good fellowship.

ROBERT Burns was the son of a very poor man, so poor that when he married he built the "auld clay biggin" with his own hands. Still it stands; unsubdued by time, almost exactly as the hands of William Burns



**Out Into the Wilderness.**

Armenian women driven from their homes by the Turks.

She had only a few hours to get together a little bundle of food and clothing. She took only a small portion of the money my father had left with her; the rest of it she told Hovanis to hide in the garden to use very carefully when we needed it.

Our mother and dozens of other women were crowded in springless carts. Mounted soldiers were in charge of the deportation. There was not room enough in the carts for all the women and some of them were made to walk behind. We stood at the gate and saw them go.

Before she went, my mother cut off

others again. I knew that they had turned toward home so I went back along the road we had traveled.

In the daytime I hid behind rocks and bushes. At nightfall I hurried on again. Sometimes I passed little groups of people but I did not try to join them lest the Turkish officer should find me again.

I decided I would not go to Harpoot but that I would attempt to cross the mountains and go to Russia too. Days and days afterward a miraculous thing happened. In the Dersim Mountains I found my brother sitting with two of the children huddled about him.

left it. Here on the 25th of January, 1759, as he tells himself, he made his first entry.

"'Twas then a blast o' Januar' win' Blew hansel in on Robin."

This Robin was not only born poor, he was schooled in that school of toil and privation to which poverty sends her children. His boyhood and youth knew little of that glad abandonment, that unthinking happiness which is not only becoming but necessary to childhood, necessary if you want the boy to develop into a strong, courageous and true man. A prosperous and happy childhood is, we believe, one of the first considerations in the making of a useful and successful manhood. Burns had no such childhood, and to judge from his temperament no child ever needed it more. He himself describes it in graphic words, which, in the light of his subsequent career, become tragic, "the cheerless gloom of a hermit with the unceasing toil of a galley slave." When a boy of thirteen he was forced to do a man's work. His father had taken a farm and prematurely broken down, was unable to work it. "We lived very poorly", Burns writes. "I was a dexterous ploughman for my age, and the next eldest to me was a brother who could drive the plough very well and help to thresh the corn. A novel writer might, perhaps, have viewed these scenes with some satisfaction; but so did not I; my imagination yet boils at the factor's threatening letters which used to set us all into tears." His brother writes: "I doubt not but the hard labor and sorrow of this period of his life was in a great measure the cause of that depression of spirits with which Robert was so often afflicted during his whole life afterwards."

In this Canada many babies have been born into just such a world as the little Robert Burns was. The log cabins which sheltered their entry into life held as little luxury as did the cottage of mud and thatch; the log cabins equally with the cabin of clay had been put together painfully with the father's hands; the same life of toil awaited the little new comer; but in this new land there was always for the toiler enough to eat, and fuel and clothing to keep him and his warm, and above all hope, which makes work and privation bearable if not pleasant. He could look forward when his land was cleared, to making himself a home in the wilderness. Meanwhile he was young and strong with life and hope and what cared he for a few hardships. We can almost feel that a strong man would have pleasure in having these to surmount, to give him a sense of his victory over wild nature.

As life was among the small farmers and peasantry in Scotland when Burns was born there was no such healthy outlook. Poverty was the general rule among them; hopeless toil also was the general rule, and we fear ignorance and coarseness of mind cannot be omitted from the situation, if we are to be honest. Intelligent farming was unknown. The big farmers lived in rough plenty and had a tolerably good time, and not knowing anything better, were content. Not so the poor, and it was into their rough and poverty stricken society that Robert Burns was born, and in such a world for the most part he spent his short life of thirty-seven years.

A common man with literary instincts and tastes would have languished in such a world. Not so Burns. His rare faculty of sympathy, his ready and ample responsiveness to all things about him, living and dead, stood him in good stead here. He could not only tolerate, he even seemed to love the commonplace and even sordid things amid which he lived. He took them as subjects for his muse and by the glamour of his genius made them lovable to all mankind. This was his crowning achievement. By his magic touch he raised Scottish peasant life into the realms of art. The ploughman at his work, the harvest rig, the winter evening's smithy, the cottage fireside, the rustic lover, ghosts and witches, the very devil himself, the entire peasant in his weakness and his strength, in his superstitions and his solid sense, his easy moods, yet his stout Calvinism, his emphasis on his earnestness and simplicity—all these Burns so pictured that it not only delights but instructs. We see rural scenes and manners with other eyes. He never went in a field for his subjects. How did he and appreciate they

seemed till they had passed through the alembic of his mind. There is ample evidence in his poems that he was an accurate as well as a sympathetic observer of nature in her varying moods.

"Whether the simmer kindly warms  
Wi' life and light,  
Or winter howls in gusty storms  
The lang dark night."

This love of nature in the more remarkable that at this period the love of natural scenery was almost an unborn emotion. He is no less happy in giving expression to the inner life of the common people than he is in depicting the outer. He knew both nature and human nature and was the poet of them both. "The muse", he says bade me sing the loves, the joys, the rural scenes, and rural pleasures of my natal soil in my native language, and he did her bidding.

THE greatest debt we owe to Burns is for the songs he wrote more than for his poems. According to Tennyson and Carlyle they are finer creations of genius than any of his poems. The song is usually the product of the highest emotion of which a man is capable. Besides this Burns had the gift of music and certain lines he has written have even in the mere words an unapproachable charm—for instance:

"Yestreen when to the trembling string  
The dance gaed through the lighted  
ha'—"

Again "Oh blow ye westlin' winds, blow  
saft  
Amang the leafy trees."

He has also the merit of having rescued some fine old Scottish music from obscurity and worse, and written for it fitting words. Two songs only we mention, "My love is like a red, red rose," the tune of which was before his time a "song without words," and that most beautiful idyll of married love, "John Anderson My Joe"—a melody even more unfortunate, for it was mated to words too unutterably coarse to be sung by decent people. One of Burns' songs, "Oh We! Thou in the Cauld Blast", inspired the fine music, we associate with it, in the young Jewish musician Mendelssohn.

Our enjoyment of Burns' songs are his only reward for the trouble he took in collecting and arranging them for we understand all he ever got in payment in his lifetime was some twenty-five dollars and a new shawl, (or was it a dress?) for his wife.

NOTHING new can be written about Burns. It is considered that the most sympathetic contribution to Burns literature is Carlyle's essay. We prefer much the fine oratory of Lord Roseberry in the address he gave at the hundredth anniversary of the poet's death. Carlyle pictures what good Robert Burns might have done had he been an industrious farmer, modelled, we suspect though he does not say so, on James Carlyle of Ecclefechan. We do not believe that Robert Burns could have been a frugal and industrious farmer any more than that James Carlyle, or his gifted son either could have written the songs which still inspire and charm us.

In these days we have outgrown the philosophy of Rousseau and Voltaire and the other thinkers of their time. Burns was touched with it and his views prevented his getting preferment, and many people still fall foul of it as presented in "A Man's Man for a' That." It was the same doctrine of the Rights of Man which caused the tremendous upheaval of the French Revolution. Its legal embodiment is preserved in the Declaration of Independence in which our good friends in the United States take such pride. No man can live comfortably a life independent of the times in which he is born and the opinions of the men who led the thought of that era. Only last year a Reverend Chairman at a Burns' celebration in a city on the other side of the lake spoke most sympathetically of Burns and, while admiring his love songs, expressed regret that the names of the ladies of his adoration should be so numerous. Did not Apollo the god of the poets love all the nine muses and the three graces as well? But we would point out that Burns was by no means the lover of all the ladies he celebrates in song. Mrs. Stewart, the heroine

of "Flow Gently Sweet Afton," was a most blameless lady, the mother of a family. According to the editor of the Scottish American the heroine of the first of his songs which got any public attention, "Behind yon hills where Lugar flows", was "Miss Nannie McIlwraith the daughter of a sheep farmer, a young lady whom Burns casually met at a cattle show and to whom he had never even spoken."

Burns died while still young, only thirty-seven. We are inclined almost to think, sad as it is, that his death was the greatest success he ever made. Those who thought most highly of him must have trembled to think what he might have become. It is sad to think how little sorrow there would be among those who laid him in his grave. Only in the quiet house where his bonnie Jean lay, her new born son in her arms, was there the true mourner. To her, in spite of all he was, always the king of men, one who could do no wrong.



Lt. Fonk, Guynemer's Pal.

The French aviator has avenged Guynemer's death by bringing down the German aviator, Lt. Wisseman. Up to date Lt. Fonk has brought down 21 German planes, 15 of them in 3 months. Photo by Kadel & Herbert, N. Y.

### Baby Welfare Week.

London is in the midst of a grand campaign in preparation for the London and Western Ontario Baby Welfare week to be held in the city, February 4th to 10th, inclusive, and preceded by Baby Welfare Sunday in the city churches on February 3rd. Practically all the leading organizations of the city as well as civic boards are represented on the general committee of which D. H. McDermid is Chairman and Capt. (Dr.) H. W. Hill, Medical Officer of Health and Director of the Institute of Public Health, Secretary. Two delegates were appointed at the Western Ontario Women's Institute Convention in November to represent Western Ontario on this committee, Mrs. D. C. Wilson and Miss McIntosh of Parkhill.

The Provincial Health Department is co-operating and an important feature will be the Provincial Government Child Welfare Exhibit, including moving pictures, demonstrations, etc. Baby clinics will be held daily by child specialists and these will be free to all who wish to take advantage of them. Each baby will be given a thorough examination to determine how it measures up to the physical standard for a child of its age. A couple of prizes will be given to the two Western Ontario babies outside the city who most closely measure up to the perfect mark in physique and development. In addition, several blue ribbons will be awarded and a score card showing the exact record of each baby given to the mother or other guardian in each case. Thursday, February 7th, is to be Western Ontario day and the whole day will be devoted to clinics for the out-of-town babies and entertainment of the visitors from outside points. In welcoming the mothers, the Mothers' Club are co-operating to make their stay in the city comfortable and pleasant. Attendants will be at the Welfare headquarters to take care of the babies while the mothers go shopping or attend to other business. Efforts are being made to arrange excursions over the railroads or at least convention rates to London.

## Hope's Quiet Hour

### Going up to Jerusalem.

And Jesus going up to Jerusalem took the twelve disciples apart in the way.—S. Matt. 20 17.

OUR thoughts have been in Jerusalem lately—old Jerusalem, the place where our Lord was crucified—and the new Jerusalem, the city of our hopes towards which we are climbing. We rejoice to know that the "Holy City" is in the hands of men who will reverence it as the city of the great King; but we know that the earthly city is only a type of the heavenly—that Vision of Peace which rests on the Rock, Christ Himself being the chief cornerstone.

In our text we see a company of toil-worn men following their Master up the steep road to Jerusalem. He did not encourage them with any vision of peace—far from it. "Behold, we go up to Jerusalem, He quietly said; and then He held up before their amazed imagination the terrible picture of that coming Good Friday. He told them in plain language that He should be betrayed into the hands of His deadly enemies, that He should be mocked and scourged and crucified—and rise again the third day. Was it any wonder that "as they followed Him they were amazed?" If He saw the trap set for His feet, why did He not avoid it? If He knew shame and torture awaited Him in Jerusalem, why did He set His face steadfastly to go there?

In simple words He explained the mystery. Because He was great among the children of men He must prove His greatness by being the Servant of all; because He was the Commander-in-chief of the army of God He must claim the right and privilege of leading that army forward into the thick of the fight. Those who asked for special places of honor, on His right hand and on His left, were warned that to be close to Him meant to be also in a place of special danger. "Are ye able?" He asked warningly, "to drink of the cup that I shall drink of, and to be baptized with the baptism that I am baptized with?"

How lightly they answered, "We are able"; though He had just told them how bitter was the cup which He was preparing to drink to the dregs.

In these days of danger and suffering we hear many people declaring that they have lost their faith in the love and power of God. "How can a God of love permit the innocent to be tortured so unjustly?" they say.

Well, the problem is not a new one. It dates back to the time of righteous Abel. It has puzzled thoughtful minds in all ages and in all countries. Perhaps it pierced the heart of Mary as she stood beside the cross of her holy Son. God could darken the sun and shake the earth—why did He not interfere to prevent the awful Sacrifice? But God—the Almighty Ruler of the universe—did not interfere to save His dearly-beloved Son from shame, agony and death. No, our Leader conquered death by dying, saved mankind by the sacrifice of Himself, and passed on to His resurrection. He is alive for evermore.

Have we joined the company of Christ? Are we going up to Jerusalem with Him? Does He ever take us "apart in the way", and tell us of the cost we must be prepared to pay if we wish to keep close to His side, on His right hand or on His left?

This is a searching question, let us try to answer it honestly as in the sight of God.

When our Lord was twelve years old His mother supposed He was in the company of pilgrims, and went a day's journey before finding out her mistake. Then, when she could not see or speak to Him, she hurried back to Jerusalem, seeking Him. How could she endure to travel alone? Though she was surrounded by friends and relations her heart was restless unless JESUS stood nearest of all. And so she went up the steep road to Jerusalem, seeking Him. What if danger had threatened her then! Would she have turned her back on Jerusalem—and on ESUS—because to be in His company meant peril to herself? We know how fearlessly she stood beside the Cross afterwards, forgetting her own danger because all her thoughts were of Him.

I am writing to those who consider

# District Prize Winners

**in Bread Making Contests Conducted  
by The Campbell Flour Mills Company,  
Limited, at Rural School Fairs in Ontario**

**WE** must say the task of picking out the winners of district prizes taxed the good judgment of the experts to the uttermost. The general excellence of the loaves of bread submitted to be judged by Miss Purdy, of the Ontario Agricultural College, was surprising. No wonder great care was needed to decide who were to be the prize winners in each district.

The winners of First Prize in the Local Contests at Rural School Fairs automatically became contestants for District Prizes. In each of the five Districts the first prize winner has received a splendid Pathe Phonograph (value \$150), the second prize winner a valuable set of Dickens' Works,

and the third, fourth and fifth winners each received a fine Canuck bread-mixer. The local prize winners were announced at the different Rural School Fairs. All prizes were awarded for the best loaves of bread baked with

## Cream of the West Flour *the hard wheat flour that is guaranteed for bread*

The results have wonderfully justified our purpose in offering these splendid prizes. They have encouraged many folks to know by experience that "Cream of the West" really and truly does make just the finest big loaves of highly nourishing, delicious bread of fine texture and good crumb—always. We say "always" because samples of all of the high grade Western hard wheat used in "Cream of the West" are examined by experts in our own chemical laboratory. In this way we are able always to maintain the high quality of "Cream of the West" at uniform excellence.

### Here is the Complete List of District Prize Winners

#### District No. 1

CARLETON, LANARK, RENFREW, GLENGARRY, STORMONT, DUNDAS, GRENVILLE, LEEDS, FRONTENAC, LENNOX AND ADDINGTON.

	Name.	County.	Address.	Fair.	
1st	95 points	Margaret Sutherland	Lanark	Almonte R.R. 2	Almonte
2nd	91 points	Jessie F. MacLean	Dundas	Ormond, Ont.	Maple Ridge
3rd	89 points	Loretto Ward	Lennox and Addington	Erinsville	Lamworth
4th	88 points	Helen Dodds	Lanark	Middleville	Middleville
5th	87 points	Marjorie Ennis	Lanark	Balderson R.R. 1	Harpe

#### District No. 2

HASTINGS, PRINCE EDWARD, PETERBORO, NORTHUMBERLAND, VICTORIA, DURHAM.

	Name.	County.	Address.	Fair.	
1st	96 points	Gladys Lewis	Victoria	Dunsford	Dunsford
2nd	93 points	Blanche M. Clarke	Prince E.	Picton R.R. 1	Bloomfield
3rd	92 points	Alma P. Aldworth	Durham	Bowmanville R.R. 3	Maple Grove
4th	88 points	Vera Crandell	Prince E.	Hillier	Hillier
5th	86 points	Mildred R. Brock	Durham	Millbrook R.R. 3	Millbrook

#### District No. 3

YORK, ONTARIO, PERTH, PEEL, HALTON, WENTWORTH, OXFORD, HURON, LINCOLN, BRANT, WATERLOO.

	Name.	County.	Address.	Fair.	
1st	99 points	Edna M. Armstrong	Wentworth	Mt. Hope	Mt. Hope
2nd	95 points	Ruth Cheyne	Peel	Malton R.R. 1	Ebeneser
3rd	93 points	Edith U. Maw	Peel	Mono Road R.R. 2	Bolton
4th	91 points	Edith Irvine	Halton	Hornby	Hornby
5th	90 points	Eletta Terry	York	King R.R. 1	Kettleby

#### District No. 4

WELLAND, HALDIMAND, NORFOLK, ELGIN, KENT, ESSEX, LAMBTON, MIDDLESEX.

	Name.	County.	Address.	Fair.	
1st	92 points	Mary E. Carson	Elgin	Bothwell R.R. 3	Rodney
2nd	91 points	Gladys M. Botier	Middlesex	London Jct. R.R. 1	Thorndale
3rd	87 points	Blanche Bateman	Lambton	Dresden R.R. 2	Rutherford
4th	81 points	Viola Green	Welland	Ridgeway	Bertie
5th	80 points	Maude Allyn	Essex	Tilbury R.R. 4	Woodslee

#### District No. 5

ALGOMA, SUDBURY, MANITOULIN, BRUCE, GREY, WELLINGTON, DUFFERIN, SIMCOE, MUSKOKA, PARRY SOUND, TEMISKAMING.

	Name.	County.	Address.	Fair.	
1st	89 points	Onnolee Cathrae	Grey	Chatsworth R.R. 5	Holland Centre
2nd	87 points	Olive F. Aitchison	Simcoe	Tottenham R.R. 3	Beeton
3rd	85 points	Gladys Fawcett	Dufferin	Hornings Mills	Hornings Mills
4th	84 points	Helen Hamilton	Bruce	Port Elgin R.R.	Pt. Elgin
5th	84 points	Mary F. Martin	Simcoe	Oro Sta. R.R. 2	Oro Town Hall

**The Campbell Flour Mills Company, Limited, West Toronto**



"It's too warm to dig in the ground this morning," she decided. "And anyway, planning the work is far more important."

"Than doing it?" he asked quizzically. "If we'd done nothing but plan all this; why you see—"

He made a large gesture which included the carpenters at work on the roof, painters perilously poised on tall ladders and a half dozen men busy spraying the renovated orchards.

"I see," she returned with a smile, "—now that you've so kindly pointed it out to me."

He leveled a keen glance at her. It was impossible not to see her this morning in the light of what he thought he had discovered the night before.

"I've done nothing but make plans all my life," she went on gravely. "Ever since I can remember I've been thinking—thinking and planning what I should do when I grew up. It seemed such a long, long time—being just a little girl, I mean, and not able to do what I wished. But I kept on thinking and planning, and all the while I was growing up; and then at last—it all happened as I wished."

She appeared to wait for his question. But he remained silent, staring at the blue rim of distant hills.

"You don't ask me—you don't seem to care what I was planning," she said, her voice timid and uncertain.

He glanced quickly at her. Something in her look stirred him curiously. It did not occur to him that her appeal and his instant response to it were as old as the race.

"I wish you would tell me," he urged. "Tell me everything!"

She drew a deep breath, her eyes misty with dreams.

"For a long time I taught school," she went on, "but I couldn't save enough that way. I never could have saved enough, even if I had lived on bread and water. I wanted—I needed a great deal of money, and I wasn't clever nor particularly well educated. Sometimes I thought if I could only marry a millionaire—"

He stared at her incredulously. "You don't mean that," he said with some impatience.

She sighed. "I'm telling you just what happened," she reminded him. "It seemed the only way to get what I wanted. I thought I shouldn't mind that, or—anything, if I could only have as much money as I needed."

A sense of sudden violent anger flared up within him. Did the girl realize what she was saying?

She glanced up at him. "I never meant to tell any one about that part of it," she said hurriedly. "And—it wasn't necessary, after all; I got the money another way."

He bit off the point of a pencil he had been sharpening with laborious care.

"I should probably never had have a chance to marry a millionaire," she concluded reminiscently. "I'm not beautiful enough"

With what abominable clearness she understood the game; the marriage-market; the buyer and the price.

"I—didn't suppose you were like that," he muttered, after what seemed a long silence.

She seemed faintly surprised. "Of course you don't know me," she said quickly. "Does any man know any woman, I wonder?"

"They think they do," he stated doggedly; "and that amounts to the same thing."

His thoughts reverted for an uncomfortable instant to Wesley Elliot and Fanny. It was only too easy to see through Fanny.

"Most of them are simple souls, and thank heaven for it!"

His tone was fervently censorious. She smiled understandingly.

"Perhaps I ought to tell you further that a rich man—not a millionaire; but rich enough—actually did ask me to marry him, and I refused."

"H'mph!"

"But," she added calmly, "I think I should have married him, if I had not had money left me first—before he asked me, I mean. I knew all along that what I had determined to do, I could do best alone."

He stared at her from under gathered brows. He still felt that curious mixture of shame and anger burning hotly within.

"Just why are you telling me all this?" he demanded roughly.

She returned his look quietly. "Because," she said, "you have been

trying to guess my secret for a long time and you have succeeded; haven't you?"

"You have been wondering about me, all along. I could see that, of course. I suppose everybody in Brookville has been wondering and—talking. I meant to be frank and open about it—to tell right out who I was and what I came to do. But—somehow—I couldn't."

It didn't seem possible, when everybody—you see I thought it all happened so long ago people would have forgotten. I supposed they would be just glad to get their money back. I meant to give it to them—all, every dollar of it. I didn't care if it took all I had. . . . And then—I heard you last night when you crossed the library. I hoped—you would ask me why—but you didn't. I thought, first, of telling Mrs. Dagge; she is a kind soul. I had to tell someone, because he is coming home soon, and I may need—help."

Her eyes were so solemn, beseeching, compelling.

His anger died suddenly, leaving only a sort of indignant pity for her unfriended youth.

"You are—" he began, then stopped short. A painter was swiftly descending his ladder, whistling as he came.

"My name," she said, without appearing to notice, "is Lydia Orr Bolton. No one seems to remember—perhaps they didn't know my mother's name was Orr. My uncle took me away from here. I was only a baby. It seemed best to—" "Where are they now?" he asked guardedly.

The painter had disappeared behind the house. But he could hear heavy steps on the roof over their heads.

"Both are dead," she replied briefly. "No one knew my uncle had much money; we lived quite simply and unpretentiously in South Boston. They never told me about the money; and all those years I was praying for it! Well, it came to me—in time."

His eyes asked a pitying question. "Oh, yes," she sighed. "I knew about father. They used to take me to visit him in the prison. Of course I didn't understand, at first. But gradually as I grew older, I began to realize what had happened—to him and to me. It was then I began to make plans. He would be free, sometime; he would need a home. Once he tried to escape, with some other men. A guard shot my father; he was in the prison-hospital a long time. They let me see him then without bars between, because they were sure he would die."

"For God's sake," he interrupted hoarsely. "Was there no one—?"

She shook her head. "That was after my aunt died: I went alone. They watched me closely at first; but afterward they were kinder. He used to talk about home—always about home. He meant this house, I found. It was then I made up my mind to do anything to get the money. . . . You see I knew he could never be happy here unless the old wrongs were righted first. I saw I must do all that; and when, after my uncle's death, I found that I was rich—really rich, I came here as soon as I could. There wasn't any time to lose."

She fell silent, her eyes shining luminously under half closed lids. She seemed unconscious of his gaze riveted upon her face. It was as if a curtain had been drawn aside by her painful effort. He was seeing her clearly now and without cloud of passion—in all her innocence, her sadness, set sacredly apart from other women by the long devotion of her thwarted youth. An immense compassion took possession of him. He could have fallen at her feet praying her forgiveness for his mean suspicions, his harsh judgment.

The sound of hammers on the veranda roof above their heads appeared to rouse her.

"Don't you think I ought to tell—everybody?" she asked hurriedly.

He considered her question in silence for a moment. The bitterness against Andrew Bolton had grown and strengthened with the years into something rigid, inexorable. Since early boyhood he had grown accustomed to the harsh, unrelenting criticisms, the brutal epithets applied to this man who had been trusted with money and had defaulted. Even children, born long after the failure, reviled the name of the man who had made their hard lot harder. It had been the juvenile custom to throw stones at the house he had lived in. He remembered with fresh shame the impish glee

**EDWARDSBURG** is a standard, reliable, concentrated Feed that gives you

**GLUTEN FEED**

This feed will give you all the Protein needed to balance the lack of Protein in hay, roots and ensilage.

Our book on feeding for profits, shows the money in milk—and shows how you can make 25% more profit out of the cows you are milking. Write for copy, sent free.

*Edwardsburg Oil Cake is the ideal ration for fattening Hogs. Try it.*

**THE CANADA STARCH CO., LIMITED**  
TORONTO  
Works at Cardinal, Brantford, Fort William O67

23%

PROTEIN

GUARANTEED

## To Prevent Chapped Skin

—use warm water and Baby's Own Soap.



The warm water opens the pores of the skin and the minute particles of pure refined vegetable oils which form the creamy, fragrant lather of Baby's Own Soap are absorbed into the skin, keeping it soft, healthy, and preventing cracks and chaps.

A perfect rinsing, then smart rubbing when drying guarantees a fine smooth skin in any weather.

# BABY'S OWN SOAP

Best for Baby  
Best for You

Canada's Standard toilet and nursery soap for over 30 years.

**ALBERT SOAPS, LIMITED, - MONTREAL.**

# HORSES

UNION STOCK YARDS OF TORONTO LIMITED

CANADA'S GREATEST LIVE STOCK MARKET  
CAPITAL, \$1,500,000. TWO HUNDRED ACRES.

Dundas St. cars to Keele St., W. Toronto. Auction sales every Wednesday. Private sales daily.

## OUR GREAT ANNUAL COMBINATION BREEDERS' SALE

### Clydesdale and Percheron Mares and Stallions

MARCH 4th AND 5th

Only entries of registered animals will be received for this great sale, which will include mares in foal, as well as yearling, two and three-year-old fillies, matured and young stallions, both imported and registered Canadian-bred stock.

Entries will close Feb. 15th, and catalogues will be published at that time. For Entry Forms, Catalogues, and all information, address

Walter Harland Smith, Manager Horse Department, Union Stock Yards of Toronto, Limited.

**O.A.C. No. 72 Oats**

Ten years' test at Guelph show a yield of over 17 bus. per acre over highest competitors. Use your pencil, 17 bus. at 85c. = \$14.45 per acre.

**YOU CAN'T AFFORD TO SOW ANY OTHER VARIETY**

Have good seed, testing 38 lbs., from registered stock. Price \$1.25 per bus. Samples sent. Sacks free.

**ORDER TO-DAY**  
Transportation is likely to be slow.

**W. T. Davidson & Son, Meadowvale, Ontario.**

**Wanted—Cord Wood**

Soft or hard, loaded on cars.  
Write or 'phone us.

**Beachville White Lime Co.**  
Beachville, Ontario

For Sale: Clydesdale Stallion, Invergowrie (Imp.) (11468) foaled 1907, sired by Marmion and passed in form 1; a sure foal getter. Was on the same route for seven years. Will be priced right. Come and see him and his colts. **Michael Graf, Formosa, Ont.** (Nearest R. R. Sta., Midway)

## Sherlock-Manning Piano Co's. CLEARANCE SALE OF USED PIANOS AND ORGANS

This Unusual Money-saving Offer Should  
Appeal To All Prospective Purchasers.

We have a number of used pianos and organs (taken in trade) that must be disposed of before our annual stock-taking, January 31st. These instruments have been tuned and put in first-class condition. Their cost or former selling price has been lost sight of during this sale, and you can buy a good piano or organ now at a phenomenally low price.

### NOTE THE FOLLOWING LOW PRICES :

- |  |  |
|--|--|
| <p>No. 1.—Heintzman &amp; Co. Upright Piano, Walnut, Boston Fall, full length hand carved music desk. Turned Pillars, 7½ Octaves, 3 pedals, 4 ft. 7 ins. high. <b>Price \$240.00</b></p> <p>No. 2.—Heintzman &amp; Co. Upright, Walnut, Boston Fall, full length paneled music desk. Turned Pillars, 7½ Octaves, 2 pedals, 4 ft. 5 ins. high. <b>Price \$215.00</b></p> <p>No. 3.—Mahogany Piano, made by Lesage of Ste. Therese, Que., new, but slightly shop-worn. Boston Fall, full length music desk, 3 pedals, 7½ Octaves, 4 ft. 6 ins. high. Is a bargain at <b>\$250.00</b></p> <p>No. 4.—Upright Piano, made by Stuyvesant, New York. Ebony finish, 4 ft. 4 ins. high, turned up fall, Round Pillars, 2 pedals, 7½ Octaves. <b>Price \$140.00</b></p> <p>No. 5.—Upright Piano made by Martin Bros., New York. Ebonized case, full 7½ Octaves, 3 pedals, Mandolin Attachment, 4 ft. 7 ins. high. A snap <b>\$150.00</b> at</p> <p>No. 6.—One Upright Piano, made by Kimball, Chicago, 4 ft. 5½ ins. high. Full 7½ Octaves, over-strung bass, 2 pedals, Mahogany finish with Walnut panels, turned up fall. <b>Price \$145.00</b></p> <p>No. 7.—Bell Upright Pianette, 6 Octaves, full Mahogany finish, 2 pedals, turned up fall. <b>Price \$85.00</b></p> | <p>No. 8.—Upright Piano, made by Chase Bros. Ebony finish, carved square pillars, turned up fall, 7½ octaves, 4 ft. 6 in. high, 2 pedals. Has had very little use. Action is as good as new. <b>Price \$175.00</b></p> <p>No. 9.—Upright Piano, made by Nordheimer, Walnut finish, turned up fall, fretted front, 2 pedals, 7½ Octaves, 4 ft. 9 in. high; snap at <b>\$200.00</b></p> <p>No. 10.—One Six-Octave Organ, Walnut Case, turned up fall, full length music desk, 4 sets reeds, 11 stops, mouse-proof, made by Blatchford &amp; Co. <b>Price \$40.00</b></p> <p>No. 11.—Six-Octave Organ, solid walnut case, made by Estey Organ Co.; 4 sets reeds, 11 stops, turned up fall, lamp stands, with low mirror extension top. <b>Price \$65.00</b></p> <p>No. 12.—Square Chickering Piano, Rosewood finish, 7 octaves, curved legs, 2 pedals. <b>Price \$85.00</b></p> <p>No. 13.—Small Stoddart Square, Rosewood finish, Octagon legs, 7 octaves <b>\$30.00</b></p> <p>No. 14.—Small Square Piano, Rosewood case, octagon legs, made by Hayes &amp; Co. <b>\$50.00</b></p> <p>No. 15.—One Upright, Sherlock-Manning, 4 ft. 4 in; Mahogany Satin finish. Has been used less than a year. Is practically as good as new. Three pedals, 7½ octaves. <b>Worth new, \$350.00. Will accept \$278.00</b></p> |
|--|--|

**VERY LITTLE CASH NEEDED** Will accept a small initial payment and balance weekly or monthly, as preferred.

### VISIT OUR FACTORY

Take Oxford car out Hamilton Road—four minutes' walk from the corner of Hamilton Rd. and Egerton St., or let our visitors' auto call for you and drive you to our factory and back. There is no charge. Phone 1078 for appointment. If you can't come personally, write Dept. 18, giving your first and second choice and stating terms desired.

## THE SHERLOCK-MANNING PIANO CO.

London, Canada

### PROHIBITION IS BOUND TO STAY

Make Your Genuine, Superior Lager Beer at Home With Our Popular

### Hop-Malt Beer Extract

CONFORMING TO TEMPERANCE ACT  
Large Cans, making 6½ to 7 gallons . . . \$1.50  
Small Cans, making 2½ to 3 gallons . . . \$1.00  
Sample Cans, making 1 gallon . . . . . 50c.  
The finest and most nourishing Temperance Beverage in Canada.

Get also our patent stoppers, fitting any ordinary beer bottle, at 40 cents a dozen. Prepaid throughout Canada. Satisfied customers everywhere. Agents wanted.

J. S., in Trout Creek, Ont., writes:  
"I must truly say that the Hop-Malt Extract makes the best beer that I ever drank, and as I am an old brewer I just know how to handle it. Trusting that you will have many more customers.—et c."

**HOP-MALT COMPANY, LIMITED**  
HAMILTON, ONTARIO — Dept. D. 1.

### Herd Books Wanted

Parties having copies of Volumes 8, 9, 14 or 15, of the Dominion South in Herd Books for sale, please communicate with  
**G. E. DAY, GUELPH, ONTARIO**

### The Most Modern Weapon

for protecting your field and orchard crops

from being destroyed (or their market value lessened) is the SPRAMOTOR. It will enable you to combat the potato-beetle and blight quickly and effectively. In the orchard—to produce 75% No. 1 fruit and have cleaner, healthier trees—free from scale and bark-louse.



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

We make a complete line of sprayers—one for every need, from the small hand outfit to the large 250-gallon gasoline power sprayers. They are all Spramotors, and range in price from \$7 to \$100.

Write us your requirements, or at least send for our catalogue and FREE booklet on Crop Diseases. Get your copy to-day.

Made in Canada—no duty to pay.

**B. H. HEARD SPRAMOTOR**  
4051 King St., London, Canada

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

with which, in company with other boys of his own age, he had trampled the few surviving flowers and broken down the shrubs in the garden. The hatred of Bolton, like some malignant growth, had waxed monstrous from what it preyed upon, ruining and distorting the simple kindly life of the village. She was waiting for his answer.

"It would seem so much more honest," she said in a tired voice. "Now they can only think me eccentric, foolishly extravagant, lavishly generous—when I am trying—I didn't dare to ask Deacon Whittle or Judge Fulson for a list of the creditors, so I paid a large sum—far more than they would have asked—for the house. And since then I have bought the old bank building. I should like to make a library there."

"Yes, I know," he said huskily. "Then the furniture—I shall pay a great deal for that. I want the house to look just as it used to, when father comes home. You see he had an additional sentence for trying to escape and for conspiracy; and since then his mind—he doesn't seem to remember everything. Sometimes he calls me Margaret. He thinks I am—mother."

Her voice faltered a little. "You mustn't tell them," he said vehemently. "You musn't!"

He saw with terrible clearness what it would be like: the home-coming of the half-imbecile criminal, and the staring eyes, the pointing fingers of all Brookville leveled at him. She would be overborne by the shame of it all—trampled like a flower in the mire.

She seemed faintly disappointed. "But I would far rather tell," she persisted. "I have had so much to conceal—all my life!"

She flung out her hands in a gesture of utter weariness.

"I was never allowed to mention father to anyone," she went on. "My aunt was always pointing out what a terrible thing it would be for any one to find out—who I was. She didn't want me to know; but uncle insisted. I think he was sorry for—father. . . Oh, you don't know what it is like to be in prison for years—to have all the manhood squeezed out of one, drop by drop! I think if it hadn't been for me he would have died long ago. I used to pretend I was very gay and happy when I went to see him. He wanted me to be like that. It pleased him to think my life had not been clouded by what he called his mistake. . . He didn't intend to wreck the bank, Mr. Dodge. He thought he was going to make the village rich and prosperous."

She leaned forward. "I have learned to smile during all these years. But now, I want to tell everybody—I long to be free from pretending! Can't you see?"

Something big and round in his throat hurt him so that he could not answer at once. He clenched his hands, enraged by the facility of his pity for her.

"Mrs. Daggett seems a kind soul," she murmured. "She would be my friend. I am sure of it. But—the others—"

She sighed. "I used to fancy how they would all come to the station to meet him—after I had paid everybody, I mean—how they would crowd about him and take his hand and tell him they were glad it was all over; then I would bring him home, and he would never even guess it had stood desolate during all these years. He has forgotten so much already; but he remembers home—oh, quite perfectly. I went to see him last week, and he spoke of the gardens and orchards. That is how I knew how to have things planted; he told me."

He got hastily to his feet; her look, her voice—the useless smart of it all was swiftly growing unbearable. "You must wait—I must think!" he said unsteadily. "You ought not to have told me."

"Do you think I should have told the minister, instead?" she asked rather piteously. "He has been very kind; but somehow—"

"What! Wesley Elliot?" His face darkened.

"Thank heaven you did not tell him! I am at least no—"

He checked himself with an effort. "See here", he said; "You—you musn't speak to any one of what you have told me—not for the present, anyway. I want you to promise me."

Her slight figure sagged wearily against the back of her chair. She was looking

up at him like a child spent with an unavailing passion of grief.

"I have promised that so many times," she murmured: "I have concealed everything so long—it will be easier for me."

"It will be easier for you," he agreed quickly; "and—perhaps better, on the whole."

"But they will not know they are being paid—they won't understand—"

"That makes no difference," he decided. "It would make them, perhaps, less contented to know where the money was coming from. Tell me, does your servant—this woman you brought from Boston; does she know?"

"You mean Martha? I—I'm not sure. She was a servant in my uncle's home for years. She wanted to live with me, so I sent for her. I never spoke to her about—father. She seems devoted to me. I have thought it would be necessary to tell her—before—He is coming in September. Everything will be finished by then."

His eyes were fixed blankly on the hedge; something—a horse's ears, perhaps—was bobbing slowly up and down; a faint rattle of wheels came to their ears.

"Don't tell anyone, yet," he urged, and stepped down from the veranda, his unseeing gaze still fixed upon the slow advance of those bobbing ears.

"Someone is coming," she said.

He glanced at her, marveling at the swift transition in her face. A moment before she had been listless, sad, disheartened by his apparent disapproval of her plans. Now all at once the cloud had vanished; she was once more cheerful, calm, even smiling.

She too had been looking and had at once recognized the four persons seated in the shabby old carryall which at that moment turned in at the gate.

"I am to have visitors," she said tranquilly.

His eyes reluctantly followed hers. There were four women in the approaching vehicle.

As on another occasion, the young man beat a swift retreat.

(To be continued.)

### Current Events

There hundred tons of onions held in storage at Vancouver and beginning to spoil were seized by the British Columbia representative of the Food Controller to be used for food.

Nationalizing of cold-storage plants is recommended by the Farm, Labor and Greater Production Conference.

Allied airmen dropped Pres. Wilson's address to Congress into German towns.

The British Labor Party, in a message to the Russian people, made public this week, announced that the British people accept the Russian principles of self-determination of peoples as to who shall rule them, and no annexations, both of which have been refused by the German military representatives at Brest-Litovsk. The message further calls on the peoples of Central Europe to declare themselves, and calls on them to renounce annexations in Europe, and no longer to suffer the family interests or desires of the German and Austrian governing classes to dominate other classes and prevent self-determination in Central Europe. Militarism everywhere, it is stated, must be defeated and victory of moral and intellectual fair-dealing must be gained.

Britain is calling for another half-million fighters for her army.

United States business men are asked, in a referendum submitted by the Chamber of Commerce, to pass upon a resolution to exclude German trade after the war unless the German Government has by that time become a responsible instrument of the people.

Gen. Pershing in December issued an order prohibiting the use of all alcoholic beverages except light wines and beers by members of the U. S. army in France, forbidding soldiers to buy or accept as presents any strong liquor, and providing prompt punishment for all who violate the rule.

The most outstanding military event of the past fortnight has been the victory of the Italians in the Battle of Asolone, Jan. 14, 15 and 16, in which 500 Teutons

were taken prisoners. On the west front the fighting has been chiefly confined to artillery and air duels. Russia still proves an uncertain factor, for while the Bolsheviks and Germans have failed to come to terms at Brest-Litovsk, the people of the Ukraine are said to have reached a separate agreement looking to further territorial expansion, a principle which the Bolsheviks will not allow. Moreover, for some reason as yet unknown, the Bolshevik Government seems anxious to pick a quarrel with Roumania, and is demanding free passage for Russian troops through Jassy, also the arrest of the King. In the meantime, relations between Premier Lenine and Foreign Minister Trotsky are said to be strained. The Germans have objected to Russian wireless messages with appeals of a revolutionary character which have been sent to German troops, but Trotsky has replied that the conditions of armistice do not limit freedom of press or speech. Upon the whole, if Russia were able to fight an early collision might be expected, whether she is or not remains a question. At all events the Bolsheviks are again raising an army, in which it is proposed to have the men fight in their ordinary working clothes in the hope of impressing upon the German masses the fact that it is working people they are fighting with.

### The Dollar Chain

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

Contributions from Jan. 11 to Jan. 18: "Bill", Middlesex Co., Ont., \$5.

Previously acknowledged \$5,111.05

Total Jan. 18 \$5,116.05

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

### The Windrow

The Literary Digest very succinctly gives a table showing how we can substitute food to send necessities to the soldiers. It is as follows:

The Soldiers Need	Folks at Home Can Use
Wheat	Cornmeal Oatmeal Barley meal Rye flour
Butter and Lard	Cottonseed oil Peanut oil Corn oil Drippings
Sugar	Molasses Honey Syrup
Bacon Beef Mutton Pork	Chicken Eggs Cottage Cheese Fish Nuts Peas Beans

"We are making a new world. Let the failures of the past be our great example for the future rejuvenation. We must not leave a stone unturned to put this right. The world is on fire, and our soldiers are the firemen who are called upon to put the fire out. We must not leave a smouldering spark. The hellish blaze of vandalism, murder, plunder, must be stamped black out. When you get to France, and put it out, do not leave a wee bit of red smoldering. Put it out clean. You are going to light up civilization. You boys are the lamp-lighters of the world. You are going to light it up as never before, and let me tell you it will be very beautiful for your children to be able to say, 'My dad lit that lamp.'—Harry Lauder to the soldiers, in *Everybody's*.

We read much nowadays of the Ukraine. Ukraine is a district in Southern Russia numbering 30,000,000 people. After 263 years of subjection to the Czars of Russia the Ukrainians have thrown off their serfdom and have formed a definite alliance with the Cossacks whose leader the Hetman (headman) Gen. Kaledines has distinguished himself during the war. "Ukraine," says George Raffalo-

**ROYAL PURPLE POULTRY SPECIFIC**

## Big Egg Yield

Royal Purple Poultry Specific is a great egg producer and poultry conditioner. It makes hens lay in the winter almost as well as they do in summer. This is because our Poultry Specific supplies the missing food elements that fowl need in their winter ration and without which they cannot lay. Royal Purple Poultry Specific tones up the digestive system, and keeps the fowl active and healthy. It should be fed daily in a hot or cold mash.

### Royal Purple Poultry Specific

has pleased thousands of farmers and poultrymen. It has enabled them to get winter eggs without trouble. Read the views of the following users:

Fred E. Bond, Kincardine, Ont., writes:  
"I have been feeding Royal Purple Poultry Specific to my hens this winter and I find it beats anything I have ever used as an egg producer. They started to lay right away and kept on gaining. I will never feed anything else as long as I can get it."

T. W. Hale, Toronto Annex, writes:  
"I have fed your Specific to poultry, and it is a valuable tonic; increases the production of eggs. Would not be without it; keeps them in good health and I recommend it highly. Any person trying it once will not be without it."

If you want more eggs and healthier fowl, feed Royal Purple Poultry Specific. It is sold in large and small packages. Ask our dealer in your town for it.

Made only by  
**W. A. Jenkins Mfg. Co., Limited**  
London, Canada

**FREE BOOK**  
This 80-page book describes the common diseases of poultry and stock. It tells how to build and remodel poultry houses, etc., etc. Send for a copy.

### POULTRY AND EGGS

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

AM SOLD OUT OF GESE AND TURKEYS. Now offering Indian Runner Ducks and Barred Rock Cockerels. Bred right, priced right. John Annesser, Tilbury, Ont.

BARRED ROCK COCKERELS—LAYING strain; good, healthy stock. Wm. R. Goff, Route 1, Glencoe.

HIGH-CLASS BARRED ROCKS AND PEKIN Ducks; also White Wyandotte cockerels from bred-to-lay strain. Prices right. Leslie Kerns Freeman, Ont.

HIGH-CLASS BARRED ROCK COCKERELS; large, heavy-boned, healthy fowl, from a good winter laying strain; price, \$2 apiece. R. A. Cowan, Streetsville, Ont.

MAMMOTH BRONZE TURKEYS, AFRICAN Geese and B. T. Lay, Single Comb White Leghorns. For particulars apply to Addison H. Baird, R.R. 1, New Hamburg, Ontario.

TWENTY-FIVE YEARS A BREEDER OF Barred Rocks that are barred and bred right, from first-class laying hens. Cockerels for sale, both show and utility. Walter Bennet, No. 1, Cottam, Ont.

**30c. for Chickens**  
**25c. for Old Hens**

Above Prices Paid by  
**Waller's, 702 Spadina Ave., Toronto**  
Write for Price List

### Baled Shavings FOR SALE

We have a limited quantity of baled shavings to offer at 15c. per bale, f.o.b. our yard. Place your order while they are going at this price. All orders promptly cared for.  
**THE NICHOLSON LUMBER CO., LIMITED**  
Burlington Ontario.

**5% INSTEAD OF 3%**

Your money can earn 5% just as easily as 3% if you invest it in the debentures of the Standard Reliance Mtg. Corp'n. Our booklet, entitled Profits from Savings, tells you all about it. Write now for a copy. It's free.  
**STANDARD RELIANCE MTG. CORP'N.**  
82-88 King St. E., Toronto, Ont.

### Advertisements will be inserted under this heading, such as Farm Properties, Help and Situations Wanted and Pet Stock.

TERMS—Three cents per word each insertion. Each initial counts for one word and figures for two words. Names and addresses are counted. Cash must always accompany the order. No advertisement inserted for less than 50 cents.

FOR SALE—FARM 200 ACRES, FIRST-CLASS buildings and stabling. Brick house, slate roof, modern conveniences. Land all under-tiled; lots of water, good orchard and hardwood bush; also house for hired man. Apply Box 142, Springfield, Ont.

FOR SALE—BY GENTLEMAN IN SASKATCHEWAN, 50 acres suitable for fruit farming, near Aslymer. At snap price and easy terms, or might exchange for improved Western land. Box "B", Farmer's Advocate, London, Ont.

WANTED AT ONCE—A MAN WHO UNDERSTANDS feeding and looking after cattle. Will hire by the year. Apply to A. J. Fox, Harrow P.O., Ont., R. R. No. 3.

WANTED—BY MARCH 1ST AT ROYALTON Stock Farm (pure-bred Holstein) a good, steady, married man by the year. House, garden, wood and milk; good wages to the right man, good milk and good with horses. State wages expected. E. C. Gilbert, R. R. No. 7, St. Thomas, Ontario.

WANTED—MANAGER FOR LARGE WHEAT and Cattle Ranch, situated in North-West. High salary and commission paid to competent man. Apply A. Pierce, 96 St. Peter St., Montreal.

**WANTED**

Alsike Red Clover, White Blossom Sweet Clover  
If you have any of the above seeds to offer, kindly send us samples, and we will quote you best price F. O. B. your station.  
**TODD & COOK**  
Seed Merchants  
Stouffville, Ont

### Polled Angus Bull

16 to 24 months old. State price, etc.  
**A. R. HUTCHISON, Dryden, Ontario**

**Steel Rails**

for Reinforcing Bridges and Barn Driveways.  
CUT ANY LENGTH  
**JNO. J. GARTSHORE**  
58 Front Street West Toronto

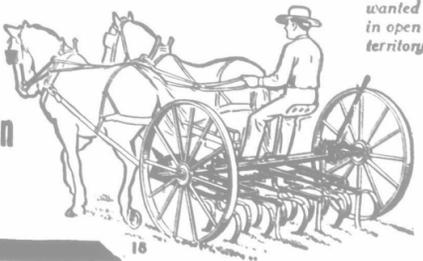
## Will it be a Dry Season?

You don't know—nobody knows. But if you take the precaution of proper tilling you will have as little to fear from insufficient moisture as hundreds of users of Peter Hamilton Cultivators last year. Good seed deserves better treatment than simply planting it haphazard. Work up your soil with a

### Peter Hamilton Cultivator

and you'll get improved results. All teeth cultivate to the same depth and thoroughly work up every inch of the ground. Every tooth reinforced, each section of heavy steel. See this splendid implement before investing in any cultivator.

The Peter Hamilton Company, Ltd.  
Peterborough, Ont.



Agents wanted in open territory



Miss Helen Merrill, known as one of Canada's poets, was married in Toronto to Mr. Frank Egerton of that city.

Harry Lauder, since the death of his soldier son, has put his whole fortune of several millions in the British war-loan. He is now in America, working steadily to get money to help British soldiers.

### A Survey of Business Conditions.

A thoughtful survey of business conditions is contained in the annual report of the proceedings of the Canadian Bank of Commerce published last week and in this issue. This bank has branches in practically every important agricultural district in the Dominion and is in close touch with producer, merchant and consumer. In financing between producer and consumer this bank holds a leading place, its advance for such purpose under the head of current loans and discounts amounted to \$149,000,000 at the end of November. Sir John Aird, the General Manager, states that the bank holds this year a largely increased amount of Treasury Bills of the Imperial and Dominion Governments representing credit given for the purchase of war munitions of which the farm is one of the chief producers. Sir Edmund Walker, President of the Bank, in his address goes into the value of farm products. The field crops of Canada were worth \$1,089,000,000 in 1917, and this wealth is needed. Sir Edmund emphasizes the need for greater production and for saving food. Banks are interested in the welfare of the people and are vitally concerned with those things which will conduce to the true interest of the country according to Sir Edmund's address. A closer co-operation is needed between producing and distributing forces. Read the reports of the year's business of the Bank of Commerce last week and in this issue.

### Gossip.

Writing recently to "The Farmer's Advocate," W. C. Houck, Llenroe Farms, Chippewa, Ont., says: "It might be interesting to you to know that the two-year-old Holstein heifer that we bought from Pine Grove Farms last spring was tested out there and just finished a nice record of 31.14 pounds of butter for seven days. I am not sure but what this gives us the champion two-year-old of Canada. The half-sister to her, Roslyn Leila Pomfian, that was sold at Welland to Mr. Detenbeck for \$750, was bought by us from him and we now have her in the test barn. I wish you could see the exceedingly fine milk she has made. We are expecting to do pretty fair with her. We have now begun official testing and will be testing until June."

### The Food Controller

We quote lower prices on seeds because we buy direct from the buyer and sell direct to you. When seeds pass through agents' or storekeepers' hands, they have to make their profit and you have to pay it. Food Controller Hanna insists that this unnecessary profit be cut out. Compare prices in our catalogue and see how much lower we are.

<b>Timothy</b>	Bus.
No. 1 (Extra No. 1 for Purity)	\$6.00
No. 2 (Extra for Purity)	5.50
No. 2 (No. 1 for Purity)	5.00
<b>Clover</b>	Bus.
No. 1 Red	\$22.00
No. 1 Alsike	16.00

Write for quotations on Turnip and Mangel seeds. Send us your name for a copy of our 1918 catalogue.

Special quotations to farmers' clubs.

GEO. KEITH & SONS SEEDS 124 KING ST. E. TORONTO

vitch in N. Y. Sun, "ranks highest among all the countries that comprise the vast Russian Empire as to the annual agricultural production." The leading products are wheat, rye, barley, sugar-beets and fruit.

One third of the Norwegian merchant marine has been destroyed by German mines and submarines, notwithstanding the fact that Norway is a neutral country.

A pontoon bridge 120 miles long has been built in Flanders, over the swamps and muddy flat lands, for the passage of British troops.

The Bolshevik Government has issued a decree providing for phonetic spelling. Three consonants are entirely eliminated from the Russian language.

The British Admiralty has approved of the employment of women on various duties on shore hitherto performed by sailors. These will be the first women in the naval service.

The Ontario License Board has completely stopped the sale in Ontario of wines used as beverages. Since prohibition certain wines have been substituted for other alcoholic liquors more difficult to obtain. Henceforth it will be impossible to buy them.

### Program of Poultry Short Course at Macdonald College.

Tuesday, Feb. 19th—9 a.m., Address, Dr. F. C. Harrison: "The Poultry Industry", M. A. Jull; 10.30 a.m., "Poultry Farm Management", Prof. H. Barton; 2 p.m., "The Fowl", A. G. Taylor; 3 p.m., "The Embryology of the Chick", Prof. W. L. Lochhead; 8 p.m., "Incubation", M. A. Jull; 9 p.m., "Brooding", A. G. Taylor.

Wednesday, Feb. 20th—9 a.m., "Feeding the Chicks", A. G. Taylor; 10.30 a.m., "Feeding the Laying Stock", M. A. Jull; 2 p.m., "Soils and Crops," Prof. J. Murray; 3 p.m., "Breeding for Egg Production", F. C. Elford; 8 p.m., "Poultry Houses", M. A. Jull; 9 p.m., address (illustrated), F. C. Elford.

Thursday, Feb. 21st—9 a.m., "Feeding the Fattening Stock", A. G. Taylor; 10.30 a.m., "Killing and Plucking", W. A. Maw; 2 p.m., "Market Eggs", W. A. Brown; 3 p.m., "Market Poultry", M. A. Jull; 8 p.m., "The Food Problem", W. A. Brown; 9 p.m., "Standard Bred Poultry" P. E. Aird.

Friday, Feb. 22nd—9 a.m., "Fruit Culture", Prof. T. G. Bunting; 10.30 a.m., "Poultry Diseases", Dr. N. E. McEwen; 2 p.m., "Parasites and their Control", Prof. W. L. Lochhead; 3 p.m., "How to Perform a Post Mortem", Dr. N. E. McEwen.

### Feeds for Farm Animals in England.

The orders of the British Food Controller, regarding feed for farm animals in England, may be summarized as follows according to the egg and poultry markets report: Allowed, wheat offals, gluten feed, maize germ meal, dried grains, malt culms, oil cake and meals. The restricted are: oats, maize, beans, peas, and other cereal foodstuffs, except bran and dried bran and dried grains. The forbidden are: wheat, barley, (imported or kiln-dried home-grown), rye, rice and malt.

### Gossip.

E. Barbour & Sons of Hillsburg, Ont., breeders of Oxford Down sheep write that they got second and third prizes for ram lambs at the recent Provincial Winter Fair, Guelph. They were reported as getting only one prize in the class.

### Markets

Continued from page 126.

mouille and \$61 to \$62 for pure grain mouille, in bags, in mixed car lots, per ton. Hay.—The market was steady, with No. 2 quoted at \$14.50 to \$15.50 per ton; No. 3 being \$13.50 to \$14.50, and clover mixed \$10 to \$12, ex-track.

Hay Seed.—Timothy is almost unobtainable in Canada, and red clover is exceedingly scarce, though alsike has been coming in freely. Red is much higher than a year ago, and alsike and timothy are a little firmer. Dealers were offering at country points 18c. to 21c. per lb. for alsike; 27c. to 30c. for red clover and 7c. to 10c. per lb. for timothy.

Hides.—Lower qualities of both hides and calf skins have declined in price. Hides were 14c., 16c. and 20c. per lb., for No's. 3, 2 and 1, respectively, Montreal inspection. Calf skins were 18c. to 20c. per lb. for grassers, and 28c. to 30c. for veals. Lamb skins were \$4.50 to \$4.65 each; horse hides, \$5 to \$6 each. Tallow unchanged at 3½c. per lb. for scrap fat, and 8c. for abattoir. Rendered tallow was 16c. per lb.

### Chicago.

Cattle.—Beeves, \$8.50 to \$13.85; stockers and feeders, \$7 to \$10.90; cows and heifers, \$6 to \$11.90; calves, \$9 to \$16.50. Hogs—Light, \$16 to \$16.75; mixed, \$16.20 to \$16.90; heavy, \$16.20 to \$16.90; rough, \$16.20 to \$16.35; pigs, \$12.75 to \$15.50. Sheep—Lambs, native, \$14.50 to \$18.

### Cheese Markets.

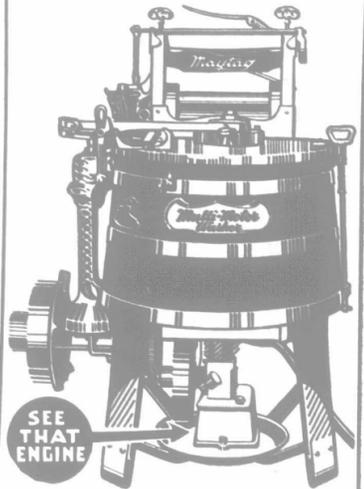
New York, specials, 24½c. to 25½c.; Montreal, finest westerns, 21½c.; finest easterns, 21¼c.

# SOLVED!

A machine that will do your washing and wringing; drive your churn and cream separator has surely solved your Labor Problems

### Buy a Maytag Multi-Motor

A postcard will bring you full particulars and prices.



WHITES LIMITED  
COLLINGWOOD, ONT.

### Coming Events.

Jan.—21 to Feb. 2.—Short Course, Farm Power, O. A. C., Guelph.  
Feb. 4 to 8.—Live Stock Meetings, Toronto.  
Feb. 12 to 15.—Corn Show, Chatham, Ont.  
Feb. 14 and 15.—Ontario Fruit Grower's Convention, Hotel Carls-Rite, Toronto.

### Sale Dates.

Jan. 29, 1918.—Victoria County pure-bred Stock Association, Lindsay, Ont.—Shorthorns and Herefords.  
Jan. 30, 1918.—Alex. Hastings, Crosshill, Ont.—Shorthorns, Leicester Sheep and Hampshire Hogs.  
Feb. 20, 1918.—A. Stevenson, Atwood, Ont., Shorthorns and Yorkshires.  
Feb. 23, 1918.—W. A. Dryden, Brooklin, Ont.—Shorthorns.  
March 5, 1918.—E. C. Chambers and Sons, Burford, G. T. R. or Scotland, Ont., L. H. & B.—Holsteins.  
March 7, 1918.—L. K. Weber, Hawkesville, Ont.—Shorthorns.  
March 20, 1918.—Oxford District Holstein Breeders' Club Consignment Sale, Woodstock, Ont.—Holsteins.

### Tobacco Growing Centres in Canada.

Tobacco growing in Canada has become localized in the parts of the country where climate is adapted to the raising of a semi-tropical plant, which requires a warm and sufficiently long summer to attain its full growth. Generally speaking tobacco can be grown in the part of the Dominion extending from east to west between the limits of Berthier county and the Detroit river; to the south for Quebec it is limited by the American border, and for Ontario by the northern shore of Lake Ontario and Lake Erie; to the north for Ontario by a straight line which could be traced from Ottawa to Windsor, and for Quebec by the foothills of the Laurentides.

**ONTARIO GROUP.**—Tobacco growing in Ontario has become particularly localized in the southern part of Essex and Kent counties. There are other centres not much developed in the Niagara district and in Prince Edward county. This part of Canada enjoys a long summer, which makes it possible to grow comparatively slow varieties like the White Burley, or which require an advanced stage of maturity like the flue cured tobaccos. The White Burley thrives on the comparatively coarse sands of Essex and Kent. It acquires on these lands a rather loose texture adapted to the absorption of juices, one of the conditions required of the tobaccos used for plug chewing tobaccos. Some finer sands, generally less fertile, on the shore of Lake Erie, and certain gravelly bench lands produce Virginia Bright tobaccos, which, on richer soils, would grow too large, ripen too late, and would not acquire the desired color. The growing of the latter tobaccos has rapidly developed, the annual output at present being about 1,000,000 pounds; it is hoped it will soon be doubled.

**QUEBEC GROUP.**—Tobacco growing in Quebec has particularly developed in the vicinity of Montreal. The most important centre comprises the counties on the north of the St. Lawrence. The southern group includes especially the Yamaska Valley and more particularly the St. Cesaire district; this group is susceptible of being considerably extended.

From an industrial standpoint the southern group, though it does not cover as large an area, has first specialized in the production of cigar binders of the Wisconsin type, the northern group, generally speaking, supplies the manufacturing trade with pipe tobaccos for cutting purposes, but some varieties like the Blue Pryor and the General Grant are sometimes used for plug.

The shortness of the season limits the choice of the varieties grown in Quebec to the earliest types. One cannot, without serious risks, grow in that part of Canada tobaccos slower than the large Connecticut, which require from 90 to 100 days of growth, and it is better to grow only the Seed Leafs of average size like the Connecticut Havana, the Havana Seed Leaf and the Comstock Spanish. In spite of the risks attached to the growing of tobacco in Quebec in case of early frosts it can be said that it is one of the best paying crops wherever the growing season extends from June 1 to September 15.

The aim of the Tobacco Division of the Experimental Farms is to endeavor to acclimatize and to disseminate in Quebec filler tobaccos of a finer aroma than that of the varieties produced so far. Judging by the opinion of the manufacturers acquainted with the results of this experimental work this is on the eve of being attained.

Canada can be considered as a real tobacco producer, though its production at present is not sufficient to meet the demand. Tobacco growing in Canada, which, for many years, has been considered one of the best paying crops, has recently come in competition, in Ontario, with the crops required by the canning industry and in Quebec with the potato crop. This is the natural outcome of the present conditions, but it would be a great mistake to lose sight of the position it should occupy with the return to normal conditions, or to forget that, thanks to it, our purchases abroad can be limited.—Experimental Farms Note.

### 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.

##### Scratches.

What treatment would you advise for a mare that has itchy legs? She bites her legs at times and stamps the floor. Her legs are slightly swollen. She has been like this for two or three months. Is the disease contagious? J. R.

Ans.—The symptoms are those of scratches, to which some horses are predisposed. If the mare is not in foal give a purgative of 8 drams aloes and 2 drams ginger and follow up with 1½ ounces Fowler's solution of arsenic twice daily for a week. If the legs are very bad, apply hot linseed poultices to the affected parts for a couple of days and then dress three times daily with a lotion made of one ounce each acetate of lead and sulphate of zinc to a pint of water. If the legs get wet or muddy they should be rubbed well until dry. Careful feeding and regular exercise are necessary to prevent the legs swelling. Sometimes scratches are difficult to heal. They are not considered to be contagious. It is more of a constitutional trouble.

##### Damages for Goslings Killed.

Last June my dog killed a number of four-weeks-old goslings for my neighbor. I offered to give him a reasonable sum for damages but he claimed the price of mature geese. I offered to leave it to arbitration, but he would not consent. On January 2 he came to me wanting market price. Can he claim the present price? Can he claim damage for full-grown geese? Is there any particular time in which this should be settled? What steps would you advise me to take to settle it? L. H.

Ans.—Your neighbor is not legally entitled to damages on the basis of "present prices," nor as though the fowl were fully-grown geese. He may bring his action any time within six years from the date of the killing. You were right in making him the offers you did; but in order to save, if possible, your having to pay costs in the event of his suing you for damages, you ought to make him a legal tender, in actual cash, of an amount sufficient to cover the value of the goslings, considered as such.

#### Veterinary.

##### Infectious Ophthalmia.

I bought a herd of yearling cattle, three or four of which had sore eyes. They got better, but others contracted the same trouble. Now one has what looks like a boil or large pimple on the pupil, and another has a white scum over the eye and fluid runs from the eyes. Some are almost blind.

S. H. M.

Ans.—This is an infectious disease known as "Infectious Ophthalmia." Isolate the diseased in a comfortable stable excluded from drafts. Get a lotion made of 15 grains sulphate of zinc and 20 drops fluid extract belladonna in 2 oz. distilled water. Purge each with 1 pint raw linseed oil. Bathe the eyes well three times daily with hot water and after bathing put a few drops of the lotion into each eye. Continue treatment until the inflammation subsides. Then if there be a cloudiness of the eye (what is generally called "a scum on the eye") get a lotion made of 5 grains nitrate of silver in one oz. of distilled water and put a few drops in the eye once daily. It is probable that the boil, of which you speak will rupture, and the animal may lose the sight of the eye. As the disease is very contagious it will be wise to observe isolation measures as thoroughly as possible, and care must be taken to not carry the infection to other cattle on the hands, clothing, etc., of the attendants. V.

# How I Make Big Money Out of "Ornery" Horses

By J. A. BUTLER

ABOUT two years ago I witnessed up in New York State an exhibition of horse-training that opened my eyes. A man by the name of Mackley took a devil of a mean, vicious mare that hadn't been harnessed for seven months and in a few days had her gentle enough for a schoolgirl to drive. Mackley had taken the mare off the owner's hands for \$50 and just ten days after sold her for \$175.00. A clear profit of \$125.00 in ten days!

That started me investigating. I learned that Mackley had simply used the methods introduced by the famous horse trainer, Jesse Beery. Beery, I learned, used to go about the country giving wonderful exhibitions in colt-breaking and horse-training; but realizing that he could accomplish more by teaching his methods by mail, had given up his exhibition work to spread his horse-training secrets by mail-instruction. Mackley had studied Beery's Course in his spare time and in a few months was able to accomplish magical results with green colts and horses with bad habits.



#### Other Successes

Mackley's work showed me a way to make some nice money and I determined to take Prof. Beery's Course in horse-training—before doing so I made further inquiries. Here are what a few of Beery's students said. I'll let them tell of their success in their own words.

Mr. S. L. Arant writes: "Just to test Beery's methods, I bought the worst balky, kicking, fighting horse I could find. Paid \$65.00 for him. After handling him only a few hours according to Beery's system I sold him for \$135.00."

Mr. Dell Nicholson, Portland, Mich., writes: "I have trained a four year old mare that was given up by everybody. Bought her for \$35.00, and now have her so gentle, my little boy handles her. Wouldn't take \$200.00 for her."

Dean L. Smith, Findley, Ohio, writes: "By following Beery's instructions have changed a worthless, dangerous balker into a horse worth \$225.00."

Everett McBlock, Elkhart, Ill., writes: "Have just broken a pony to drive and taught it some tricks. Owner bought it for \$17.50. Paid me \$40 to train it. He just sold it to a show company for \$150.00."

#### How I Work

The big source of my income is in buying up

"ornery" colts and horses at bargain prices, and after training the animals, selling them at a good profit. However, I also pick up good money handling colts and training horses for others on a fee basis. For instance, a farmer had a beautiful driving bay that had the bad habit of shying. A piece of paper blowing across the road would set the horse crazy. The owner thought a great deal of the animal, but couldn't take chances on the shying habit. A friend of his for whom I had done some work put this man in touch with me and in a few hours I had the horse completely cured of the habit—for which job I received \$50.

#### Curing Bad Habits

You can see from this that my work consists not only in breaking colts and "gentling" vicious horses, but in curing the various bad habits a horse can have—such as shying, balking, fear of automobiles, etc., pulling at hitching strap, pawing in the stall, etc. etc., Beery's methods of colt breaking are particularly amazing. Under the old way of handling green colts one usually had to half kill the horse as well as himself to accomplish anything—and then the colt was usually spoiled or hurt in some way or other. But, when you apply Beery's principles, there is no hard, long work or injury to the colt.

No one should have a biting, kicking or balky horse when it is so easy to cure these vicious habits. No one should attempt to break in a colt the old fashioned way when Beery's methods make the task so easy. To every horse owner, to every lover of horseflesh, my advice is to get acquainted with the Beery principles. You can not only make money for yourself, but you can do a world of good, particularly at this day when war-demands have placed a premium on horses.

#### Wonderful Book Free

I have been requested to state that Prof. Jesse Beery will send his remarkable booklet, "How to Break and Train Horses" free to those interested. It is a booklet well worth having as it reveals some startling information on horse-training. I have heard men who considered themselves expert horsemen say that the booklet was a revelation to them. There is no use in my going into details on the booklet when you can get it free for the asking.

Just drop a line to Prof. Jesse Beery, Dept. 481 Pleasant Hill, Ohio, and the booklet will be sent free by return mail. A postcard will do as well as a letter.

## Imported and Canadian Bred Clydesdales

### COLUMBUS STABLES

We have on hand at present one of the strongest selections of imported and Canadian bred stallions we have had in the stables in years. A strong combination of size, quality and breeding. We also have 15 in-foal mares, all to the service of horses we are offering.

Smith & Richardson, Myrtle, C.P.R., Oshawa, C.N.R., Oshawa, G.T.R., Columbus, Ont.

## Sundrum Clydesdales

Several choice imported and Canadian-bred mares, safe in foal. Also several prize-winning fillies and stallions, and a few show geldings, 2 and 3 years of age.

W. A. McNIVEN, R. R. No. 4, HAMILTON, ONTARIO

### CLYDESDALES AND SHORTHORNS

I have on hand a number of real choice young mares and fillies. Eight excellent young bulls, from 9 to 12 months, of Right Sort and Royal Blood breeding; also a number of females. Inspection invited J. B. CALDER, R. R. No. 3, GLANFORD STATION, ONTARIO

## Aberdeen-Angus

We have a splendid selection of last spring's bull calves to offer, sired by our noted herd bulls and from our choice home-bred and imported cows. Inspection invited. Berkshire Boars and Sows, LARKIN FARMS (MENTION FARMER'S ADVOCATE) QUEENSTON, ONTARIO

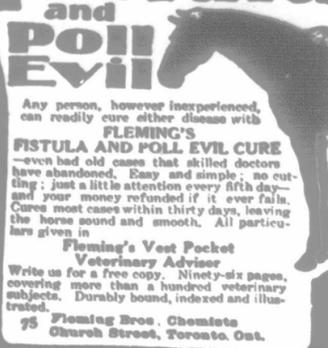
#### CENTRAL NURSERIES

For reliable Apple, Pear, Plum, Cherry, Peach and Ornamental Trees, Shrubs, Roses, Grape Vines, Berry Plants, Evergreens, Hedges, etc.—good ones, too. We ship direct to customers. Our trees are extra fine. Write us for prices on your lists for early Spring planting. 38 years at it. No agents. A. G. Hull & Son, St. Catharines, Ont.



REES & SHRUBS  
BROWN BROTHERS Co.  
MURKERTON LIMITED  
BROWNS NURSERIES, ONT.

## 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.

95 Fleming Bros. Chemists  
Church Street, Toronto, Ont.

### Some Reasons Why Aberdeen-Angus Cattle are Growing Popular

At Guelph Winter Fair and Toronto Fat Stock Show, 1915 and 1916, the grand champions were Aberdeen Angus. At Chicago International, out of 15 grand championships and 15 reserves, the Aberdeen-Angus have won 10 grand championships and 9 reserves. Out of 15 grand championships for carloads, Aberdeen-Angus have won 12 times. Out of 15 grand championships for Carcass Contest, Aberdeen-Angus won 14 times.

For free information, write:  
**W. I. Smale, Secretary,**  
Aberdeen-Angus Association,  
BRANDON, MANITOBA  
Jas. D. McGregor, President, Brandon, Manitoba

MESSRS. A. J. HICKMAN & CO., (late Hickman & Scruby), Court Lodge, Egerton Kent, England, Exporters of PEDIGREED LIVE STOCK of all descriptions. Specialty made of draft horses, beef and dairy breeds of cattle, show and field sheep. Illustrated catalogues and testimonials on application. All enquiries answered with pleasure. Now is the time to import. Prospects were never better, and insurance against all war risks can be covered by payment of an extra 1% only.

#### THE VETERINARIAN

A valuable book which tells you all about the treatment of diseases of your live stock, given FREE with a trial ton order of LINSEED OIL CAKE "Maple Leaf" Brand. Write to-day for lowest prices. The Canada Linseed Oil Mills, Limited Toronto and Montreal

#### MORE HORSEPOWER

if your teams are equipped with Ventch. These pads prevent Sore Shoulders and cure Gall Sores. Your dealer will supply you, or write: BURLINGTON BLANKET CO., LIMITED 793 King Street, West, Toronto, Canada.

#### SUNNY ACRES ABERDEEN-ANGUS

Bulls of serviceable age and females not akin.  
**WM. CHANNON & SON**  
P. O. and Phone Oakwood, Ont.  
Stations—Lindsay, G. T. R. and C. P. R.

#### Alloway Lodge Stock Farm

Angus - Southdowns - Collies  
SHOW FLOCKS  
Rams and ewes. Heifers in calf to Queen's Edward, 1st prize, Indiana State Fair.  
**Robt. McEwen, R. R. 4, London, Ont.**

Dr Bell's Veterinary Medical Wonder. 10,000 \$1.00 bottles FREE to horsemen who give the Wonder a trial. Guaranteed for Colic, Inflammation of Lungs, Bowels, Kidneys, Fevers and Distempers, etc. Send 25¢ for mailing, for King, etc. Agents wanted. Write address plainly.  
**Dr. Bell, V. S., Kingston, Ont.**

#### Aberdeen-Angus

Alonzo Matthews, Manager, Forest, Ontario  
H. Fraleigh, Proprietor, Forest, Ontario

#### Beaver Hill ABERDEEN-ANGUS

Cows with calves at foot. Bulls of serviceable age and females all ages.  
**ALEX. MCKINNEY, R. R. No. 1, Erin, Ontario.**

#### Kennelworth Farm Aberdeen-Angus

A grand lot of pure bred Aberdeen-Angus from the neighborhood of Toronto. A. C. Guelph, Ontario.  
**PETER A. THOMSON, HILSBURG, ONT.**

### Questions and Answers. Miscellaneous.

**Mirror.**  
Where can I get a piece of plate glass made into a mirror, without purchasing an amalgam? T. B.

Ans.—It is advisable to have the work done at a factory where they are equipped for making mirrors. There are a number of manufacturers of glass and you might have your local glazier or furniture dealer who handles glass or mirrors send your piece of glass to the factory at which he deals.

**Sprain.**  
I have a three-year-old horse which is lame. I first noticed the lameness when leading to the water trough. One of his hind legs is slightly swollen at the fetlock. I applied mustard and turpentine but without results. I believe the trouble was caused by the horse slipping on the pavement. What treatment would you advise?

I have found butter of antimony a sure and simple cure for thrush. E. A. D.

Ans.—A sprain caused by slipping or a mis-step might affect the muscles or ligaments, causing a swelling, heat and tenderness of the part involved, which would result in lameness. Rest for a time will be necessary. Apply heat in some form to the swollen parts and also an anodyne lotion, as 4 drams acetate of lead, 2 ounces of laudanum and 6 ounces of water, until acute soreness disappears, then you might apply a liniment and bandage.

**Tanning Skins.**  
I would like to tan some skins without the hair and I have heard that there is some method called "oil tanning" which makes them very soft. Would it be possible for you to give me the recipe for the same? H. W.

Ans.—The following is a recipe for what is known as "Indian tan", which may serve your purpose: Take the skin and flesh it with a dull knife; spread on a smooth log and grain it by scraping with a sharp instrument. Rub nearly dry over the oval end of a board. The Indians used to take the brains of a deer or calf and boil them until soft and soak the skin in them until quite soft and pliable, then wring it out as dry as possible. Wash in strong soap suds and rub dry, and then smoke with wood smoke. Instead of brains, oil or lard may be used and the skin soaked therein six hours. We are not aware of any other method of oil tanning. Possibly some of our readers have used the oil method or some other method which is satisfactory.

**Mange—Soil Analysis.**  
I have an aged mare in rather poor condition. She raised a colt last year but was not required to do very much work. Her teeth are good. She is always rubbing her tail and biting her sides. Is this mange? What would be good for this trouble? I have treated her for worms.

2. Where can I get soil analyzed to find out what it requires, as it never grows a fair crop. A. G. L.

Ans.—1. It is possible that the mare is infested with vermin; if so, insect powder sifted into the hair may prove effective, or four parts cement to one part hellebore may be sifted into the hair and the animal kept out of the wet for two or three days. If suffering from mange, some treatment must be applied which will destroy the parasite. The hair should be clipped and the skin washed with soap and water. A sulphur ointment, consisting of one part sulphur to three parts lard sometimes proves effective. One part creosote to twenty parts lard is another remedy which is sometimes used. Animals sometimes become affected with eczema which is a skin trouble, in which pimples form containing matter substance. Treatment for this trouble consists in giving 7 drams aloes and 2 drams ginger, and follow up with one ounce Fowler's solution of arsenic twice daily for a week. The parts affected should be dressed twice daily with a warm five per cent solution of one of the coal tar antiseptics. The animal should be kept comfortable and warm and thoroughly dry after each treatment.

2. It is possible that you might have the sample of soil analyzed at the Chemical Department of the O. A. C., Guelph, or at the Experimental Farm, Ottawa.

## MORE WORK FROM YOUR HORSES

Heavy spring work takes the surplus flesh from the horse. His collar no longer fits. His neck and shoulders chafe and gall. He can't do his full share of work and you lose money. Prevent these evils by using TAPATCO Pads.

### A NEW AND BETTER HOOK ATTACHMENT

Consisting of wire staple, reinforced with felt washer (note where arrows point). This gives the hook a better hold and prevents pulling off. The weakest point is made strong and life of pad greatly lengthened.

Look For The Felt Washer.

SOLD BY DEALERS EVERYWHERE

The American Pad & Textile Company

Chatham, Ontario, Canada



Pat. in U. S. Dec. 1, 1914, Pat. in Can. Apr. 6, 1915.

### BROOKDALE FARM HEREFORDS

Herd headed by Bonnie Ingleside 7th, the Canadian-bred champion bull at Toronto, 1914-1915. We are offering several young bulls that were Toronto and Ottawa winners this year, all sired by the herd bull, as well as a few females in calf to him. Come and see our herd or write us for anything in Herefords.  
**W. READHEAD BROOKDALE FARM MILTON, ONT.**

### THE MANOR STOCK FARM---SHORTHORNS

Present Offering—A choice young red bull, fit for service in any herd. Write or come and see.  
**JOHN T. GIBSON, DENFIELD, ONTARIO**

### NICHOLSON'S SHORTHORNS

Herd headed by "Best Boy" = 85552 =, and "Browndale Winner" = 106217 =. Bulls and females for sale. Visitors always welcome to this herd of long-established reputation.  
**R. & S. NICHOLSON, PARKHILL, R. NO. 2, ONTARIO.**

### THE HAWTHORNE SHORTHORNS

5 young bulls, and several females bred to the herd sire, Royal Choice "79864," a Toronto winner. Both milk and beef strains. A few Leicester rams and Yorkshire sows. Everything priced to sell.  
**"THE HAWTHORNES"—ALLAN B. MANN, R. R. 4, PETERBORO, ONT. G.T.R., C.P.R.**

### WELLAND DISTRICT SHORTHORN BREEDERS' CLUB

are still offering young bulls of serviceable age, and a few breeding females.  
**CHAS. GAINER, Secretary, Box 607, Welland, Ont. A. E. HOWELL, President, Fenwick, Ont.**

### HIGH-CLASS SHORTHORN BULLS

We have a number of choice young bulls on hand, ready for service. Some are straight Scotch and others are bred for milk production. Also offering the four-year-old Duchess-bred bull, Duchess Hug  
**GEO. MORDEN & SON, OAKVILLE, ONTARIO**

### FLETCHER'S SHORTHORNS

Our herd of Scotch Shorthorns represents Orange Blossoms, Kiblean beauties, Matchless, Mysie, Missies, Clementina's, etc., and is headed by the Watt-Stamford bull, Victor Stamford = 95959 =, a Toronto winner. Present offering, two young bulls (show animals) also several heifers and cows.  
**GEO. D. FLETCHER, ERIN, R. R. 1, ONT. Erin Station, C.P.R., L.-D. Phone**

### GERRIE BROS' SHORTHORNS

Herd headed by Gainford Matchless, one of the very best sons of the great Gainford Marquis. Our breeding cows are Missies, English Ladies Duchess of Glosters, etc. Present offering of young bulls are by our former herd sire, Master Missie, Junior Champion at Brandon last summer.  
**GERRIE BROS., ELORA, ONT.**

### PURE SCOTCH SHORTHORNS

of exceptional merit. The young things we are offering this year are something extra, especially the bulls. Come and see them if you want something choice.  
**GEO. GIER & SON, WALDEMAR, ONT.**

### BURNFOOT STOCK FARM

A rare opportunity to secure a great dual-purpose Shorthorn bull, whose dam, Bonnie Jean, gave 8,175 lbs. milk, testing 4.18, in 227 days, and brother, on dam's side, to Jean Lassie, who has a two-yr.-old R.O.P. of 8,939 lbs. milk, testing 4.14, and who, at present in test, is giving up to 65 lbs. per day. Sired by our herd-header, Burnfoot Chieftain, whose dam has an R.O.P. of 13,535 lbs. milk, testing 3.99. He is 7 months old, and a smooth, thick fellow.  
**S. A. MOORE, CALEDONIA, ONTARIO**

### Blairgowrie Shorthorns and Shropshires

20 imported cattle, cows and heifers; all have calves at foot or are in calf to British service. Bulls for breeders wanting herd headers. Also home-bred bulls and females. Prices right. Rams and ewes in any numbers.  
**JOHN MILLER, Myrtle Station, C. P. R., G. T. R. ASHBURN, ONTARIO**

### IRVINEDALE SHORTHORNS

Herd headed by Marquis Supreme 116022. For sale at present, 9 granddaughters of (Imp.) Right Sort and a good lot they are; also 2 bulls (roans), 15 months old, by Gainford Select.  
**JOHN WATT & SON, R. R. No. 3, Elora, Ont. G. T. R. and C. P. R.**

### OAKLAND SHORTHORNS

This herd, numbering nearly 60 head, is of our own raising, and of the dual-purpose, prolific kind that satisfies the buyers. Present offering is 7 bulls, from 8 to 18 months, and females any age; priced worth the money. All registered. Crown Jewel 42nd at head of herd.  
**John Elder & Sons, Hensall, Ont.**

### SHORTHORN BULLS Will. A. Dryden

of my own breeding, around a year old; best families and good colors, are for sale. Also a few young, imported bulls.  
**Brooklin, Ontario County Myrtle, C.P.R., Brooklin, G.T.R. Brooklin, C.N.R.**

### A. G. Farrow, Oakville-SHORTHORNS

Herd headed by Proud Lancer (Imp.) and Pride of Escana, a great son of the great Right Sort Imp. I have a few bull calves of the better sort. Three imported ones left. Prices right.  
Farms one mile from station. Trains every couple of hours each way.

### \$500 Bull for \$325

Meadow Lawn Major is a big, growthy, 12-months-old red bull, of the Claret family. Dam, Nora 101690; sire, Escana Ringleader 95963. We are offering one red and two roan two-year-old heifers. bred in July, priced at \$250.  
**F. W. EWING, R. R. No. 1, ELORA, ONT.**

Questions and Answers. Miscellaneous.

Fertilizer for Potatoes.

I have broken an acre of land which has been in sod for one year. I wish to plant it with potatoes. The soil is light and well drained and received a light coating of stable manure last fall. Would you advise the putting on of any commercial fertilizer? C. C.

Ans.—It depends a good deal on the fertility of the soil. If the land has been well treated in the past few years, you might grow a profitable crop of potatoes by applying stable manure. It is one of the best all-round fertilizers, but, of course, it cannot always be obtained in satisfactory quantities. Sulphate of potash is an excellent potato fertilizer, but it is rather difficult to get at the present time; in fact, the price is almost prohibitive. Nitrate of soda, 100 lbs; acid phosphate, 400 lbs; and sulphate of potash, 150 lbs., is generally considered to be a good mixture to apply to potato land. This quantity could be applied to an acre. Comparatively light soil that contains a sufficient quantity of plant food should prove very satisfactory for potatoes.

Worms—Feed for Sows.

My father has 61 acres of good soil but is not able to cultivate it himself so he wants me to stay home and work it for him. We came to an agreement and I have been doing this since I came of age. Nothing, however, was said about wages. What would be a good way to have arrangements made now? What should it have been worth a year to bear the responsibility? Could I have things fixed up so as to resign the management of the farm and draw my wages when I feel like starting for myself. There are a number of boys and girls in the family but all have their own homes.

2. What is a good cure for worms? I have a two-year-old colt and a mare which are affected.

3. One of my cows dropped a calf the last of December, although she was not due to freshen until sometime in April. She is in fair condition and has been fed corn from the shock, turnips and clover hay. I am now feeding 3 quarts of oat chop with the other feed. What is the trouble?

4. I have two brood sows to which I am feeding roots and warm swill. How long before they farrow should they be fed grain? I have buckwheat and oats; what proportions would you advise feeding?

5. Can a two-year-old colt be driven if well fed and cared for? Would a ten-mile trip be too much for him? Would you advise shoeing him? I purpose turning him on grass for the biggest part of the summer. G. L.

Ans.—1. It is always advisable to have some understanding regarding wages, etc. It very often saves a good deal of trouble. We believe you could collect wages from the time you were of age; as to how much, would depend on what agreement you could make with your father. From the details given we are not in a position to say what would be a fair wage.

2. Take 1½ ounces each of sulphate of iron and sulphate of copper and one ounce of calomel. Mix and make into 12 powders. Give a powder night and morning in damp feed. If it is not eaten in this way, mix with a little water and drench. Starve for ten hours after the last powder and then administer a purgative of 8 drams aloes and 2 drams ginger. Do not give the purgative to a mare that is in-foal.

3. It is probable that abortion was due to an accident. It is not likely that the feed was the cause.

4. You can scarcely expect to have a large litter of strong pigs from a sow fed entirely on roots and swill. She should have a little grain. One part buckwheat and three parts oats would be a fair mixture. After they farrow, shorts might be added to the ration.

5. It depends a good deal on the colt. If he is a fair size for his age, light driving should not materially harm him. After he has been driven a little, a ten-mile trip should not hurt him, provided he is carefully driven. A colt's feet will sometimes stand a good deal of roading. If the hoofs start breaking though, flat shoes might be put on to protect the hoof. If he is running on grass and not being put on the road much, his feet would be better without shoes.

High in Quality



Enarco PETROLEUM PRODUCTS

A Better Lubricant for Any Motor

Let no man sell you "just oil" again. The difference between the price of En-ar-co National Motor Oil and ordinary oil is only a few dollars per year.

AND those few dollars "saved" will cost you power losses and money losses in repair and upkeep bills. In any climate, at any temperature, up grades or over level stretches, En-ar-co will conserve the power your money has bought and insure your motor's longer life and satisfactory service.

For Your Automobile, Tractor, Gas Engine And All Power Machinery

Select your motor oil as carefully as you selected the motor you must lubricate. Investigate—don't buy blindly.

For 36 years En-ar-co National Motor Oil has kept step with the onward march of motor progress. From motordom's experimental days to its present high efficiency, En-ar-co has stood for highest excellence.

If you do not now enjoy En-ar-co satisfaction, this is the season to investigate. Send in the coupon today for free handy oil can and valuable power facts.

For Other Farm Needs

These other En-ar-co products are equally important to every farmer. Only the highest quality products bear the En-ar-co brand. Try

- En-ar-co Motor Grease
En-ar-co Black Beauty Axle Grease
En-ar-co Black Star Harness Oil
En-ar-co National Light Oil
En-ar-co White Rose Gasoline

Get this FREE Handy Oil Can Now!

Canadian Oil Companies Limited, Dept. U3 2-12 Strachan Ave. Toronto, Ont.

I own... automobile or tractor and enclose two 3-cent stamps. Send me Handy Oil Can FREE. Please give nearest shipping point in this province and quote prices on the items I have marked. I will be in the market about...

Form with fields for: I use...gals. gasoline per year, I use...gals. motor oil per year, I use...lbs. axle grease per year, I use... auto greases per year, I use...gals. kerosene per year, I use...gals. tractor oil per year, My Name is..., Address..., Postoffice..., Province...

Canadian Oil Companies, Limited Branch Offices in 36 Cities Dept. U3, 2-12 Strachan Avenue, Toronto, Canada

SPRING VALLEY SHORTHORNS

Herd of seventy head, straight Scotch, good individuals. Headed by the great show and breeding bull Sea Gem's Pride 96365 and Nonpareil Ramsden 83422. We have for sale four as good young bulls as we ever had and a few females. KYLE BROS., DRUMBO, ONT. (Phone & Telegraph Via Ayr.)

ESCANA FARM SHORTHORNS

For Sale—2 herd-headers of serviceable age; one a Cruickshank Orange Blossom by Right Sort Imp., and one a Jilt, by Raphael (Imp.); also one good farmer's bull. Can also spare a half-dozen females. J. F. MITCHELL, BURLINGTON, ONT. Farm, ¼ mile from Burlington Junction.

Robert Miller, Stouffville, Ont.

still has a few Shorthorn bulls, fit for service, and some females that are as good as can be found for the man that wants to start right in Scotch Shorthorns. They will be sold for a low price, considering the quality, and the freight will be paid.

Write for anything in Shorthorns. One hour from Toronto

FIFTY IMPORTED SHORTHORNS

I have fifty head of newly imported Shorthorns (42 females, 8 bulls) which are acknowledged to be one of the strongest lots that have left Britain this season. You should see these if you are wanting something choice. George Isaac, (All Railroads; Bell Phone) Cobourg, Ontario.

GLENGOW SHORTHORNS

We have a choice offering in young bulls, fit for service. They are all of pure Scotch breeding, and are thick, mellow fellows, bred in the purple.

WM. SMITH, COLUMBUS, ONTARIO. Myrtle, C.P.R., Brooklin, G.T.R., Oshawa, C.N.R.

PURE SCOTCH SHORTHORN BULLS

Our present offering of young bulls, sired by our herd sire Broadhooks Star, a son of the great Newton Ringleader, Imp., are the best lot of bulls we ever had on the farm. Come and see them, or write for particulars. We also have females of the richest breeding and highest individuality.

GORDON SMITH Woodslee Sta., M. C. R., Essex County. SOUTH WOODSLEE, ONT

Imported SCOTCH SHORTHORNS

Our present offering includes 100 imported females and 12 young imported bulls, representing the most desirable lines of breeding. If interested come and see them. Burlington Jct., G. T. R. is only half mile from farm. J. A. & H. M. PETTIT, FREEMAN, ONTARIO.

Protein Prolificacy—Proficiency—Prosperity

More and more do we realize the tremendous significance of protein and nitrogen in our business as farmers. They mean flesh-forming elements in the stable, plant food in the soil. We pay out good money for both, and regard it as good business to do so. Our own business is to demonstrate to you that there are two ways of getting these precious elements. One is the railway; the other is the clover way. Every now and then some enthusiastic experimenter tells you something about the enormous food-producing and soil-fertilizing power of sweet clover. Who doubts its value as a food now? Who discredits its soil-rebuilding power? Its reputation is established, the need for its services are insistent. Grow bigger crops of feed, feed more live stock and feed them better, at the same time rebuilding, not depleting your fields. Probably ten thousand farmers will grow it this year for the first time. As others' experiences have been, theirs will be. Sow Sweet Clover. Sow the best. For forage, for pasture, we recommend our own select strain of sweet clover, known as Canadian Albortea. It is finer of stalk, more tender and less rank, more prolific of seed. Write for our descriptive pamphlet, "The Hollow Stem," that tells you all about it.

CANADIAN ALBORTA CLOVER CO., LTD. Warehouse and Shipping Office: Listowel, Ontario

CHURCH BELLS

CHIMES AND PEALS MEMORIAL BELLS A SPECIALTY FULLY WARRANTED McSHANE BELL FOUNDRY CO., BALTIMORE, Md., U. S. A. Chicago Office: 154 W. Randolph St. Established 1854



# Order Now

For shipment when sleighing is good

## Interprovincial Pressed Brick

For the best combination of Quality and Price  
 RED, BUFF and FIRE FLASHED Colours. No Artificial Colouring Used. Cannot Fade. Samples forwarded prepaid on request.  
 Victory Bonds Accepted as Cash  
**INTERPROVINCIAL BRICK CO. OF CANADA, Limited**  
 154 Simcoe Street (Goodyear Building)  
 TORONTO  
 Plant—Cheltenham, Ont.

**BE YOUR OWN**

**BLACK-SMITH**

FARMERS! SAVE REPAIR BILLS & VALUABLE TIME. ONE OF OUR BLACK-SMITHING OUT-FITS WILL PAY FOR ITSELF. CATALOG FREE

**THE HALLIDAY COMPANY, LTD. HAMILTON**  
 FACTORY DISTRIBUTORS CANADA

**METALLIC**  
 WRITE FOR PRICES  
**METALLIC ROOFING CO.**  
 LIMITED  
 TORONTO, CANADA  
**CEILING**

Economy in management accounts for the big dividends that you get if you insure with **The Mutual Life of Canada**

**STAMMERING**

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

**THE ARNOTT INSTITUTE**  
 KITCHENER, CANADA

**Gasoline and Kerosene Engines**

Saw Frames, Saw Blades, Grain Grinders, Straw Cutters, Belting, Scales, Farm and Lawn Fence. Write for price list.

**A. R. Lundy, 251 West King Street, Toronto**

**Mardella Shorthorns**

Dual-purpose bulls, 20 young cows and heifers—bred, some calves by side. Size type, quality; some full of Scotch. The great massive Duke—dam gave 13,599 lbs. milk, 474 lbs. butter-fat—at the head

**Thomas Graham, Port Perry, R.3, Ont.**

**R. O. P. SHORTHORNS**  
**THE EVERGREEN HILL HERD**

Present Offering—Four young bulls from R. O. P. dams, and each tracing to three R. O. P. sires. Could also spare a couple of R.O.P. cows.

**S. W. Jackson R. R. 4, Woodstock, Ont.**

**Glenfoyle Dual-Purpose Shorthorns**

Herd bull College Duke 4th, 95430, big, thick, young cows and heifers for sale; 8 young bulls, some herd headers. Also a yearling Clyde stallion.

**STEWART M. GRAHAM, LINDSAY, ONT.**

**Spruce Lodge Shorthorns and Leicesters**

Herd headed by the Butterfly-bred bull, Roan Chief Imp. #60867. Young bulls, cows, and heifers of all ages, of good breeding and quality.

**W. A. DOUGLAS, CALEDONIA, ONTARIO**

**Plaster Hill Shorthorns**

Two 2-year-old bulls, one yearling bull, one bull calf. Heavy milking families.

**F. Martindale & Son, Caledonia, R.R. 3, Ont.**

**Seed Oats**

O.V.C. #2 grown from pure seed \$1.75 per bush. Bags free.

**THE POTTER FARM**  
**R. D. Potter, Mgr. Essex, Ont.**

### Questions and Answers. Miscellaneous.

#### Lice on Cattle.

I would like to know the best method of destroying lice on cattle. W. McG.  
 Ans.—Insect powder sifted into the hair proves effective. A remedy for lice on cattle is four parts cement to one part hellebore. This is mixed thoroughly and sprinkled on the backs and sides of the animals. Care should be taken not to turn the cattle out in the wet for a short time after applying this mixture.

#### Seeding Spring Crops.

1. Should peas be sown early or late in the season?
2. How deep should the land be plowed?
3. Would you advise sowing white-blossomed sweet clover for pasture. Will it stand grazing all summer?
4. I have a field which I intend seeding with white clover for pasture. Would it re-seed itself to give a satisfactory catch next year?
5. Would it do to sow goose wheat on sod which had been fall plowed, or would it do better on other land?
6. Is goose wheat a good grain to sow with oats for pig feed?
7. What is the difference between white-blossomed sweet clover and albotrea? How much is albotrea per bushel?
8. Does line breeding have a tendency to weaken young fowl? J. S. H.

Ans.—1. With practically every kind of spring grain we believe in sowing as soon as the land is in good tilth. If sod is spring plowed for peas, it would be the first crop we would sow. As a rule the sod can be plowed before the other soil is ready for the cultivator, and as soon as it is plowed it is dry enough to sow. Outside of that, it will depend a good deal on local circumstances and the condition of the soil. If the field in which we were going to sow peas was ready for cultivation at the same time that the oat field was ready, we might sow the oats first.

2. Again it depends on the soil; if plowing in the fall we like to plow 6 or 7 inches deep if the sub-soil will permit. In the spring we would not plow quite so deep.

3 and 4. Sweet clover is gaining in favor as a pasture crop. We have seen several fields that have given exceptionally good returns. While the cattle did not take any too kindly to the sweet clover at first, yet they did well on it through the season. We saw one field of sweet clover which carried an animal and a half through an entire summer, and the cattle were in good condition. The sweet clover was as high as the cattle and they were browsing it off. With more stock, no doubt the clover would have been kept down. However, portions of it were re-seeded during late summer and fall and sufficient seed fell on the ground to give a splendid catch the next spring. The system practiced on the farm we have in mind was to plow sweet clover under late in the fall, using a chain on the plow to bury the stalks. In the spring the land was cultivated and sown to oats. The sweet clover came up quite thickly; in fact, was considered to be too thick, and one year the harrows were run over the field after the sweet clover came up in order to thin it somewhat.

5. Goose wheat might do all right on the fall-plowed sod, but we would much prefer sowing it where roots or corn had been the previous year. Goose wheat is a crop which should be sown early.

6. The trouble is to get the wheat and oats to ripen the same time. Our experience has been that the wheat would be a little green when the oats were cut, which would result in shrunken kernels. An early-maturing variety of spring wheat and late-maturing oats might work satisfactorily. With very late oats there is more or less danger of rust attacking them.

7. We believe that the firms advertising Albotrea claim that it is a selection of the yellow-blossomed sweet clover. We are not familiar with the price, but by communicating with the firms advertising in our paper you will be able to secure the information desired.

8. With careful selection, line breeding should not necessarily weaken the fowl. Line breeding is intended to strengthen certain desirable characteristics.

**ROYAL PURPLE**

### Stock Specific

This popular animal regulator and fattener is being fed to stock in thousands of stables every day during the winter. It is good for cows, steers, horses, sheep and swine. It tones up the entire system by improving digestion, and purifying the blood. Maximum nourishment is obtained from all food eaten when our Stock Specific is fed regularly.

#### Cows Give More Milk

Dairymen state positively that their cows give from one-quarter to a half gallon more milk each, daily, when fed Royal Purple Stock Specific. Think how you would benefit by its use if milking only a small herd. It rapidly improves the condition of hide-bound horses, and enables you to fatten hogs in from three to five weeks less time than you would otherwise require. Give it a trial.

Feedmen everywhere carry it in large and small packages. Ask for our 80-page booklet.

**W. A. Jenkins Mfg. Co. Ltd., London, Canada**

### NINTH ANNUAL AUCTION SALE

Under the Auspices of the Victoria County Pure-Bred Stock Association, and the Ontario Department of Agriculture.

In Arnold's Garage, Kent Street, Lindsay, Ontario

**Tuesday, January 29th, 1918 at 1.30 p.m.**

#### 35 Males—Shorthorns—15 Females, 6 Hereford Bulls

This is the largest sale of the kind in Eastern Ontario. Every animal inspected by the Association's Committee. Among them are a number of extra choice young bulls which would be a credit to any herd. Also a fine lot of heifers, a number of them of breeding age. Herefords offered by the well-known Hereford breeders, Mossom Boyd Co., Bobcaygeon, Ontario.

**TERMS:**—To residents of Ontario, cash or ten months' credit will be allowed on approved joint notes, all notes to bear interest at 6 per cent. per annum, from date of sale. To all buyers not residing in Ontario, terms cash.

CATALOGUE MAILED ON REQUEST TO THE SECRETARY

**President and Auctioneer: Jas. Casey, Valentia.**  
**Secretary: A. A. Knight, Lindsay.**

### Dual Purpose Shorthorns

**Herd Headed By DOMINATOR No. 106224**

whose grandam on his mother's side has an R.O.P. record of 13,535 lbs milk, testing 3.99; and whose dam has an R.O.P. record of 10,689 lbs. milk, testing 3.88.

The cows in our herd are large and strictly dual-purpose in type and performance, many of them have high milk records.

A few cows, heifers and young bulls for sale, three of the latter are out of cows in the herd which have given between 10,000 and 11,000 lbs. of milk each in one lactation period.

**Weldwood Farm Farmer's Advocate, London, Ontario**

### SHORTHORNS--T.L. Mercer, Markdale, Ont.

**ROSEWOOD CHAMPION**, by Nonpareil Archer, Imp., at the head of the herd. I have almost 100 Shorthorns in my stables at present. Marr Missies, Campbell-bred Clarets, Nonpareils, Minas, Rosemarys, etc.—the best of breeding and the best of cattle; bulls or females; also have a few Herefords

### SALEM SHORTHORNS

Herd headed by Gainford Marquis, (Imp.) undefeated in England and Canada. Sire of the winning group at Canadian National, 1914, 1915, 1916. Can supply cattle, both sexes, at all times.

**J. A. WATT, ELORA, ONT.**

### SEVENTY-THREE HEAD OF SHORTHORNS

Ten young bulls of serviceable age, Nonpareil Ramsden #101081, and Royal Red Blood #77521, at the head of the herd. The ten young bulls range in age from 8 to 15 months, and are for immediate sale. They are out of good dams which will bear inspection. Our cows and heifers will please and you'll like the bulls.

**JAMES McPIERSON & SONS, DUNDALK, ONTARIO.**

### PLEASANT VALLEY FARMS

Herd headed by (Imp.) Newton Grand Champion and Belmont Beau. We have for sale a goodly number of real good young bulls that will suit the most exacting; also females. Inspection invited.

**Geo. Amos & Sons C. P. R., 11 miles east of Guelph Moffat, Ontario**

Questions and Answers. Miscellaneous.

Curing Beef.

- 1. Give a recipe for making salt yeast bread.
- 2. How can I put away beef so that it will keep fresh for next summer? Would it have to be put in glass jars?

F. S. S.

Ans.—1. The following is a recipe for salt-rising bread: Dissolve a half teaspoonful of salt in a pint of scalding water and beat in gradually enough flour to make a soft dough. Beat for ten minutes, cover and set in a warm place for eight hours, then stir a teaspoonful of salt into a pint of lukewarm milk and add enough flour to make a stiff batter before working it into the risen dough. Mix thoroughly, cover and set again in a warm place to rise until light; when light, bake.

2. The beef may be sliced and cooked, then packed in a jar and covered with hot drippings. Care should be taken that no air reaches the meat. The meat may be cooked a little more before using, and as it is used out of the jar hot drippings should be poured in to seal it. A recipe for curing beef for summer meat, which has been recommended, is as follows: For 50 pounds of meat take 2 gallons of water, 4 pounds of salt, 2 pounds of brown sugar and one ounce of saltpetre. Boil for ten minutes and skim to remove any scum which may rise to the top. Remove from the fire and allow to stand until cool. The pieces of meat should be put in a cask or crock and covered with the brine. It may be necessary to weight the meat down to keep it covered. If the brine should become sour, it must be drained off, boiled, and put back on the meat when cold.

Seed Corn—Black Leg.

1. We lost two heifers last fall. One became sick soon after the first frost. She would not eat and died in a few days. The second became stiffened in the joints soon after it was brought to the stable. The knees and hock joints swelled badly; soon she could not rise, and we killed her. We found a mattery discharge from the joints when we removed the hide, and there was an offensive odor. What was the trouble?

2. Does steady cold weather, such as we have had the past few weeks, hurt young clover and alfalfa when there is no snow on the ground?

3. Why is it that there is little corn on the market here, when they claim there is such a large crop on the other side of the line?

4. Will seed corn from Kansas and Illinois be as satisfactory for us to plant as home-grown seed? If not, why?

5. Would it be advisable at the present time to apply to the Hydro Electric Commission for an extension of the line from a nearby town in order to serve a number of farmers with electric power? A. F. S.

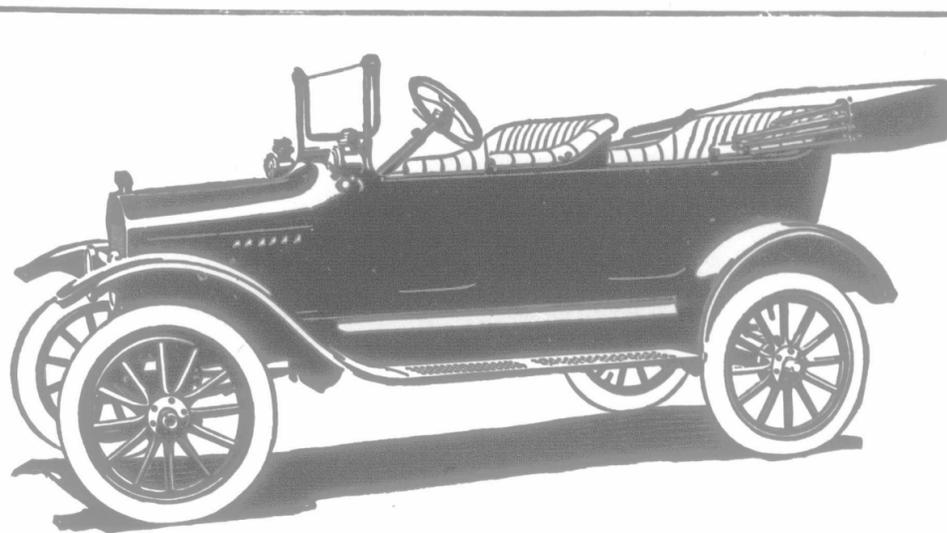
Ans.—1. The symptoms given, especially of the second heifer, are very much like those of black leg. We would advise you to consult your veterinarian regarding the matter, and to take precautions in the spring to prevent further outbreak of the trouble.

2. The cold itself does not injure the clover so much as the water lying around the roots. When water freezes it expands, which may injure the roots, and then when frost is coming out of the ground in the spring the clover roots are oftentimes heaved out.

3. There is a congestion of freight which undoubtedly interferes with the movement of corn. Then, too, we understand that a portion of this big crop consisted of soft corn which would not stand shipment without being artificially dried.

4. We would prefer the home-grown seed if we could get it well matured. Corn is a crop which must be acclimatized in order to give the best results. Seed should be secured as far north as possible. Wisconsin seed would, no doubt, do better in Ontario than seed from States farther south, due principally to the fact that the climate of Wisconsin is more nearly like that of Ontario than is the climate of the Southern States.

5. We see no harm in making an application, even though the line is not extended at present. When more power is secured and the Commission commence catering to farm trade your application would then be on file and would possibly be attended to sooner than if you delayed applying.



A Ford Car Takes the Place of all These Things

WHEN you own a Ford you can do away with many articles that are a source of continuous expense to the man who still drives a horse. For instance, not only your driving-horse and buggy, but the single harness, blankets, whips, currycombs, brushes, horse-shoes, pitch-forks, feed-bins, etc.

In their place you have a speedy, dependable, dignified, roomy Ford Car—complete in itself. It is vastly superior to the narrow, cramped buggy that travels so slowly. And when a Ford is standing idle it does not eat three meals a day, and it requires no "looking after."

A Ford will save you time, trouble, and money. It is the utility car for the busy farmer and his family.



Ford

THE UNIVERSAL CAR

- Touring - - \$495
- Runabout - \$475
- Coupe - - \$770
- Sedan - - - \$970

F. O. B. FORD, ONT.

Ford Motor Company of Canada, Limited Ford, Ontario

A HOLSTEIN HERD YOU SHOULD KNOW WM. STOCK & SONS, TAVISTOCK, ONT.

Home of the great Baroness Madoline, 31.48 lbs. in 7 days, 1,043.35 lbs. in 335 days. Write at once for a list of the good record bulls they are now offering, and plan now to spend a day this winter at the farm. It will be a day worth while and here there is always a welcome. Mention the Advocate.

WALNUT GROVE STOCK FARM

Holstein-Friesian Cattle, Tamworth Swine. We are offering a choice lot of 5 months' sows and boars and also have several nice young litters. Must clear a number quick to make room. We are also offering White Wyandotte Cockerels at \$3 each. Satisfaction guaranteed. C. R. JAMES, R. R. No. 1, Richmond Hill, Ont. Take Yonge Street Radial car from Toronto—stop Thornhill.

HOMESTEAD HOLSTEIN STOCK FARM

I must sell 12 or 15 young cows, due to freshen in March or April in order to make room for young stock, also a few young bulls. For further particulars, write:

B. R. BARR Harrietsville Station, C.P.R. Phone Connection. MOSSLEY, R. 1

WHO WANTS THIS BULL?

Lyons Colantha No. 23221, Born Sept. 11, 1914. His sire is King Lyons Colantha, whose six nearest dams average 39.10 lbs. butter in 7 days; his sire is by a son of Colantha 4th's Johanna, 35.22 in 7 days and 1,217 lbs. butter in 1 year. His dam is a 4,875 lb. 2-year-old in R. O. P.; her dam a 8,258-lb. 4-year-old. Must be sold at once, right in every way. For fuller particulars write: J. Mogk & Son, R. R. 1, Tavistock, Ont.

When writing please mention Farmer's Advocate

TELEPHONES

- Modern in design.
- Fully guaranteed.
- Made in Canada.

Write for rural telephone bulletins.

CANADIAN INDEPENDENT TELEPHONE CO., Limited

261 Adelaide Street West, Toronto

KING SEGIS PONTIAC DUPLICATOR

A 3/4 brother to the \$50,000 bull is the sire of our young bulls offered at present. Two of these are ready for service. Write us also for females. R. W. Walker & Sons, Manchester Station, C.T.R., Port Perry, Ontario

### LIFT YOUR CORNS OFF WITH FINGERS

Tells How to Loosen a Tender Corn or Callus so it Lifts Out Without Pain.

A noted Cincinnati chemist discovered a new ether compound and called it **Freezone**, and it now can be had in tiny bottles as hereshown for a few cents from any drug store.

You simply apply a few drops of Freezone upon a tender corn or painful callus and instantly the soreness disappears, then shortly you will find the corn or callus so loose that you can just lift it off with the fingers.

No pain, not a bit of soreness, either when applying Freezone or afterward, and it doesn't even irritate the skin. Hard corns, soft corns, or

corns between the toes, also toughened calluses, just shrivel up and lift off so easy. It is wonderful! Seems magical! It works like a charm! Your druggist has Freezone. Ask him!



**ARE YOU BUILDING OR REPAIRING?**  
OUR CATALOGUE OF BUILDING MATERIALS AND TOOLS WILL SAVE YOU MONEY. WRITE FOR FREE COPY.  
**THE HALLIDAY COMPANY, LIMITED, HAMILTON, CANADA**  
FACTORY DISTRIBUTORS

### 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

We are open to buy cream both for churning and for table use.  
**ASK ANY SHIPPER** about our service and prompt returns.  
Ask for Prices

The figures of yesterday may be **TOO LOW** for to-morrow. We furnish cans.  
**The Toronto Creamery Co., Limited**  
Church Street, Toronto

### Sunnyhill Offering:

Holstein bulls and heifers. Shropshire ram lambs. Yorkshire pigs, both sexes, all ages.

**WM. MANNING & SONS**  
WOODVILLE, ONT.

**For Milk, Butter, Cheese, Veal**  
**Holstein Cows Stand Supreme**  
If you try just one animal you will very soon want more.

WRITE THE  
**HOLSTEIN-FRIESIAN ASSOCIATION**  
W. A. Clemons, Sec'y, - St. George, Ont.

### Holstein Bulls

of serviceable age and younger; from dams with records of 30 lbs. down. Write for prices.  
**R. M. HOLTBY, R. R. 4, Port Perry, Ont.**

**For Sale—Holstein Bull Calf**  
Dropped December 15; extra-good animal from high-producing stock. Fifty dollars for quick sale. Write for pedigree and R.O.P.  
**E. W. TENCH, R. R. 3, Niagara Falls, Ont.**

### British Agriculture in the Defeat of the Submarine.

The organization of British Agriculture with the object of producing within the country a portion of the food supplies which are becoming more difficult of import owing to the reduced tonnage at the disposal of the Government, is one of the most important matters confronting the authorities here at the present time. It is rather difficult for one who is in the position of an outsider, looking in, to thoroughly appreciate the complexity and difficulty of the task which the Board of Agriculture has set itself. Yet when one has had even a limited opportunity of observing the progress of events such as may be obtained by brief visits throughout the country in both England and Scotland and by meeting with people who are continually discussing this problem in all its phases, he is able to arrive at more accurate conclusions than would be possible for those situated many miles away and really unaffected by any of the changes which such organization is making inevitable. It is the impressions that I have gathered and the conclusions that I have formed in these various ways that I purpose setting down in this article in the hope that my readers will thereby obtain a more accurate impression of the changes which this organization has brought about and will continue to bring about in British agriculture than it is possible for them to get from the disconnected reports which reach them from time to time.

If one would understand intelligently the task before the Board of Agriculture, he must free his mind of all comparison with our own agricultural system and remember the central facts which I shall point out. First, let my readers not forget that we have here a people who have been engaged in various industrial pursuits, shopkeeping various trades and professions, but accustomed to look to countries abroad for their food supply. This country has only raised sufficient food stuffs to supply its needs for a very small fraction of each year. Secondly, bear in mind the fact that these changes which agricultural Britain is now undergoing are being made to meet a contingency which was unforeseen until a few months ago, when Germany commenced her ruthless submarine campaign. Thirdly, let us remember that the efforts of the Board of Agriculture aim at the introduction of wheat growing upon a large scale into an agricultural system of which it has in the past scarcely formed a part. Fourthly, let me tell those who are unacquainted with this country that customs change slowly and old methods of doing things die a violent and lingering death. The difference between this country and ours in that respect is aptly described by that eminent English writer, H. G. Wells, when he puts the words into the mouth of one of his characters in a recent book: "England is being, America is beginning. That is to say customs, methods and institutions are permanently formed here and change is not looked for, when it appears people are skeptical, while in our country the newness of everything leaves our citizens in a more receptive frame of mind ready to accept with alacrity any change which seems an improvement. This attitude has developed a natural aversion to plowing up the parks and grass lands which has to some extent impeded the efforts of the Board of Agriculture. No doubt this difficulty is being gradually overcome by the persuasive force of public opinion and the firmness with which Lloyd-George's government has tackled the problem, but that it does exist is very clear, as evidenced by some experiences of my own. One wealthy farmer southwest of Glasgow assured me that the Board of Agriculture could go hang before he would plow up his grass land. Many others spoke to me in the same vein and assured me that the land would not grow wheat anyway. The difficulty is that they do not know and the new changes look doubtful to them. While crossing a very large stretch of grass land in Sussex in the south of England a local gentleman was asked why all his land remained in grass when food production was so urgent. He shrugged his shoulders and replied: "It always has been like that and always



### MANOR FARM HOLSTEINS

Announcing the First Offering in Females

My stables are getting too crowded and I must make room. No matter whether they are the mature cows I have been trying to retain, or even daughters of my own herd sires freshening with their first calves, some will have to go to make room for the youngsters now coming. The price asked on a limited number of cows should clear, and clear them quick. If you are in the market, don't delay.

I also have sons of both my junior and senior sires, King Korndyke Sadie Vale and King Segis Pontiac Posch.

**GORDON S. GOODERHAM, CLARKSON, ONT.**

### HIGHLAND LAKE FARMS

Herd sire, AVONDALE PONTIAC ECHO, (under lease), a son of MAY ECHO SYLVIA, the world's record cow. Only one other 41-lb. bull in Canada. We have young bulls for sale whose two nearest dams (both Canadian champions) average as high as 35.62 lbs. butter in seven days; another whose two nearest dams are both 100-lb cows; and one ready for service, from a 41-lb. sire and an 18,000-lb. two-year-old dam. A few females for sale. Satisfaction guaranteed.

**R. W. E. BURNABY (Farm at Stop, 55, Yonge St. Radial) JEFFERSON, ONT.**

### LLENROC STOCK FARM

On the Boulevard of the Beautiful Niagara River

A few well-bred young Holstein bulls for sale. Also a Belgian stallion, weight about a ton.  
Address:—**W. C. HOUCK** - - **R. R. No. 1, Chippawa, Ont.**

### Hospital for Insane, Hamilton, Ont.

Present offerings are 4 grandsons of Dutchland Colantha Sir Mona, and high-testing, large-producing R. of P. dams of Korndyke and Aaggie DeKol breeding. Born during April and May, 1917. Apply to Superintendent.

### Roycroft Farm Holstein-Friesians

Our 30-lb. bulls have all been sold, but we still have several sons of Pontiac Korndyke of Het Loo, that are just nearing serviceable age. Get one of these for your next herd sire, have a brother of Het Loo Pieterje, the world's greatest junior two-year-old at the head of your herd. We also have a 9 months, 27.75-lb. son of King Segis Alartra; and one other, same age, by Dutchland Colantha Sir Mona. See them at once or write early.

**W. L. Shaw, Roycroft Farm (Take Yonge Street Radial Cars from N. Toronto) Newmarket, Ont.**

### SUMMER HILL HOLSTEINS

A number of choicely-bred bulls. One a real show bull, beautifully marked, dam a 30.76 junior four-year-old; sire's dam 34.60. The three nearest dams average over 100 lbs. milk a day. Can spare a few good heifers and cows.

**D. C. FLATT & SON, R. R. 2, HAMILTON, ONT.**

### MAPLE SOIL STOCK FARM OF HOLSTEINS

I am offering a few choice heifers sired by King Segis Pieterje that have just been bred to FINDERNE King May Fayne; also some heifers and cows due to freshen all the way from February until April. AD bred to FINDERNE King May Fayne, a few heifer calves sired by FINDERNE King; get some good ones.

**R. R. No. 1, GLANWORTH, ONTARIO**

### KING SEGIS WALKER'S DAUGHTERS

STILL MAKING LARGE RECORDS  
If you want a young bull let me send you some photos and pedigrees. A few females left.  
**A. A. FAREWELL, OSHAWA, ONT.**

### CLOVER BAR HOLSTEINS

We are now offering a number of young bulls, sired by our senior herd-header, Francy 3rd's Hartog 2nd, the noted son of the famous old Francy 3rd and Canary Mercedes Hartog; also a few females, all choice individuals.  
**P. SMITH, Proprietor, R. R. 3, STRATFORD, ONT.**

### DUMFRIES FARM HOLSTEINS

Present Offering—A few bull calves.  
**S. G. & ERLE KITCHEN, ST. GEORGE, ONT.**

**17<sup>95</sup> ON TRIAL**  
**Upward**  
**American**  
**FULLY GUARANTEED CREAM SEPARATOR**



ASOLID PROPOSITION to send new, well made, easy running, perfect skimming separator for only \$17.95. (Closely skims warm or cold milk. Makes heavy or light cream. Bowl a sanitary marvel, easily cleaned. Different from picture, which illustrates larger capacity machines. See our easy Monthly Payment Plan

Shipments made promptly from Winnipeg, Man., Toronto, Ont. and St. John, N. B. Whether dairy is large or small, write for handsome free catalog and easy payment plan.

**AMERICAN SEPARATOR CO.**  
 Box 3200, Bainbridge, N. Y.

**A PAYING INVESTMENT**



Store your corn in a **BISSELL SILO** and it will keep sweet and sappy. **BISSELL SILOS** are built of seasoned timber saturated with Wood Preservative Oils. They are durable, heavy-hooped structures, with air-tight walls and tight doors.

In several sizes with or without roofs. Write Dept. W for free catalogue. 97 T. E. Bissell Co., Ltd., Elora, Ont.

**EVERY FARM** Should have an Ayrshire. They are profitable cattle.

WRITE W.F. STEPHEN, Secretary  
**CANADIAN AYRSHIRE BREEDERS' ASSN.**  
 Box 513, Huntingdon, Que.

**Fernbrook Ayrshires**

Young bulls for sale (out of R.O.P. dams) from one to fifteen months old; tracing closely to the world's champions, Garclough May Mischief and Jean Armour.

**COLLIER BROS., Beachville, Ontario (OXFORD COUNTY)**

**LAKESIDE AYRSHIRES**

A choice selection of young bulls for sale from Record of Performance dams imported and Canadian bred.

**SIRE:** Auchenbrain Sea Foam (Imp) 35758 many times grand champion.  
 Fairfield Mains Triumph (Imp) 51137, a son of the noted Hobsland Perfect Piece.

Write for catalogue.  
**Geo. H. Montgomery, Proprietor, Dominion Express Building, Montreal. D. McArthur, Manager, Phillipsburg, Que.**

**D. M. WATT**

For imported or Canadian-bred Ayrshires, bulls or females, get my prices. My importations win wherever shown. Write me for one animal or a carload. St. Louis Station, Que.

**JAS. B. ROSS, MEADOWVALE, ONTARIO** for high-producing, show-yard AYRSHIRES. Herd headed by SNOW KING 47376, first-prize two-year bull at Toronto, 1917. Write me also for anything in Yorkshires.

Meadowvale P.O., Streetsville Station

**SUNNYSIDE AYRSHIRES**

We have at present the strongest lot of young bulls ever offered—one by Hobsland Masterpiece, one by Sunnyside Mat-hless, and the others by our present herd sire, Sunnyside Masterpiece.

**John W. Logan, Howick Station, Que.**

**Kelso Farm R. O. P. Ayrshires.** Herd headed by Palmerston Speculation Imp. We never had a stronger line-up of R. O. P. producers than we have at present. Our 1917-1918 young bulls are sure to please. D. A. Macfarlane, Care Crossing, G. T. R., Athelstan N. Y. C.; Kelso, Que.

**Twenty-Five Years Breeding Registered Jerseys and Berkshires**

We have bred over one half the world's Jersey Champions for large yearly production at the pail. We bred and have in service the two grand champion Berkshire boars. If you need a sire for improvement, write us for literature, description and prices.

**HOOD FARM, LOWELL, MASS.**

**Tower Farm Oxfords**

Champion Oxford flock of Canada. Choice Oxfords of all ages for sale. Prices reasonable.

**E. BARBOUR & SONS, R.R. 2, Hillsburg, Ont.**

**SHROPSHIRE**

30 Yearling Rams—12 Yearling Ewes.

**W. H. PUGH, MYRTLE STATION, R. R. 1 Farm 2 miles from Claremont**

**Labels** Live-stock Labels for cattle, sheep and hogs, manufactured by the Ketchum Manufacturing Co.

3101, Ottawa, Ont. Write for samples and prices

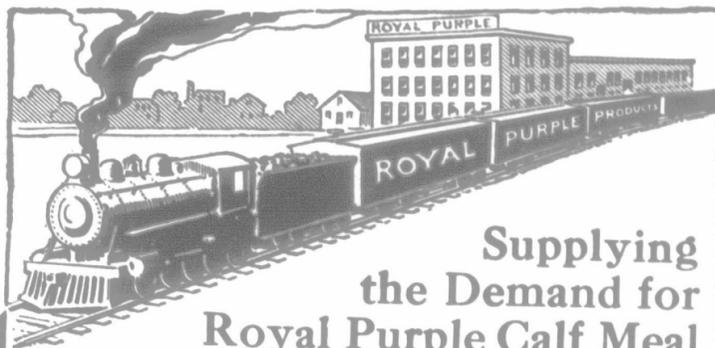
will be." The same attitude appears again and it amounts to a lack of faith in any change of policy.

It will be seen then, that the production of food supplies upon a large scale in this country will result in nothing short of a revolution in agricultural methods. The preparing of a large acreage for the growing of wheat involves not only the supply of all the machinery required for the carrying on of a branch of the agricultural industry which had almost ceased to exist, but it involves the education of the agricultural population to the task, and the provision of large amounts of labor at a time when labor is extremely difficult to obtain without impairing the efficiency of the fighting forces in France and Flanders.

So much for the conditions in which these changes are being brought about. Now for a word about what the Board of Agriculture is undertaking and how it is going about the task. For 1917 the government undertook a production campaign which they carried out mainly by advertisement through the press and upon the public platform. It resulted in an increased effort on the part of many farmers, particularly in the growing of potatoes, and was responsible for the development of the allotment system which found almost every enterprising citizen with a back garden or a similar plot located somewhere in the vicinity of his home. Undoubtedly the sum total of the produce taken off these allotments added considerably to the food supply of the country, while the amount of work performed on them on Sunday afternoons was the cause of much worry to some over zealous clergymen. For 1918 the preparation of an extra 3,000,000 acres for crop has been planned and to date the plan has been partially completed. The plan was laid systematically, by allotting a portion of the 3,000,000 acres to each county of England and Scotland based upon a survey of the available land in each county. The allotting of the proper portions among the farmers of each county is done by the local society. By way of an incentive to the adoption of their plans by the farmers, the government have guaranteed the prices of grain for five years. I have not the figures before me, but the prices guaranteed are very substantial, and have been well received by the farmers. On the other hand, the fixing of prices of beef, mutton, etc., has drawn considerable hostile criticism from stockmen, notably in Scotland.

The methods employed in bringing this new land under cultivation are unavoidably different from those practised heretofore. Horses and plows are not available, and if they were the men required to handle them are carrying a rifle and bayonet somewhere in France, instead of following the peaceful life of a plowman. The only alternative was to resort to some form of motive power, so tractors and tractor plows are being used all over the country. Many of the scenes which took place on the Western prairies between Winnipeg and the foothills have in a smaller way been reproduced here. Some enthusiasts have started plowing at night with glaring headlights to illuminate the field of operations and many other plans have been advanced as the most rapid means of turning the country black. People have learned, as we have learned by experience in the West, that tractor cultivation has its difficulties. At times the heads of departments under the Board of Agriculture or the Ministry of Munitions (which department supplies the machinery) have had rather heated controversies over these matters. However, with all its difficulties the land is being plowed. Much of it is rather badly done, but that is the inevitable result of so drastic and rapid a change in methods at such a time as this.

The provision of manual labor, always a problem, is now thrice difficult. Women are doing much of the work on farms and this certainly places many obstacles in the way of the plans laid down. I do not speak of the efforts of the women in a disparaging way, but as a necessary explanation of the difficulties of the task of re-organizing agriculture here. I would be one of the first to pay tribute to the efforts of the womanhood of this country, without which Britain could not have carried the burden which she has assumed. Where women are not employed it is either old men, young boys or German prisoners who do the work, all of which



**Supplying the Demand for Royal Purple Calf Meal**

This baby food for young animals is partially pre-digested, and can be fed to the youngest animals with perfect safety. It WILL NOT cause stomach or bowel trouble, which are serious ailments in young animals. Royal Purple is a sure preventive for scouring.

**Calves Gain Rapidly Without Milk**

When the calves are 3 or 4 days old they can be fed Royal Purple Calf Meal and raised just as well without one drop of milk. What prominent breeders remark: "Gentlemen,—In regard to your Calf Meal, I think you have the best on the market, as people who have bought it give it great praise. Some have taken their calves off sweet milk, and feed them nothing but your Calf Meal and water, and say they are doing as well on it as they did on the whole milk."

To Whom It May Concern: This is to certify that I have secured your "Royal Purple" Calf Meal from our druggist, Mr. T. C. Nicholls, of Uxbridge, and can speak of this meal in the highest terms. I have used other calf meals, but this one is the best I ever tried. I never saw a calf gain more rapidly and thrive better than mine did while using your "Royal Purple" Calf Meal. I can cheerfully recommend it to all our stockmen who wish to raise large, healthy calves.—Stanley W. Croxall.

Note—The above Mr. Croxall keeps a large herd of pure-bred Holstein cattle, and is an excellent authority on Calf Food.

Royal Purple Calf Meal is equally good for young colts, lambs and young pigs. Put up in 25-lb., 50-lb., and 100-lb. bags. Secure it from our dealer in your town.

**W. A. Jenkins Mfg. Co., Ltd., London, Can.** 35

**FREE BOOK**  
 Send for our 80-page book which describes the common diseases of stock and poultry; also methods of feeding and our many products. Get a copy to-day.

**Cockshutt Catalogue**

will give you valuable farming hints, and shows the full line of Cockshutt and Frost & Wood Implements. Write for a copy to-day.

**Cockshutt Plow Co., Ltd., Brantford, Ont.**

**Snow Ploughs**  
 FOR TOWNSHIP ROADS

**Snow Ploughs for sidewalks Stone and Stump Pullers**

**A. Lemire, Prop. Wotton, Que.**



**Humshaugh Ayrshires and Yorkshires**

Three young bulls, fit for service; sons of Hillside Peter Pan and R. O. P. dams. These were winners at Toronto and London. A few young sows and boars of good quality and priced right.

**Alex. Hume & Co., Campbellford, Ont., R.R. No. 1**

**HILLHOUSE AYRSHIRES—F. H. Harris, Mt. Elgin, Ont.**

Headed by Burnside Lucky Master Swell, a combination of blood so hard to equal, being of the Masterpiece and Lucky Girl families, a combination which means quality, production and constitution. Ninety head to select from. Special offering—20 yearling heifers and 3 bulls. Inspection invited.

**SPRING BANK R.O.P. AYRSHIRES**  
 Herd Sires: Netherton King Theodore Imp., and Humshaugh Invincible. Grand Champion, London, 1917. Our herd at present holds the Canadian records for both milk and butter in the two-year, three-year and the mature classes. Let us tell you about the daughters of Netherton King Theodore. We have sons of both bulls for sale—all have R.O.P. dams. Visitors met at Hamilton by appointment.  
**A. S. Turner & Son (3 miles from Hamilton) Ryckman's Corners, Ont**

**ORMSBY GRANGE JERSEYS**

I offer for immediate sale, at bargain prices, two promising young Jersey bulls fit for service. RALPH LACTUS [6767], calved January 30th, 1916. Sire, Royal Merger II [3290]. Dam, Lady Lactus II [3182]. ROYAL MERGER IVth, [8454], calved February 24th, 1917. Sire, Royal Merger II [3290]. Dam, Lily Lactus [2974].

**D. McEACHRAN, ORMSTOWN, QUEBEC.**

**RECORD OF PERFORMANCE JERSEYS**

Choice Bulls and Females. We have six young bulls of serviceable age, all from R.O.P. dams. Three are by our senior sire, Brampton Dairy Farmer, and three are by our junior sire, Brampton Bright Togo. Write for records. We also have females.

**R. & A. H. BAIRD, (G.T.R. Stations—New Hamburg, Bright) NEW HAMBURG, ONT.**

**THE WOODVIEW FARM JERSEYS**

LONDON, ONTARIO  
 John Pringle, Prop.

**CANADA'S MOST BEAUTIFUL JERSEY HERD**  
 The foundation of this herd is made up of very high-class cows, imported from the island of Jersey, most of them in the Record of Performance, and while we have, at all times, a few mature cows for sale, we make a specialty of in-calf heifers and young bulls. Write us your wants, or better still, come and see the herd. We work our show cows and show our work cows.

**THE DON JERSEY HERD—**

OFFERS—Several young bulls, all of serviceable age, and all from R. O. P. dams. These are priced right. Interested parties should write or see these at once. We also have females of breeding age.

**D. DUNCAN & SON, Todmorden P.O., Duncan Station, C.N.O.**

**JERSEY MEETING**

The annual meeting of the C. J. C. C. will be held in Toronto, February 5th, 1918. All Jersey fanciers are invited to visit the Brampton Herd the days before or following the meeting. The farm is 20 miles from Toronto, with good train service.

**B. H. BULL & SON, BRAMPTON, ONT.**

**EDGELEY STOCK FARM**

The home of Canada's greatest producing Jersey, Sunbeam of Edgeley, the Sweepstakes Dairy Cow at the recent Guelph test; is also the champion R.O.P. butter cow for Canada. Would a grandson or great-grandson of this famous cow improve your herd? We have them. Write for particulars.

**JAMES BAGG & SON (Woodbridge, C.P.R.—Concord, G.T.R.) EDGELEY, ONT.**



ference to the recent Agriculture try against submarine the war ord about be in possession ot present gathered n. Many ioned. It don many southern places in e a single od or to about the ed. One complaints e insuffi- which are properly at to-day London, n a meal satisfied ly incon- necessity of white streets in er shops s as one st joints excellent the act in any country. er foods rices are is not ough fed dergoing of conse- ste to a react to y her g to the national

red by ply for so that n's agrit- until fect the war last ed pro- nance of is most n of our recon- ion and on our

ed and t year ut fear he dis- supplies Britain ith any of large work. in the is not lent of warned iculties reduced o care- time to of our is not tioning st. All can be onomy the war

ing to led by as ini- inistry rine to rakness e par- ion and only stand orities cert- in- of the ment I make lier to ore to ee of is so W. F.

# Necessity for Production Greater Than Ever Before

An Appeal to the Farmer is Made by Sir Edmund Walker, President of the Canadian Bank of Commerce, in His Annual Address.

## THE CONDITIONS AS THEY EXIST PORTRAYED IN PLAIN LANGUAGE.

After dealing with the subject of the various kinds of war supplies made in Canada, Sir Edmund Walker, President of the Canadian Bank of Commerce, in his address at the Annual Meeting of the Shareholders, said:

We have made an attempt also to follow the purchases of such ordinary articles as wheat, cheese and meats. It is understood that the purchases in Canada by the Wheat Export Company of wheat and oats from this year's crop will reach 350 million dollars in value, and that there have been shipped cheese valued at between 30 and 40 million dollars and a large supply of meats, partly the product of Canada, and partly from animals bred in the United States, but cured here. The published returns are not easy to follow but we appear to have exported, during the year ending March, 1917, live animals, including horses, to the value of 15 millions and meats to the value of over 60 millions; against this we have apparently imported meats to the value of about 25 millions. For the six months ending September the totals of both imports and exports, measured only by value, are on a basis 50 per cent. higher than for the previous year.

These figures show some of the activities of the Canadian people in the way of production, but the need is greater, in some directions much greater, than ever before. The outpouring of supplies of all kinds, from wheat to shells, must go on, but the most crying needs are for sea-going ships, aircraft and those forms of food which are more necessary than others to sustain the life in its fullest vigor and without a sufficient supply of which the allied nations are threatened with starvation. The supply of wheat is vital, and the losses of

shipping add enormously to the difficulty of obtaining supplies from the southern half of the world. At the same time the scarcity of labor makes the life of the North American farmer so difficult that he needs all our sympathy, and should have all the assistance which the city worker or student can give him in summer time.

### The Food Question.

One of the most valuable foods for the soldier is bacon. He can apparently do more fighting on it than on anything else. In the United States, when necessary, breeding stock and help in other forms is being supplied to farmers to ensure the largest possible production of bacon, and associations of breeders have been formed for the purpose of distributing well-bred stock. This is being done by men who realize that if we fail in producing greater quantities of bacon than ever before, we shall fail in our duty to the soldiers. In this country we have been occupied in an effort to place the blame for the high price of an article, which, beyond any doubt, we ought not to consume in large quantities just now, and we have apparently forgotten that the price has gone up mainly because bacon is vital to carrying on the war and that if we do anything to lessen the efforts of the producers, the price will certainly be much higher next year than it is now. In England well-to-do people are standing in line for their food supplies, and they, at least, are learning that the talk of famine is not a story to frighten

children with, but a terrible possibility. The harvests have not been plentiful and the danger is as real as the menace of the submarines. We ask the farmer, in spite of the great difficulties which confront him, to produce to the last ounce, but how can we make our city people save food, remembering that every ounce saved will provide food elsewhere for those who without it must starve?

### High Cost of Living.

We are living in a time of social unrest affecting greater areas of disturbance than the world has ever known. We are experiencing this unrest at a time of which it may be said, that those who live in our part of the world were never so easily able to obtain employment suited to their varied capacities, never so highly paid, so far as those are concerned who aid in the production of goods for sale, never so prosperous, using the word in a material sense. The price of everything, however, was almost never so high, and the purchasing power of the dollar has declined so much and so rapidly that people with a more or less fixed income suffer keenly, while those who earn more money than they could have conceived possible a few years ago, are disappointed and apparently surprised to find that everything else has advanced in proportion to their high wages. Out of this turmoil has come a bitterness towards all who, by any stretch of fancy, can be held responsible for existing conditions, a bitterness often without any real basis, and which is accompanied by explosions of wrath directed at whatever happens to be the nearest object of criticism, but, if continued, and kept at fever heat as it has been of late, promises ill for our country after the war. I am aware that I shall be accused of defending Capital and what are called the Big Interests, but there must be many readers of the annual addresses made by the officers of this Bank who will believe that we try as faithfully as we are able, to portray conditions as they exist.

### Result of War.

Nothing in the end is to be gained by blaming the premier or the food controller, the provision dealer or the farmer, for high prices which are not merely a result of the war but a result of war requirements so peremptory that the question of cost almost disappears. The conditions arising out of the war are at the bottom of most of our troubles, and what is necessary is not only fair dealing on the part of those who supply the wants of the people, but patience, and some remnant of belief in our fellowmen, on the part of those who feel the pinch and who, perhaps naturally, would like to punish somebody. If dealers have combined to put up prices, let them be punished, but apparently we are complaining because dealers, in buying from producers, did not combine to lower prices or to keep

them down. The needs of the war are, however, so great that no combination can control prices either in one way or the other.

### Personal Thrift.

We have been told that we should save money, not for our own benefit so much as because we should not spend on unnecessary things the money needed to carry on the war. It is even more necessary that we should eat less, again not so much because we need to save for ourselves but because if we do not eat less others across the sea must go hungry. If we have men, money and food we shall win. If we fail in any of these we may lose. Individual tests, particularly in hotels and restaurants, show that very large savings can be made wherever the effort is directed to that end, but the difficulty is to make advice, or even the regulations of the Food Controller, effective in a country which produces food largely in excess of its own requirements and where economy in the use of food is thought to be evidence of a mean and sordid disposition. It is not, however, enough that we should eat less but that we should as far as possible replace some articles of food, especially white bread and bacon, with others. There is a satisfactory increase in the use of fish, but only a small fraction of our people are responding in any degree to the call to economize. England has reduced the supply of sugar per capita per annum from 93 pounds to 26. Our normal supply is 90 pounds and we are not reducing it yet. Working in harmony with the United States, an order-in-council has been passed prohibiting the export, except to places within the empire, of food and relative commodities, unless a license has been obtained.

### Food Conservation.

The Food Controller is bringing under license the milling and packing industries, and is controlling the refining and distribution of sugar. The license system will also be applied to fish, fruit, vegetables, groceries, package cereals, milk, etc. In our London Manager's Review of Business Conditions the following deeply significant words will be found:

"Too much importance cannot be attached to the steps that may be taken in the United States and Canada towards conserving food-stuffs, with a view to increasing the amount available for export to the Allies. The shortage of food, with which all the belligerents are confronted, and the difficulty of increasing production, owing to the lack of available man power, may hasten, or even prove the dominating factor, in bringing about a cessation of hostilities."

He means, of course, that such a shortage may prevent us from continuing the war until we can end it on our own terms. Do you wonder, therefore, that we return so often to this subject? Difficult as the problem may be, we must produce more, and we must eat less, otherwise some of those who are dearest to us across the sea must starve and we may lose our chance of dictating a peace, the nature of which shall be a guarantee that our children shall not have to fight again for those liberties which are now in jeopardy. —Adv.

## "Make the Money You Worked for Work for You"

A very easy matter to arrange, and well worth the trouble of investigating, for those who have \$100 or upwards lying idle or at only 3 per cent.

We can supply Government bonds and other safe investments to yield as high as 7 per cent. (\$70 per annum per \$1,000, instead of \$30, with larger or smaller amounts in proportion).

A postal will bring you particulars by return mail.

**Ferguson, Sanson & Graham**  
Investment Bankers  
85M Bay Street, Toronto

## McCormick's JERSEY CREAM Sodas

Contain all the elements of a pure wholesome food at an economical price.

### Gossip.

Shorthorns and Herefords to Sell at Lindsay.

Very thorough preparations are being made for the ninth annual auction sale of the Victoria County Pure-bred Stock Association. This will be held at Lindsay on January 29. Thirty-five Shorthorn bulls and 15 females will be offered, also six Hereford bulls. This is reputed to be the largest sale of its kind in Eastern Ontario, and every animal is inspected by the Association's committee. There will be some extra choice young bulls sold, and a fine lot of heifers; a number of them being of breeding age. A request addressed to the Secretary, A. A. Knight, Lindsay, will bring a catalogue and any information you desire. Do not overlook this event.

A Scotchman and an Irishman meeting in Toronto had an argument as to whose walls were the thinnest in their respective boarding-houses.

"My walls are so thin," said the Scot, "that you can hear the man in the next room changing his clothes."

"That's nothing," exclaimed Pat, "my walls are so thin that you can hear the man in the next room changing his mind."

**New COAL OIL LIGHT FREE**  
BEATS ELECTRIC or GASOLINE

Here's your opportunity to get the wonderful new Aladdin Coal Oil Mantle light FREE. Write quick for particulars. This great free offer will be withdrawn as soon as some distributor starts work in your neighborhood. You only need show the Aladdin to a few friends and neighbors; they will want one. We give you years free for this help. Takes very little time, and no investment. Costs nothing to try it.

**Burns 70 Hours on One Gallon**  
common coal oil, no odor, smoke or noise, simple, no pumping up, no pressure, won't explode. Tests by Government and thirty-five leading universities show the Aladdin gives three times as much light as best round wick flame lamps. Won Gold Medal at Panama Exposition. Over three million people already enjoying this powerful, white, steady light, nearest to sunlight. Guaranteed. And think of it—you can get it without paying out a cent. All charges prepaid. Ask for our 10-day Free Trial Offer and learn how to get one free.

**AGENTS WANTED**  
MANTLE LAMP COMPANY, 231 Aladdin Building, MONTREAL  
Largest Coal Oil Mantle Lamp House in the World

BURNS 70 HOURS ON ONE GALLON  
TWICE THE LIGHT ON HALF THE OIL

**DO YOU NEED FURNITURE**

Write for our large photo-illustrated Catalogue No. 7—it's free to you.

**THE ADAMS FURNITURE CO., Limited**  
Toronto, Ontario

**"1900" Gravity Washer**

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

**"1900" WASHER COMPANY**  
357 YONGE ST., TORONTO, ONT.  
(Factory, 75-81 Portland St., Toronto)

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

# THE TELEPHONE SAVES YOU



**TIME**



**TROUBLE**



**MONEY**



**—AND PAYS YOU INTEREST IN THE SHAPE OF INCREASED LEISURE AND FREEDOM FROM ANXIETY**

The telephone, the time saver, has never been so indispensable on the farm as today, when farm hands are difficult to secure and when higher prices for farm products are so general.

This human-like little instrument has completely transformed farm life. It has banished isolation and distance, and brought to the farmer a city facility—the means of direct communication.

Though it be half-a-day's journey to the village, the telephone brings you within "speaking distance" of the man you want. It enables you to transact business or make social calls at a remarkable saving of time, no matter how far away.

OUR FREE BOOK—"How The Telephone Helps The Farmer" tells all about the telephone in a most complete and concise form. Have you received your copy? If not, write your name and address on the coupon and return to us. It's FREE and without obligation—DO IT TODAY.

*We supply everything a Telephone Company needs from the organization of a Company to the Complete Plant—inside apparatus and batteries as well as poles, crossarms, wire, and other line construction material and tools. Our business is the telephone business.*

## Northern Electric Company LIMITED

Makers of the Nation's Telephones and Northern Electric Farm Lighting Plants

MONTREAL HALIFAX OTTAWA TORONTO LONDON WINNIPEG  
REGINA CALGARY VANCOUVER

SEND THE COUPON

TO THE  
Northern Electric Company  
LIMITED  
(Address nearest house)

Please send us your new Free Book "How The Telephone Helps The Farmer."

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

PROVINCE \_\_\_\_\_

801 L F A