

# THE FARMER'S ADVOCATE

AND HOME

PERSEVERE  
SUCCEED

MAGAZINE

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

ENTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1917.

Vol. LIII.

LONDON, ONTARIO, AUGUST 15, 1918.

No. 1351

## "Bake 10 minutes in a very hot oven"

THE clock will count those minutes for you to the exact second, but how about that "very hot" oven?

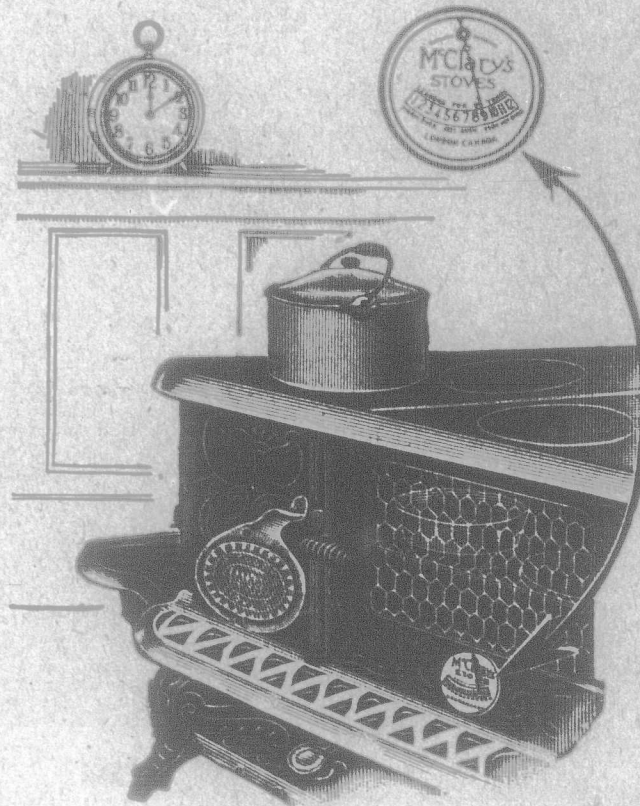
Every woman has known the nerve rack of that guess; whether the oven is "just right" or not; whether the cake will "fall" or burn, or whether it will come out done to a turn.

With the glass door and the tell-true oven thermometer of the Pandora Range there is no guess—only the sure knowledge of seeing exactly what is going on in the oven.

You not only can see the cake as it bakes, but you can also see by a glance at the thermometer when the baking temperature of the oven is exactly right.

And by the Pandora flue and control systems you can instantly regulate that condition—raise or lower the temperature.

The woman who is plodding along with a worn-out range or an antiquated stove cannot appreciate the joy there is in store for her the day a Pandora Range is set up in her kitchen with its "daylight" oven and thermometer that never forgets to tell the exact heat of the oven.



### "The Magic of the Pandora"—Booklet Free

This is only one of the many features of the Pandora Range described in "The Magic of the Pandora," a little booklet full of information that every woman will want before she buys a range. Write for it to the nearest McClary Branch.

# McClary's Pandora Range

London  
St. John, N.B.

Toronto  
Hamilton

Montreal  
Calgary

Winnipeg  
Edmonton

Vancouver  
Saskatoon

The Wonderful **GILSON**



The Lightest Running Blower Cutter Made.

"Everyone Said We Couldn't Do It"

Writes J. Geldner, of Kitchener, Ont. He further adds: "We filled and re-filled a 12-ft. x 49-ft. silo in 16 1/2 hours with a 6 h.-p. Gilson and an N-13 Gilson Cutter. The outfit also made a record in cutting straw, at the rate of five loads an hour."

"Surprised the Whole Community"

Writes J. K. McLennan of Dalkeith, Ont. "With out 0-10 Gilson Cutter and 4 h.-p. Gilson Engine we filled and re-filled three silos, sizes 14 ft. x 25 ft., 12 ft. x 25 ft. and 13 ft. x 25 ft. in six days."

**F**ILL your silo with your own Gilson Silo Filler and your own or your neighbor's engine. Our 10" Gilson Cutter can be operated successfully with a 4 or 6 h.-p. engine. No bands to cut. Two larger sizes are for 8 h.-p. to 20 h.-p. You need one of these cutters—it will pay for itself the first season.

With a Gilson Cutter you can cut your own corn just at the right time,—doing all the work in a day or two and refilling without expense when the silage has settled.

**GILSON SILO FILLERS**

The Gilson Silo Filler is built for many years of service. It is made entirely of iron and steel, excepting the feed table. All five main bearings are a part of the one-piece semi-steel frame,—insuring perfect alignment of the wheel and knife for all time. The power is applied direct to the cutting wheel,—no chains.

The patented safety reverse makes accidents practically impossible. The drum is made of steel,—not dangerous cast-iron. The wheel is indestructible,—steel bound,—with no breakable parts such as spokes or bosses. It runs at slow speed—600 to 800 r.p.m.

Write for free silo filler book. It tells the Gilson story from start to finish,—points out the advantages of the design, and describes the all-metal construction in such a way that you will understand why our machine cuts and elevates to UNUSUAL HEIGHTS at SLOW SPEED with LIGHT POWER. This is a matter of dollars and cents to you. Send for your copy of this book to-day,—learn all about the "WONDERFUL GILSON" line of silo fillers.

Beware of Imitations and Infringements.

**GILSON MFG. CO., LTD.**

119 York St., Guelph, Ont., Canada

"Will silo-filling time find YOU ready?"

GILSON MFG. CO. Limited  
119 York St. Guelph, Ont.

Gentlemen: Kindly send me free catalogues as checked.

- Ensilage Cutter
- Silo
- Engine

NAME.....

ADDRESS.....

DATE.....

Clip out the Coupon and mail to-day

**GILSON SILO FILLERS**

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

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

Will Silo Filling Time find you ready?

Write for catalogue to-day.

Gilson Mfg. Co. Ltd.  
399 York St., Guelph, Ont.



"GOES LIKE SIXTY" We Want to Demonstrate on Your Farm



We will send a Gilson engine, any size, without charge, to any responsible farmer in Canada to try out on his own farm, at his own work.

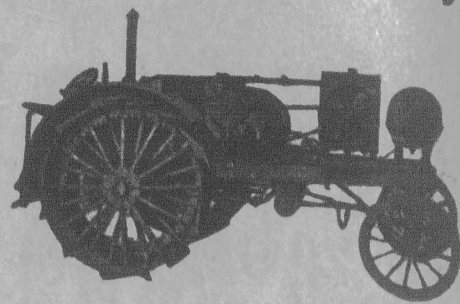
Write for further particulars of free trial offer, catalogue, and special introductory prices.

**Gilson Mfg. Co. Limited**  
269 York St., Guelph, Ont.

**PATENTS** Trade Marks and Designs Procured in all Countries. Special attention given to patent litigation. Pamphlet sent free on application.  
**Ridout & Maybee** Crown Life Bldg. Toronto, Ont.

**Patent Solicitors—Fetherstonhaugh & Co.** The old-established firm. Patents everywhere. Head Office: Royal Bank Building, Toronto. Ottawa Office: 5 Elgin St. Offices throughout Canada. Booklet free.

The Waterloo Boy



The Three-Plow Tractor for Ontario. The Tractor that makes good. The Tractor that has stood the test. The Tractor that is guaranteed under all conditions.

Write for free catalogue, prices and any information wanted.

**THE ROBERT BELL ENGINE & THRESHER CO., LIMITED**

Selling agents for Ontario. Seaforth, Ont.

**Food Will Win the War**

Serve your country and yourself by raising FOOD on the fertile plains of Western Canada. The Canadian Pacific Railway makes it easy for you to begin. Lands \$11 to \$30 an acre; irrigated land up to \$50, 20 years to pay. Loans to assist settlers on irrigated lands. Get full particulars and free illustrated literature from

**G. A. Muddiman,**  
Land Agent, C.P.R.  
Montreal, P.Q.

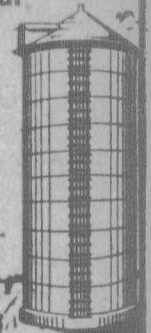
**HYLO SILO**

Sweet Fresh Ensilage down to the last forkful

THE HYLO SILO is perfectly air-tight. No frozen or spoiled ensilage around the walls. Convenient and perfect fitting doors, adjustable without hammer or wrench. Blade of Guaranteed Long Leaf Yellow Pine. Built to last a life-time. Stands rigid when empty.

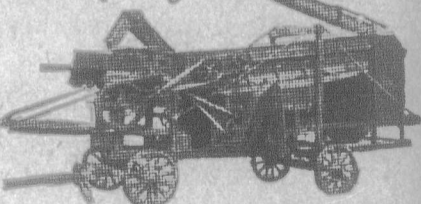
Write for prices and catalogue. AGENTS WANTED.

Gilson Mfg. Co. Ltd. 49 York St. Guelph (4)



The Wonderful—Light-Running Gilson Thresher

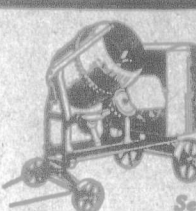
"Goes like Sixty"



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. Furnished with or without Blower. Send for full particulars.

**GILSON MANUFACTURING COMPANY LTD.**  
489 York St., Guelph, Can. 48

**GILSON CONCRETE MIXER**



The ideal small Concrete, Plaster and Mortar Mixer, hand or power. Built in three sizes. Smallest size 2 1/2 cu. ft. per batch—mixes in two minutes—capacity 25 cu. yds. per day. Price on skids without engine, \$75 3/4 ft. with engine and housing on truck, \$195

Send to-day for Concrete Mixer Bulletin No. 40  
**GILSON MFG. CO. Ltd. Guelph, Ont.**

loo Boy



r Ontario.  
od.  
d the test  
anteed under all con-  
rices and any infor-

L ENGINE &  
LIMITED  
Seaforth, Ont.

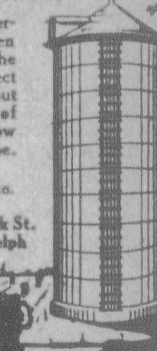
l Win  
ar

and yourself  
on the fertile  
Canada. The  
lway makes it  
begin. Lands  
irrigated land  
o pay. Loans  
irrigated lands.  
and free illus-

C.P.R.  
ontreal, P.Q.

SILO

Ensilage  
kful



ht-Running  
resher



ie independent of the  
eds. Do your thresh-  
h.p. Engine and the  
n Thresher. Furnish-  
d for full particulars.  
COMPANY LTD.  
lph, Can. 48

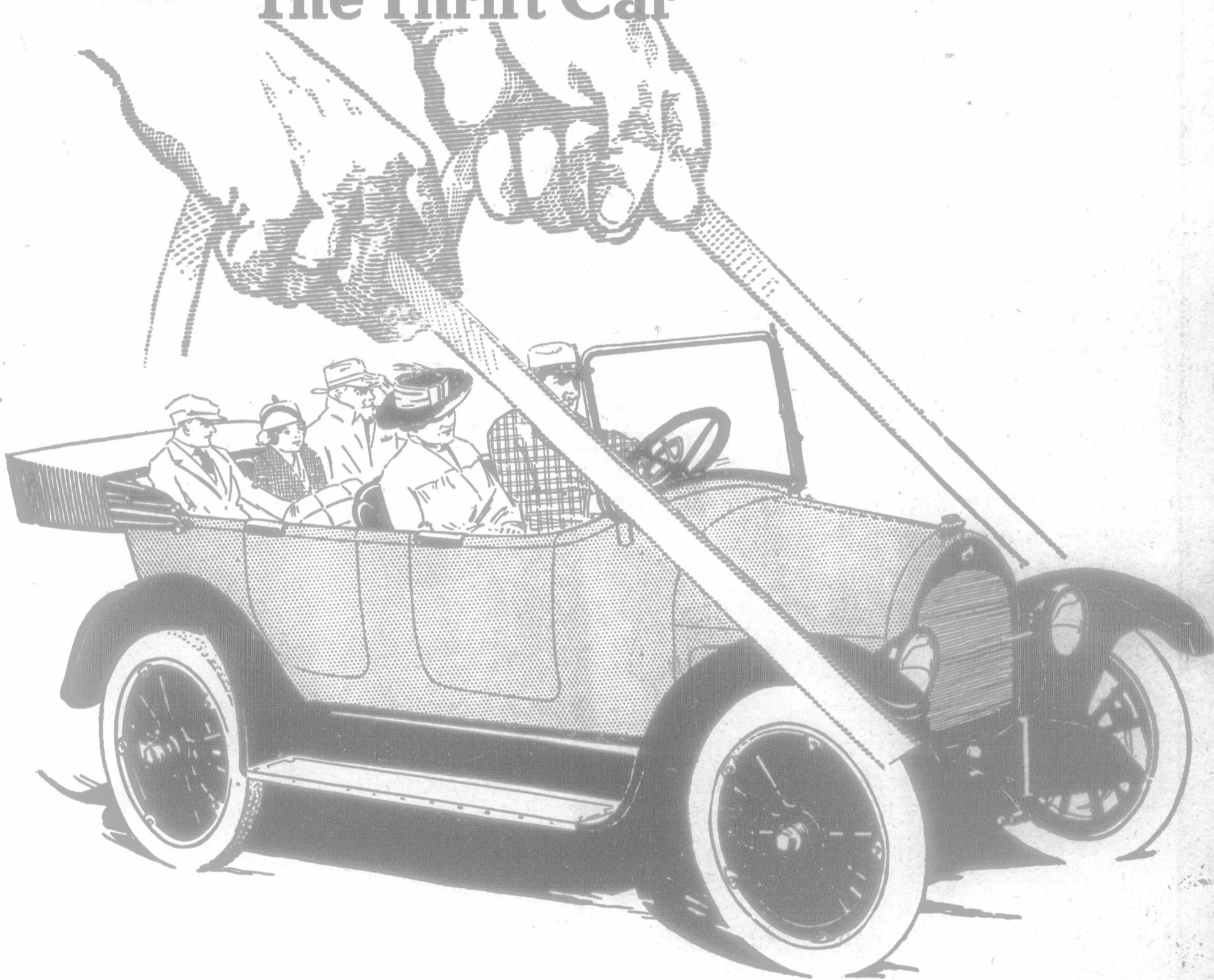
TE MIXER

deal small Concrete  
and Mortar Mixer.  
or power. Built in  
zes. Smallest size 2 1/2  
per batch—mixes in  
minutes—capacity 25  
per day. Price on  
without engine. \$75  
with engine and  
g on truck. \$195  
day for Concrete  
let in No. 40  
York St.  
Guelph, Ont. 54

# Overland

TRADE MARK REG.

## The Thrift Car



# Reins or Steering Wheel?

A LONG, tiresome, time-wasting drive with horses is a short, pleasant, time-saving ride with an Overland.

Let an Overland perform innumerable work duties for you and in addition be an endless source of recreation and benefit for every member of your family.

Select this beautiful, roomy Model 90 and you save money in the first costs and maintenance.

You cannot get complete satisfaction from less advantages than it gives—

And you cannot get as much value in any other car for the low price of this Model 90.

It has a powerful, fuel-saving motor; narrow turning radius; rear cantilever springs; 106" wheel base; 31x4 tires, non-

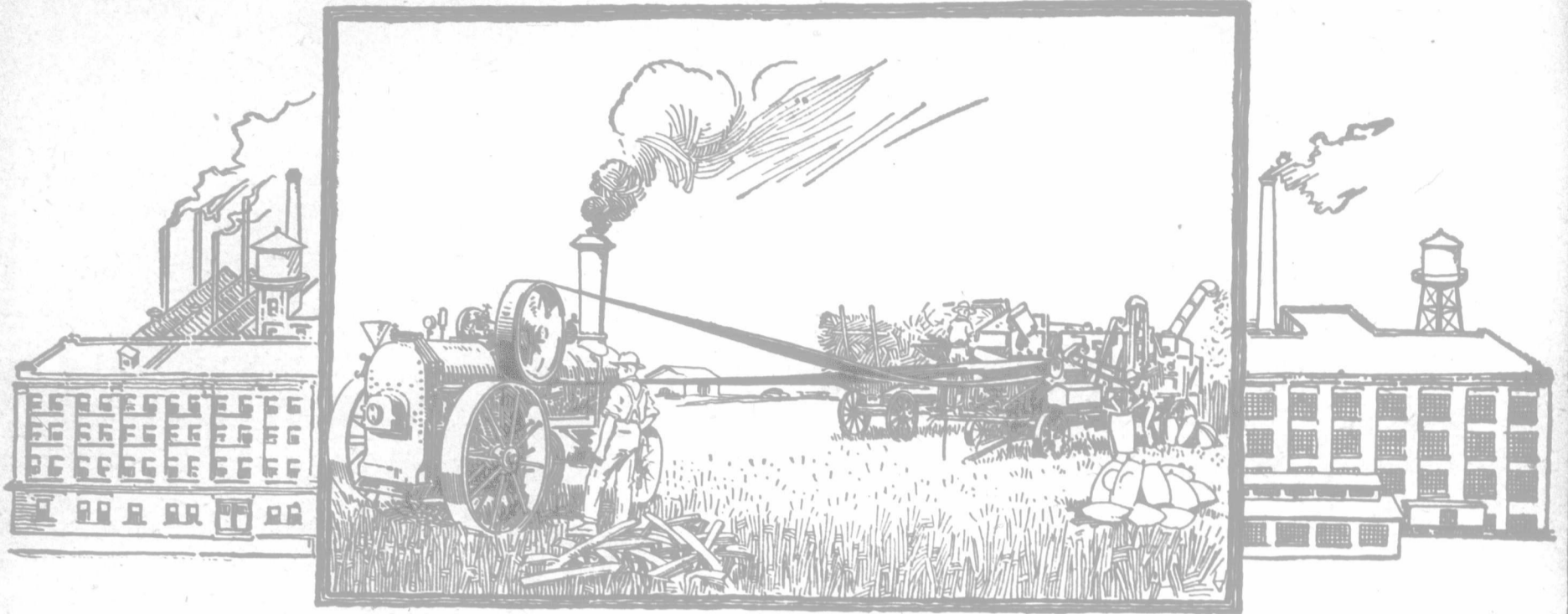
skid rear; electric Auto-Lite starting and lighting and vacuum fuel system.

Because this Overland Model 90 gives every essential for complete satisfaction, the farmer's family can enjoy it as much as the farmer can employ it.

Five Points of Overland Superiority:  
*Appearance, Performance,  
Comfort, Service and Price*

Willys-Overland, Limited  
Willys-Knight and Overland Motor Cars and Light Commercial Wagons  
Head Office and Works, West Toronto, Ontario  
Branches: Montreal, Que., Winnipeg, Man., Regina, Sask.  
Catalog on request—Address Dept. 1209

# EXTRA POWER BELT



## Best for Factory—Best for Farm

A POOR belt wherever you find it is a troublemaker.

It wears out and breaks—just when everything should be going at full speed.

It slips and slows down the machine.

It slides off the pulleys because it hasn't the weight and grip to hang on.

In factories where belts are used the most, the poor belt has no friends.

Why should it find a place on the farm?

THE farmer needs good belting even more than the factory man. He gives it harder usage. He puts it against hard wear and weather. He hasn't time to fuss with it.

Extra Power is the belt we supply for the hardest kind of factory service. It is not too good a belt for the hard use of the farm.

And it will prove the most economical.

TO-DAY, especially, it would seem a needless waste to use any but the best belting. Let us explain why.

Cotton is the big item of cost in a belt. It is the strength of the belt. Rubber is used to protect the cotton.

The moment the rubber protection is gone, the cotton soon goes to pieces.

Now, cotton is up in price, three times what it was before the war. Rubber is, if anything, a little cheaper.

The difference between the poor belt and the best is in the amount and quality of the rubber protection.

To save money on the rubber that is the very life of the belt does seem like poor economy. You might as well wear your fine shoes in the mud to save the price of rubbers.

EXTRA Power, the best Goodyear Belt, is used on the big drives of Canada's greatest industries. That is because it is the highest type of belting made.

Extra Power is built of strong cotton bound together with fine, tough rubber. The rubber, forced through the strands of cotton, forms into one solid, hard-wearing mass. It really becomes rubber reinforced with cotton. The seam is sealed tight with fine rubber.

Such a belt is bound to return every dollar you pay for it.

When you buy your next belt, make an investment in Extra Power.

**GOODYEAR**  
MADE IN CANADA

Carried in stock in all sizes by Goodyear Branches. Your dealer can get Extra Power Belting for you promptly.

The Goodyear Tire & Rubber Co., of Canada, Limited



# !! YOUNG MEN ON THE FARM !! !! WHO CANNOT GO TO WAR !!

Read This Announcement. It Will Interest You.

**Canada Must Have Greater Agricultural Production!  
Canada Needs Men Trained in the Best Agricultural Practices !!**

You will be of greater value to your country and to yourself if you will gather all available information regarding your own business as a farmer. The result is bigger crops and bigger profits. You can get this information during the fall and winter months at the

## Ontario Agricultural College, Guelph

The Agricultural College belongs to the farmers of Ontario. It is a special school maintained by the Ontario Government, where agricultural investigation is carried on from one end of the year to the other, where young farmers may acquire the best practical and scientific knowledge concerning their chosen occupation.

**EVERY FARM BOY WITH ONLY PUBLIC SCHOOL EDUCATION,  
WHO IS SEVENTEEN YEARS OF AGE, CAN GO TO COLLEGE.**

### The College Term

The College opens September 20th, 1918, and closes April 12th, 1919, with two weeks' holidays at Christmas. Most of the hardest work is completed before college opens, and students leave again in the spring before seeding commences. They are free all summer to work at home, and can then put into practice some of the information they have gathered at the college.

### Courses

**The Two-Year Course** is designed particularly for young men intending to be good practical farmers. It includes instruction in the following subjects: Varieties and culture of all farm crops; care and judging of all farm stock; farm dairying; fruit and vegetable growing; farm surveying and drainage; road making; farm bookkeeping; carpentry and blacksmithing; veterinary treatment; soils and fertilizers; bee-keeping; extermination of insects and plant diseases; eradication of weeds; farm forestry; poultry raising; English literature and composition; public speaking. The course not only gives a practical education for life on the farm, but also "stirs up" young men to observe, read, and think for themselves. At the end of the Two-Year Course the Associate Diploma is awarded.

**The Four-Year Course** for the degree of B.S.A., which is conferred by Toronto University, is simply the Two-Year-Course, with the addition of two years of advanced study. Matriculation standing is not necessary if you wish to obtain the degree. Students who complete the second year and have obtained 50 per cent. general average and 60 per cent. on English subjects, at the second year examinations, are allowed to enter the third year. The third and fourth years make a more scientific study of agricultural problems, and prepare students for work of a scientific, as well as of a practical nature. Graduates of the college are engaged as farm managers, district representatives, agricultural teachers, Government investigators, agricultural journalists, etc.

### Expenses

In order to encourage farm boys to attend the college and to put this opportunity within the reach of the average young man, the Ontario Government bears a large share of the expense of the institution, and has fixed all college fees at the lowest possible figure. It is the cheapest school in Ontario. Figure this out for yourself: Tuition fee for one year, \$20.00; board and room at \$4.00 per week. A rough estimate for one year, exclusive of railway fares, etc., is \$150.00. Can any other college give a year's education at this figure? It need not cost this much the first year, as students have opportunity to make some money, say \$25, by work on the farm.

**College Opens September 20th, 1918**

*Arrangements may be made to admit you a little later if it is impossible to come on September 20th.*

A College Calendar, giving full details of courses, expenses and regulations will be mailed on request.

**ADDRESS COMMUNICATIONS TO: G. C. CREELMAN, B.S.A., LL.D., President**

### The College and Farm

The Agricultural College and Experimental Farm is a more extensive institution than most people realize. The land property consists of 700 acres. Over 100 acres is used for experimental purposes, where hundreds of small plots are arranged to test different varieties of all manner of farm crops and for creating new varieties by plant breeding. In this way the very best varieties for Ontario are discovered. The farm proper consists of 500 acres. This is used largely to raise roots and fodder for the many head of stock which it is necessary to have at an agricultural college. The College buildings consist of the men's residence, dining-hall, barns and stables and twelve large buildings, where the work of the different departments is carried on. A staff of over sixty professors, lecturers and investigators is maintained for teaching and for scientific research. The entire property represents an outlay of about two million dollars.

### The Student Body

This college is favorably known all over the world, and, as a consequence, many countries are represented amongst the students. In 1914, there were students from eighteen different countries. The Ontario boy is in close association with men from many parts of the world, as well as those from every Province of the Dominion. The result is a broadening of ideas. Education is not confined to class-rooms, but includes social and residence associations. The average age of the O.A.C. student is 22 years, though it may vary from 17 to 35 years. Do not think you have been out of school too long. In the first year a good deal of elementary work is reviewed for the sake of students who have had little opportunity for education. We want young men to take advantage of the instruction given at this school, and we make it as easy as possible at the beginning.

### Student Activities

The Athletic Association provides recreation in all branches of sport, and assists in keeping the student mind and body in a "fit" condition for study. Rugby, track, hockey, basketball, gymnastics, swimming, etc., are popular pastimes. A large, well-equipped gymnasium, a fine campus and a covered rink are at the students' disposal. The Y. M. C. A., Literary Society and Philharmonic Society assist in the religious and social life of the students, and add to the attractiveness of the college course. The Students' Co-operative Association operates a store which supplies books, stationery and athletic goods at reduced prices. It also controls and prints the official college magazine, "The O. A. C. Review."

# The Farmer's Advocate and Home Magazine

PERSEVERE  
AND  
SUCCEED

ESTABLISHED  
1866

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875

LIII.

LONDON, ONTARIO, AUGUST 15, 1918.

1351

## EDITORIAL.

Speed the plow.

After-harvest cultivation helps to keep the farm clean.

The weather man has been a good helper in the gathering of hay and grain.

A good seed-bed is as essential, or even more so, for fall wheat as for the spring crops.

The well-cultivated corn field does not show effects of drouth like the field that has been neglected.

For the sake of future laying flocks, make careful note of the pullets that start to lay early this fall.

It is wonderful what a person can do when forced by an emergency—as seen on many a farm this year.

The moult of chickens may be stimulated by confining in narrow quarters, but the natural moult is the best after all.

A good, strong colony of bees, given a good location and during a good season, should produce a surplus of fifty to seventy-five pounds of honey.

The widespread infection from apple scab this year will likely make the new "Consumers" brand better known than heretofore on the retail markets.

The British embargo on apples will likely persist throughout this season, but there should be no occasion for worry since the fruit crop is nowhere very heavy.

There are few scientific farmers, but there are a fair number of successful, practical farmers who follow scientific principles. They are the men who lead in agricultural progress.

Cows, hogs and corn make a combination in farming that has many times been successful. Incidentally, fruit, poultry and bees make an equally good combination for those whose inclinations turn in that direction.

Do not become discouraged because your crop of calves this year has shown too many of the wrong sex. Other people have had the same experience before, and by persistence have secured just as great a predominance another year of the right sex.

There seems to be a general impression among urban folk that all or any objectionable foreign element now found in the city should be passed on to the farmer and absorbed in agriculture, regardless of what unpleasantness such a course might cause in the rural home.

Some farmers who never feed concentrates to their cows except in small quantities wonder why other farmers are able to get such high yields from their cows. The other day we saw a cow that is being fed 30 pounds of concentrates per day. She gives promise of taking the lead in her class for yearly production.

What is rational farming? One explanation states that it is the return of a large proportion of the plant food which plants take from the soil, thus keeping up soil fertility without the direct use of plant food. It is also stated that there are only two ways of doing this; one, producing manure and its proper use, and the other the growing of clovers.

### Seed Wheat.

Ere the month of August has come to a close, fall wheat seeding will be commenced in some parts of Ontario, and by that time the want of seed in a dozen or more counties where a deficit exists will begin to be felt. The normal acreage in Ontario is around 800,000 acres, which will require—if the usual amount of land is prepared—in the neighborhood of 1½ million bushels for seed. The Ontario Department of Agriculture has commissioned Dr. C. A. Zavitz to inspect the wheat crop in the Genesee Valley, New York State, with the object of importing a quantity of seed to be held in reserve. This is a wise precaution, but we believe the Agricultural Representatives in the various successful wheat-growing counties of Ontario could assemble sufficient for this fall's planting. Farmers, of course, would have to be induced to thresh their crops early and have it cleaned for immediate shipment. On two adjoining farms in Middlesex County there are 700 bushels grown from this year's crop, and the sample is good. A Bruce County farmer, on whom we called recently, had twenty acres in stook which would yield close to 25 bushels per acre, and he said he had 300 bushels left over from last year. These cases are exceptional, of course, but in travelling through the country representatives of this paper have seen a very considerable quantity of fall wheat, especially in Western Ontario, and in many sections it is the custom to hold over sufficient for the next year's seeding. Many prefer the current season's grain for planting in the fall, but between what was held over and what can be threshed before September 5 we should suffer no shortage of seed if it is properly distributed.

The dry weather has very much retarded preparation of land, and with suitable labor scarce, many farmers who would like to plant a reasonable acreage of fall wheat will find it almost impossible to do so. However, the desire to help out by the production of such a necessary commodity is general, and before the middle of September a fair amount of seeding may be done. Frequent cultivation and a good seed-bed prior to sowing are prime requisites for fall wheat production. It is advisable, also, to fertilize with manure or commercial fertilizer. In the past few years this crop has not made sufficient growth in the fall to carry it through the winter satisfactorily, and everyone should endeavor this year to give the young plants every possible chance before growth ceases in 1918. Obtain your seed early and prepare the land well.

### Apply Manure Frequently.

All agricultural chemists and practical farmers of good standing are agreed that of the various kinds of manures and fertilizers available for the encouragement of plant growth, none are so effective and so generally valuable as well-cared-for barnyard manure. Besides containing all the most essential of the elements necessary to the development of the root, leaf and seed of the plant, barnyard manure is very valuable on account of the large quantity of humus which is incorporated into the soil. Calculated on the basis of the value of artificial fertilizers, barnyard manure is worth in the neighborhood of two dollars and a half per ton, a very much larger figure than is usually credited to this very common source of plant food by many agriculturists. In addition, there is the humus value of the manure, a very considerable item when we consider that humus is probably the most valuable of all our soil constituents.

Notwithstanding the immense value of barnyard manure to agriculture, there is sometimes shown on our farms a very evident lack of appreciation of the proper way to use it. Vast quantities of plant food are lost annually on the farms of Eastern Canada from improper storage of manure, or the application of relatively large amounts of manure to the land at long intervals. It has been repeatedly shown by investigation that

there will be some loss resulting from the rotting of manure even under the best of conditions, but it is also true that where the manure is not put into, or on to the soil at once, one-third its initial value is lost to that farm. Where it is not possible to take the manure to the field daily or weekly, it should be stored in as compact a condition as possible and, if at all possible, where the rain will not reach it. If it happens that the fertilizing constituents of the manure have been well conserved before it reaches the field, there is then every reason why it should be applied judiciously, so that the largest possible proportion of these constituents will serve as plant food. There is undoubtedly a distinct value to be realized from the frequent application of manure and, while there is the question of labor to consider in this connection, the principle underlying this desirable practice should be studied and the work of the farm planned as nearly in accordance with its practical application as circumstances will permit.

### The Late Fruit Commissioner.

One branch of Canadian agriculture has suffered a severe blow through the death of Donald Johnson, the late Dominion Fruit Commissioner, but, while his services in behalf of the industry were appreciated by all, it is the loss of such an outstanding character and esteemed friend that will strike deepest in the hearts of those who knew him personally. Long before the duties of Fruit Commissioner were assumed at Ottawa, the deceased took a national rather than provincial interest in public affairs and matters pertaining to his occupation, and above all he was not evasive or prone to dodge a difficult situation. Earnestness, sincerity, and a conscientious application of his energies to the tasks which confronted him were traits of character which distinguished the late Commissioner and gained for him the respect of everyone. While the changed life from one of constant activity to the more or less sedentary habits common to office work cannot be held directly responsible for his death, it hastened, no doubt, the call of the Grim Reaper as it did in the case of the late John Bright, Live Stock Commissioner. The elevation of men, accustomed to the onerous duties connected with agriculture, to public office carries with it an element of danger and the possibility of an undue sacrifice of health.

### Milk and Hot Weather.

Professor R. W. Brown in an article in this issue states that, "present day results unmistakably point to the conclusion that the two greatest causes of spoiled milk and cream are slow and insufficient cooling and the use of dirty utensils". There really should be no excuse for the use of dirty utensils in the dairy, since it is only a matter of common sense to know that with such a product as milk or cream cleanliness is of paramount consideration. There may be some shadow of an excuse for not always cooling milk promptly, since one must understand the nature of milk and the agencies, such as the many different forms of bacteria, which may operate to quickly lower its quality. That all milk contains certain numbers of bacteria and that these bacteria are capable of causing the souring of milk, are facts that are pretty generally known, but it requires some little thought and attention to the care of milk to find out that bacteria multiply more rapidly in warm milk than in milk that is kept cool and that milk will absorb foreign flavors much more readily when it is warm than when it is kept at a temperature below 60 degrees. The tables in connection with the article referred to are particularly interesting in this regard. Not only should milk be cooled to as low a temperature as possible but it should be cooled quickly as is shown by the fact that stirring the milk for one hour was sufficient to reduce the

# 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 and 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.

temperature twelve degrees below that of milk that was not stirred.

These factors in the care of milk and cream each have a cash value and are worth an investment to secure them in proportion to their value. A short time ago we were talking to a cheesemaker with many years of experience. We were discussing the yield of cheese, particularly the causes of variation, and the greater part of the difference between 9¼ and 12¼, the extremes in pounds milk per pound of cheese, he ascribed to the gassy condition and over-ripeness of the milk met with during the hot summer months. Lower yields in certain seasons are inevitable, but a low yield due to carelessness is the poorest kind of business.

## Money Values.

The value of money or, in other words, the buying power of a five dollar bill is steadily depreciating. A stated sum of money will probably buy less to-day than it would at any time in the history of the world, that is, taking all commodities into consideration and considering the buying power of money the world over. There have been times in the past when, in small, or more local areas, prices have been higher.

This climbing up and up of prices is having a most unsettling effect upon the consuming and wage-earning masses of the people. What else could be expected? They continually hear of the huge profits being made by corporations in almost every line of industry, and yet they are finding it more and more difficult to meet ordinary living expenses even with increased wages.

Under these conditions we may expect that there must be readjustments in economic conditions that will make the necessary comforts of life more available to these classes if they are to continue to give their utmost work and support to the necessary industries at this time. We cannot but feel that there is need for more serious consideration in Government circles regarding this continual increase in prices or, in other words, the lessened buying power of money, that all classes may be affected equally.

We are inclined to believe, however, that prices which have been attributed to the war, have their origin elsewhere, in many cases, and finances are now in such an abnormal condition that unnecessarily high values may be placed on articles and the blame laid to the war with impunity.

## Get Through Giving.

BY ALLAN MCDIARMID.

I heard an old farmer say, a short time ago, that if they didn't stop sending collectors around to beg for the Red Cross and the Y. M. C. A. and the Patriotic Fund and the Belgians, besides the different things that the church is always troubling herself about, that he believed he'd have to get a bag and start out to collect for himself. His idea apparently was to give the impression that he had made himself poor by his generous giving to all the different institutions mentioned. Any one who knew him well, however, wouldn't be much afraid of any such fate as that befalling him. When a dollar got into his hands its chances for escape were small. It was liable to become a prisoner for life.

The old fellow was pretty religious in his way, too, but if he had read all of his Bible he evidently didn't believe it all, for there's a passage in it that goes something like this: "There is that scattereth and yet increaseth; and there is that withholdeth more than he meet but it tendeth to poverty. The liberal soul shall be made fat; and he that watereth shall be watered also himself."

If he thought there might be any truth in this sample of the wisdom of Solomon he was afraid to run the risk of experimenting. With him a "bird in the hand" was worth two in somebody else's, and he was a firm believer in the motto, "what we have we'll hold." He was the kind of a man who wouldn't go fishing for fear that he might lose his bait. One thing that could be said for him was that he was no gambler. He took no chances. That is, when it came to risking what he already had.

I don't think there are many of us that have much use for this sort of a man, especially if he has happened to have business dealings with him, but when it comes to bringing the matter home to ourselves we sometimes find that there is a little of this spirit of selfishness, or shortsightedness, to give it a better name, in the best of us.

The old instinct of saving and hoarding up comes down to us from some far back ancestor who was compelled by necessity to economize to the last degree or starve. A succession of such ancestors in the case of some of us have made it second nature for us to do as they did and we can hardly be blamed for the tendency we show, but on the other hand we have, of course, our reason to help us to overcome it.

It's all right to be economical but it's all wrong to carry the thing too far, even in war-time. In our business dealings with our fellowmen especially, we've got to be open-handed and willing to give even a little more than what we call a "square deal" if we expect to get the greatest possible amount of satisfaction and profit from these transactions. As we deal with others so others will deal with us, is a rule that has only an occasional exception.

An incident I heard of recently in connection with Edison, the inventor, is in line with the above. It seems he had made a contract with a certain firm to supply them with a large quantity of metal castings at a fixed price. Before these castings could be delivered the price had advanced to such an extent that the filling of the contract meant a loss of money to Edison. The firm he was supplying offered to release him but he refused. When his son, who is engaged in the business with his father, tried to reason with him and get him to change his mind he said to him, "A contract is a contract and must be lived up to. Even from the point of view of straight business it pays in the end." And the son goes on to tell how it did pay in this particular case. Shortly after, conditions were reversed and the firm spoken of were supplying Edison with material. Prices had again risen and Edison offered to release them from their contract. They, in turn, refused and insisted in fulfilling their engagement at the price agreed on. This happened no less than three times, so from the money standpoint alone, apart from the good-will created, Edison was considerably the gainer through his policy of open-handedness. He had given a pretty good illustration of the saying, "with what measure you mete it shall be measured to you again."

It seems to be one of the Natural Laws of the Universe, this getting as we give, but we don't seem to understand, very well, the way it works out, or at least we are not taking full advantage of it. The farmer who refuses to invest in better live stock when he has the opportunity, or to go to the expense of draining and fertilizing his land when it needs it, is not taking his chance to benefit by this law. His miserly instincts refuse to let him "cast his bread on the waters," as the saying is, and as a consequence nothing can ever come back to him in the way of a reward for faith and generosity.

There is something about generous action on the part of any man that brings out the best in him. It sharpens his intellect, increases his self-respect, raises his standards and makes a better business man of him, putting him in a position to take advantage of circumstances in a way that doesn't open up to the narrow-minded man who makes self the first interest.

Selfish men have made money in spite of their selfishness. We have to admit that. They gave their whole life and energy to the one object and were successful to a certain extent. But they didn't make what they might have made if they had known enough to get Nature and the rest of their fellowmen working with them. And, in the true sense of the word, they were always poor and died poor, for they had neither the good-will of the world nor anything in the shape of developed character to show for all the time and labor they had spent here. Money is worth working for, but no man has amounted to much who has to count all his wealth in dollars. The only common-sense reason for making

money is in the fact that it is then possible for us to give it away; helping our fellow creatures and increasing our own returns, making progress possible and continuous for ourselves and others, for without progress we might as well be dead, though we may find sometimes that progress comes by way of our mistakes and having to pay for them. And the one mistake that has cost us more than any other has been in thinking first and last of our own interests and forgetting or overlooking those of our neighbors and fellowmen.

## Nature's Diary.

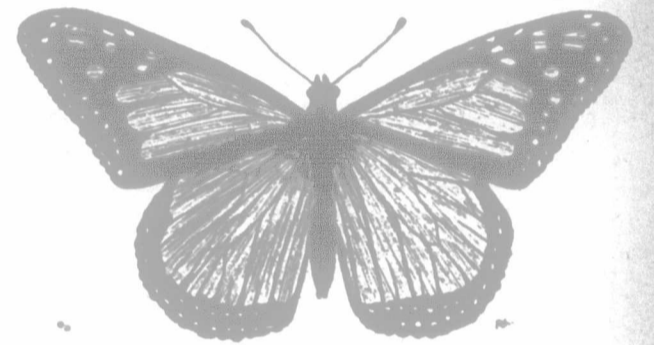
A. B. KLUGH, M.A.

Beneath the blue of the summer skies,  
In the golden sunny hours,  
Like dainty sylphs dance the butterflies  
At play among the flowers.

Among all the multitudinous species of insects there are none which rank as high in popular favor as the butterflies. Many people who take no interest in most insects, and to whom the great majority of insects are "bugs," are entranced by the brilliant coloration and the dainty flitting of the butterflies.

We have in Canada a great many species of butterflies, and some of them are so common and so distinctively marked that they may be recognized at once from a black and white sketch and a few notes on coloration.

A very common, but large and striking, species is the Monarch or Milkweed Butterfly. The upper surface of the wings of this species is reddish brown, with the borders and veins black, with two rows of white spots on the outer borders, and two rows of pale spots across the apex of the fore-wings.



The Monarch.

The outstanding peculiarity of the Monarch is the fact that it migrates, and it is our only Butterfly that does so. In the spring the adults that have wintered over in the southern states come northwards, and as the females find the Milkweed sprouting they deposit their eggs on this plant. The individuals which hatch from these eggs, when mature, migrate still further north, and so the tide of Monarch migration advances until they reach Canada in July. As the cold weather approaches the Monarchs gather in large flocks and migrate southward. I have seen immense flocks of Monarchs in the middle of September on Point Pelee, Essex County, and have seen them striking out directly across Lake Erie. When these flocks come to rest they have the habit of settling on one tree, so that at a little distance the tree appears to be covered with very peculiar leaves. When one approaches closer these leaves take flight and resolve themselves into Monarchs. Immense numbers must perish on these fall migrations, as though the Monarch is very strong on the wing for a Butterfly, it has too much "sail" to handle in a strong wind, and during a heavy blow I have found a great many Monarchs cast up on the shore.

The caterpillar of the Monarch is strikingly marked, being pale green with rings of black and yellow. These caterpillars feed only upon the Milkweed, and they feed both day and night with intervals of rest, during which they are found on the underside of the leaf.

The chrysalis of the Monarch is a very beautiful object, being pale green shading to whitish below, while outlining the lower portion are flecks of gold. At the apex of the chrysalis is a band of gold with a dotted lower edge of jet. After a few days the chrysalis changes to a darker blue-green, and just before the time for the butterfly to emerge it changes to a still darker and duller hue.

The Monarch seems to be distasteful to birds, as it enjoys practically complete immunity from their attacks, both in the larval and adult condition.

The Monarch has a very extensive range, being found over the greater part of North and South America. It has also spread to Australia, probably by means of the chrysalids being transported in baled hay, and from thence it has reached Java and Sumatra. It is well established in the Philippines and the Cape Verde Islands, and has also spread eastward to England.

A butterfly which may be readily mistaken for the Monarch is the Viceroy, a very common species which differs from the Monarch in being smaller, (3 inches across the spread wings), and in having a black line across the middle of the hind wings. So closely does this species resemble the Monarch that it is generally supposed that this is a case of mimicry, in which the Viceroy, belonging to a genus which is not distasteful to birds, shares the immunity of the Monarch. The range of the Viceroy is from Canada to the Gulf of Mexico.



# THE HORSE.

## The Horse Judge in the Show-Ring.

The horse judge in the show-ring has many opportunities for studying human nature, and he is often astonished at discovering that (even among horsemen) there are many exhibitors who cannot be called sports. Someone may ask "What do you mean by a sport?" By a "sport" we mean a person—man, woman or child—who "plays the game," plays to win, but plays fair; who is anxious that the best horse shall win, regardless of ownership; and who is a good loser. Any person can be a good winner, but it requires a "sport" to be a good loser. Making reasonable allowance for the fact that an exhibitor can see more good points in his own entry than either the judge or those at the ring-side can, and when comparing his entry with the others is naturally somewhat prejudiced, we cannot help noticing that in many cases he cannot fail to realize that his horse is out-classed, but at the same time he endeavors to make himself believe that he should win, and he wants to win, notwithstanding the fact that he really knows that his horse is not good enough. If from any cause, either incompetence, favoritism or failure on the part of the judge to carefully compare the merits of the entries, he should win, he is highly pleased, and tries to make himself believe that he has a better horse than he thought he had. He is a "good winner." Probably the next week he is again exhibiting in the same company, but before a different judge, one who is more careful in comparing the merits of the entries, and he places the previous winner down in the list, or probably does not place him at all. They are placed about as this exhibitor really thinks they should be (provided he is really a horseman), but he won in the same company last week and thinks he should win again. He looks sour at the judge, mumbles something unintelligible, in some cases tells the judge what he thinks about his judgment; in some cases refuses to accept a second or third prize ribbon, and at all events is anxious to let his friends outside the ring know that he has been given a "raw deal." He is a poor loser, hence not a "sport."

Even when an exhibitor gets less in the ring than he deserves, if he be a "sport," he will try to look pleasant, and at all events pass no uncomplimentary remarks in the presence of the judge or other officials. He is a "good loser." If failure on the part of the judge to realize in the proper manner the merits of his entries in other sections or classes continues, the exhibitor is justified in withdrawing his entries, or refusing to exhibit further before that judge, as he may rightly conclude that for some reason he is not getting a "square deal," but he is too much of a "sport" to make a public demonstration of his feelings in the matter. Horses in the show-ring, like men in all classes of sport, have their "on days" when they feel well, look well and act well, and their "off days" when they neither feel, look nor act well. A high-class horse that may have won at a series of shows in high-class company may some day be competing with entries of a lower class, and on account of it being his "off day" be rightly beaten by an animal that he could win over when feeling and acting at his best. Under such circumstances the judge is often accused of either incompetence or dishonesty. The exhibitor of the beaten horse cannot properly compare his merits with those of his competitors and fails to notice that he is not doing himself justice. He thinks that having won over better horses than he is up against on this occasion, he should win again. He thinks he cannot be fairly beaten. In fact, he thinks he should win on reputation, if from no other cause. Horsemen at shows cannot fail to notice that occasions in which horses do win on "reputation" are not uncommon. The judge who expects to please all exhibitors, the directors and the spectators has set for himself an impossible task. There will be those who will decide that he is not qualified for the job, but he has the satisfaction of knowing that all cases, no matter what his decisions may be, he has made someone happy, and impressed him and his friends with the fact that "he is the proper man in the proper place." While, as stated, he cannot please everybody, if, after the day's work is done he is satisfied with his work, would not make any changes if he had the opportunity, he may rest satisfied that he has made no great mistake. Some exhibitors acquire great skill in endeavoring to deceive the judge, such as filling quarter or sand cracks and coloring to match the hoof, wearing blinds that fit very closely to cover a defective or diseased eye, plugging the false nostril of a horse that "makes a noise", keeping a horse that is lame in the hock moving all the time, handling a horse with stringhalt so that he will not exhibit his fault when the judge is looking, trimming the hair so as to, as far as possible, make the limbs appear to have the desirable conformation, causing artificial inflammation to a weak part in order to make it appear strong, or to a joint in order to make it appear like its fellow which is diseased; applying local anaesthetics to a diseased limb in order to disguise lameness, "doping" phlegmatic animals in order to instil life and energy, etc., etc. Such practices are occasionally successful, but we repeat, the man who is guilty of such tricks is not a "sport". He is not willing that "the best horse should win" In fact, he is dishonest. He is anxious to gain a reputation and, incidentally, a little money that he knows should go to another man.

The show-ring is not without its humor. If an exhibitor should be acquainted with the judge, or should have met him on a previous occasion, he is often anxious to tell him how well he is looking, enquire after his family and friends, tell him how much he is pleased

with the work he is doing, enlarge upon the merits of an entry he has in a certain section, etc. It is also, in some cases, very amusing to hear the explanations of the manner in which a horse received an injury which caused a blemish that the judge is looking at, and the assurance that it will be all right in a few days. A friend of an exhibitor will often go to considerable trouble to interview the judge before the show commences and tell him that in a certain section of a certain class a certain person will have the best horse, and will describe the horse and exhibitor minutely, in order that the judge may not make a mistake and award the first ribbon to the wrong animal, or possibly fail to put the proper winner in the money at all. In rare cases the exhibitor or his friend will intimate that the winning of first place in a certain section by a certain horse will be "worth something" to the judge, and in some cases specify the amount. He will assure the judge that the animal under discussion is really an easy winner, but he wants to make sure that he will not be overlooked. He has not the slightest doubt about the judge's ability to pick the proper winner, but in order that no mistake

an aim to improvement has been under way for years. What, then, is the result in the average herd and flock where apparently little thought is given to the matings? There will undoubtedly be a few choice individuals, but culls will predominate. Cull animals transmit their qualities as persistently as do the top-notchers, consequently, if improvement is to be made, weeding out is essential. The breeders and farmers whose herds and flocks lead in their various classes of stock to-day have gained that position by judiciously mating their animals and then culling severely.

A writer in the "Live Stock Journal" has the following to say regarding weeding out undesirable individuals for breeding purposes:

"No herd, stud or flock can arrive at a desirable state of perfection unless it is weeded, and just as this operation is thoroughly or partially or slovenly carried out will be the increased excellence and pecuniary profit. What is applicable to a breeder's herd is equally true to that of the farmer, with this added difference—the breeder may be wealthy and able to dispense with profit



A New Zealand Division Horse Show on the Western Front.

or oversight may occur he wants to impress upon his mind that it will be "worth something" to him. It is rather amusing to lead such a man on to find out just "what it will be worth." Fortunately, there are few who will go quite so far as to offer bribes. Probably the reason that such suggestions or offers are rarely made is the fact that men are afraid the judge will expose them to the directors.

There are cases where the director in charge of the ring draws the attention of the judge to a certain entry made by a certain person who is, and has been a great friend of the Society, by giving special prizes or in other ways, and intimate very shortly that the awarding of the first ribbon to this animal would be very popular with the directors and the people in the town. When asked if it would be quite honest, and fair to the other exhibitors, the answer generally is that "it would be all right," that the horse should win, but he was simply drawing the attention of the judge to the case in order to make sure that the merits of the entry would not be overlooked. While all cases of this nature really imply a want of confidence in the ability or honesty of the judge, they have a humorous side and he is usually inclined to look at them in that light.

In conclusion we would say to exhibitors "be sports", and to judges "be honest". Be sure you are competent before you undertake to judge; then be careful; use your own judgment; do not be influenced by the wishes of the exhibitors, their friends or the directors; do work with which you will be satisfied when it has been done, and you will find that you have made few mistakes, and that your work in the ring has given as general satisfaction as is possible. WHIP.

## LIVE STOCK.

### Improve by Culling.

The mating of two high-quality animals does not always produce progeny of like quality. While the majority of the offspring will be as good or better than their parents, there will be a small percentage of culls. This occurs in the herds and flocks where breeding with

but the farmer cannot afford to do so. How absolutely necessary it is, that the latter should do the greatest possible amount of weeding. The question is vital to the agriculture of the country, and affects breeders and farmers alike. It is one that can only be met by the extermination of the weeds, and by retaining the best for future breeding. It is not the work of a day, a month, or a year, but it is absolutely essential if we are to retain our supremacy that it should be commenced at once. Why should we retain in our herds animals of the weed class, and more important still, why should we breed from these? They do not pay to keep, and they form a source of danger for the future. If the weeding is properly carried out it will conduce to individual prosperity, and enable the nation to hold the supremacy as the live stock breeding farm of the world."

Canada is an agricultural country and live stock is the mainstay of the farms; without it fertility would gradually wane and the returns diminish. Therefore it is essential that the highest quality of herds and flocks be built up, and this can only be done by every breeder and every farmer culling out the inferior animals and breeding only from the best. Following this policy year after year will gradually lessen the number of culls until the annual production of such, amounts to but a very small percentage of the animals raised. Not only does selection of breeding stock lessen the number of inferior animals, but greatly improves the quality of the entire herd or flock.

Using a grade or scrub pure-bred sire won't bring improvement. Better far to take the females five miles to a right good sire and pay five dollars a service than to patronize an inferior animal on the next farm and pay a dollar. The other four dollars plus interest and extra time will be many times repaid in the improved quality of the progeny. No stockman can afford to use an inferior sire, and the time is believed ripe for the inspection of bulls, tending to the elimination of the grade and the scrub. If Canada is to gain the place she should occupy as a live stock country, the farmer and the breeder of pedigreed animals must weed out the culls, not for one or two years only but every year. Only by so doing will the quality of live stock on the whole reach the highest standard.



Shade, Water and Luxuriant Grass Provide for the Comfort and Well-being of the Herd.

# Sheep and Intensive Farming.

During recent years the price of wool and mutton has made sheep farming more profitable than it was heretofore, and has resulted in sheep being kept on more farms. However, there is need for a greater sheep population in Canada, and this need can only be met by more sheep being kept where mixed farming is carried on. The following paragraphs by F. R. Marshall in charge of sheep and goat investigations, Bureau of Animal Industry, United States, which appeared in the U. S. Department of Agriculture Year Book, deals with some of the obstacles encountered in keeping sheep where intensive farming is practiced, and shows how these may be overcome:

"The sheep industry of the United States is in a stage of transition. In most of the western range States the number and size of flocks continue to decline. In the farm States there is a distinct trend toward the more general production of wool and mutton. The net result for the country as a whole in 1917 is reported to have been an increase of 2 per cent. over that of 1916. This movement, though accentuated by war conditions and prices, did not originate with the war. It had its beginning much earlier and may be expected to continue after peace is restored. The full significance of this movement is not generally appreciated. It has been either actively discouraged or misunderstood by certain agricultural authorities who seem to believe that the passing of the sheep industry of the Eastern States in early times finally disposed of the question of the economic place of sheep in intensive farming. It is believed that the analysis of the situation which follows will show that this view is erroneous and unfortunate in respect to the development of opinion as to the best practices for the most effective and economical use of the land in the immediate future and in the period following the war.

"It may seem strange that after more than a century of sheep raising in the United States the relationships of that branch of agriculture are still the subject of discussion, while beef cattle, dairy cattle, and swine have mainly found their permanent locations and profitable extent of development in relation to other lines of agriculture. The divergence of opinion arises mainly from a failure to distinguish between sheep kept chiefly for wool production in newer parts of the world and in the Eastern States prior to 1880, and the other type of sheep husbandry that regards mutton and lamb production co-equally with wool, exemplified on the farms of Great Britain.

"The frequently repeated statement that the decline of farm sheep raising, that occurred decades ago, is proof that the industry cannot have a place in modern intensive farming has mainly gone unchallenged. The fact is that there is very little resemblance between the former business of growing wool and the present rapidly developing business of keeping sheep for the economical production of meat as well as wool. The type of sheep raising now engaging the interest of farmers is essentially new. It has never been tested in a large way in the United States, and has never been abandoned anywhere when once established.

"Federal statistics show a decline of 8 per cent. in the number of sheep kept in the United States between 1910 and 1917. To a considerable extent this decline is due to the abandonment of keeping wethers. When wool was the most important product, large numbers of wethers were kept, sometimes until four or five years old. With higher market values for lambs, wethers have been largely discarded and ewes put in their places. The ewes produce practically the same quantity of wool as the wethers and a crop of lambs each year, equal to about 80 per cent. of their number. The decrease in meat production therefore has not been so great as might be supposed. The number of sheep (including lambs) slaughtered in 1915 was 14 per cent. less than in 1914, and in 1916 the number was 8 per cent. less than in 1915. This was due to the fact that the settlement of the range had made it necessary for many western sheep owners to dispose of their flocks, which swelled market receipts for a time, but diminished the number of ewes to produce lambs later on.

"In the former period of the farm rearing of sheep mainly for their wool, mutton was very lightly esteemed as an article of diet. Lamb, as we know it, was not offered for sale. Other meats were abundant, cheaply produced and retailed at low price. The general and continuing upward trend of beef and pork values diverted attention to the then cheaper mutton and lamb. When once understood, these meats, particularly lamb, came into favor and, though now selling higher than other meats, are in strong demand because of their taste and flavor and also because of the special economy of their use by small families and by city residents in general, who compose the majority of the patrons of our butcher shops and markets. This condition in conjunction with the peculiar economy in the production of lamb, gives to the sheep as a meat-producing animal an assured position in the more nearly stable plan of operations rapidly being adopted on American farms. In this, as in the cattle industry, the farmer's security is due to the removal of danger of unequal competition of cheaper lands in Western States. The lessened difference in acreage value of range and farm lands and the much greater feed-producing capacity of the latter, puts the business of live-stock production on a basis where the margin of profits depends mainly upon the skill and business ability of the producer.

## Farm Production of Wool.

"Students of world wool-trade conditions are convinced that future wool supplies must come quite largely from farm flocks. At present the bulk of the world's wool supply comes from sheep kept on the agricultural frontiers. The flocks of Australia and South Africa are maintained primarily for wool production. The fine-wool type of sheep has been the forerunner of agriculture in the drier and in the new areas of all countries. The mutton sheep comes in at the other end of the gamut as a necessary instrument in highly-intensive and self-supporting agriculture. In our own range States, in New Zealand, and in South America the better parts of the pastoral areas are now devoted to the production of both wool and mutton from what is broadly called the "cross-bred" type of sheep.

"The range areas of the United States, Australia and South America have steadily been encroached upon by closer settlement and the use of the lands for grain growing. While these same lands, or such of them as are found continuously profitable for farming purposes, will eventually evolve into a system of raising live stock, there will be a long interval of lessened production of meat and wool. This might be compensated for by the production of still newer areas, but the primitive conditions still existing in the unproductive parts of Asia and the equatorial regions at best give no promise of the addition of new wool-yielding areas for a very long time. Since the supplies cannot be maintained from new sources, the only opportunity remains in increasing the output of present sources of supply. A smaller and diminishing margin between supply and consumption of wool seems inevitable. It is not possible to see how this tendency can fail to cause a new level of values for wool unless civilian consumption is very greatly curtailed. Since very little of the actual requirements for wool can be satisfied with substitutes the only alternative lies in the maintenance of a level

## Economic Phases of Sheep Raising.

"In addition to the great need of increased production of meat and wool and the development resulting from the operation of higher values, the raising of sheep has a new appeal to older farming areas as a result of alterations in feed values and the scarcity of farm labor. The major factor in determining the cost of other animal products is the value of grain or millfeeds. Pasturage and roughage are important, but both beef and pork require a very considerable use of concentrated feeds for the finished animal that is most profitable when sold for slaughter. The most valuable carcasses of lamb and mutton require a very much smaller proportion of fat and therefore a smaller use of grains than is required in other meat animals. In the case of lamb, which is much more popular than mutton, a majority of the animals are marketed at the time of weaning and without having any feed other than milk of their dams and a slight amount of grazing. The lambs raised in areas incapable of producing a good milk flow in the ewes, and which, therefore, go to fattening yards, consume considerable grain, but their finish is largely produced from hay and other roughages of comparatively lower value.

"With breeding ewes, as with mature females of other classes of live stock, the free use of grain is not needed when good roughages are furnished. Fleeces of good weight and quality can be produced without the use of concentrated feeds.

"The other prominent economic advantage of sheep raising is in the comparatively small demand it makes upon farm labor. The labor cost per dollar's worth of wool or lambs is lower than in any other farm-animal product. This factor had a noticeable effect in 1917 upon farmers' attitude toward sheep raising, and may be expected to be more appreciated in the future. In the past injury has been done by advocating sheep raising on the ground that no labor or attention is needed and farms are cleared

of weeds. So far as their appetite for weeds is concerned, the sheep may be regarded to some extent as scavengers. They will eat most weeds, and on any farm will greatly reduce the amount of hand labor needed to hold in check the areas of pasture and grain fields. Many rougher, permanent grass pastures that require mowing can be kept clean by the use of sheep, while at the same time the cattle-carrying capacity of the pasture is increased. It is a mistake, however, to encourage or advocate the raising of sheep by people whose main interest is in weed control. While the labor required by sheep raising is continuous, it is not heavy, and, if properly supervised and made interesting by financial return, can well be performed by boys incapable of other kinds of farm labor. Constant attention and careful observation are necessary to maintain thrift in flocks of practical commercial size.

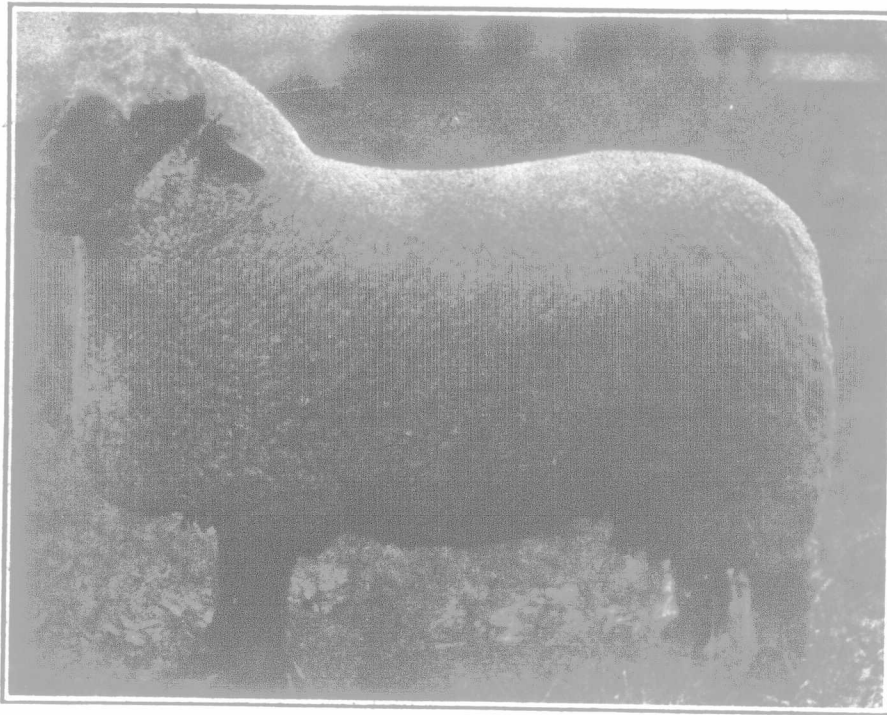
"One competent, experienced man can care for from 300 to 500 ewes during winter. Extra help will be needed at lambing and shearing time, but unless the forage rotation plan is followed, the full time of the shepherd will not be needed for the flock in summer.

## Obstacles to Expansion.

"The first and greatest obstacle to an adequate increase in the size and number of farm flocks has been removed in the restoration of equal competition with other areas and in the improved prospect of continued higher values for wool and lambs. Owners of farms can now safely develop flocks to the size suggested by the character of their land, existing marketing facilities and available labor without hindrance to logical development such as formerly existed in disproportionate prices for different classes of animals and other farm products.

"A second obstacle to a quick increase lies in the fact that comparatively few farmers are as well qualified to care for sheep as for other classes of stock. The management of mutton sheep does not differ altogether from that of the former wool flocks, but the majority of farmers have had no experience in caring for sheep. The systems of management for quickest returns, continued health, and maximum profits under different types of farm conditions are not well understood, nor have they been determined by experiment stations in any such way as has been done for other classes of stock.

"This obstacle is a temporary one. The needs and habits of sheep differ widely from those of horses, cattle, and swine, but present no problems that will not be met by interested study and observation supported by



Oxford Down Ram.

Champion at the western shows this year. Owned by E. Barbour, Hillsburg, Ont.

of values to justify an increase in wool production in present range or farm sections.

"As was suggested, the range product has been declining in all countries except South Africa and New Zealand. A portion of this decline in range production in the United States may be offset by improved methods and the revision of State or national attitudes on public land policies, but it is probable that much more of the wholly unimproved lands now used for grazing will be settled before a condition is reached under which each type of land is employed in the most economical way. The strong probability of an early increase of supplies of wool from the present principal sources indicates the continuing importance of wool as a source of income from flocks previously kept for meat production. The British breeds of sheep amply demonstrate the possibility of obtaining large yields of wool and meat from the same animals, and with both commodities in strong demand the commercial flocks of the future will develop still further upon a wool and mutton basis.

"The United States is still a large importer of wool. Her meat consumption, in normal times, equals production. Her farms contain much unproductive land, and the earlier rush westward left many large areas undeveloped. It seems certain that the new order of affairs will result in the increased production of live stock, particularly sheep, on the larger areas of idle lands in the Appalachian, Great Lakes, and South Atlantic regions. The still more intensive use of land in farms, and effort to secure the most economical use of every acre, every facility, and all available labor, will necessitate the general inclusion of sheep in our system of mixed farming and live-stock production.

satisfactory returns. The boys' sheep clubs now being formed are valuable largely for the opportunity furnished to interest prospective farmers and give them experience with sheep which, though on a small scale, will teach the essential points of sheep management and contribute materially in overcoming the present lack of qualified shepherds.

"The dog question is still a serious hindrance to sheep raising in most farming localities. The probability of sheep being killed by dogs is sufficiently great to keep many people out of the business. Public sentiment as to the necessity of more adequate control of dogs for many reasons is rapidly changing. The prospective sheep raisers, however, are not assured of protection until such sentiment results in the enactment and the enforcement of suitable laws. Five States enacted improved legislation in 1917, and a number of other States are likely to take similar action. The experience of the States having had most experience in this matter emphasizes the need of plain and ample provisions for full enforcement of the laws enacted. Readily available officers are necessary to appraise and secure early compensation for damage done. Such compensation cannot be adequate or timely where payments can be made only from local collections for dog licenses. It was not the fault of the losing farmer that lack of vigorous enforcement of the law resulted in too low a condition of the funds to do the work intended. Compensation arrangements are a secondary though essential feature of this kind of legislation. The first need, and one calling for a clear assignment of duties to available and efficient officers is for public education through the collection of license fees or taxes and the prevention of dogs from running at large and unattended where sheep are kept."

**Good Live Stock Show at Brandon.**

In spite of the discouraging crop outlook, thousands of Manitoba farmers visited the Brandon Fair. Unfortunately for the management, a half-grown cyclone struck the Brandon district on the second evening of the show, and after a terrific wind had driven the side-show orators from their tottering rostrums a drenching rain furnished the finishing touches which made the Mid-way look like a section of "No man's Land." During Thursday the rain came down steadily, soaking the grounds to such an extent that the judging of live stock had to be completed in cramped quarters found in the various barns. However, the rain was warmly welcomed by the farmers.

The Brandon show was always marked by a substantial live-stock exhibit, and this year was no exception. The Clydesdale exhibit was above average with some exceptionally good classes; Andrew Dollar, High River, Alta., placed the awards. In the aged-stallion class, Thorburn and Riddle, De Winton, Alta., moved to the top of the line with Scotland's Splendor, and later won with him the grand champion ribbon. Brookside Mohamet, shown by George Stutt, Brookside, Sask., and Proud Hugo, exhibited by Hugh McLean, Arcola, Sask., won the three-year-old and two-year-old classes, respectively. In the yearling stallion class seven good colts were forward; Caradoc Magic, shown by Swanton Haggerty, Belle Plain, Sask., went to the top. Strong classes were forward in the female section. Lady Ruby Rose, from Thorburn and Riddle's stables, won the aged-mare class, while Nell of Aikton, her stablemate, topped a strong aggregation of yield mares. Maggie Fleming was second in this class, and Harviestoun Nell third. Eleven three-year-olds were topped by Deanston Ina, which later won the Canadian-bred championship and the reserve grand championship. The grand champion mare of all was Nell of Aikton.

**Beef Cattle.**

Representatives from the herds of John Barron, Carberry, Man.; Geo. Allison, Burbank, Man.; J. J. Elliott, Guelph, Ont.; R. A. Wright, Drinkwater, Sask.; and J. Bousfield, McGregor, Man., made up the Shorthorn exhibit, which was judged by Jos. Barnett, of Regina. Elliott's Newton Loyalist won the aged-bull class and the grand championship. Augusta Star, shown by Barron, stood second, third place going to Fancy Lord, the entry brought forward by Allison. Challenger, also from the Guelph herd, won the honors in the yearling bull class, where Barron's Morning Star was second. Barron won first place in the classes for senior and junior calves with Star of Hope and Conqueror, respectively. The reserve champion bull was Star of Hope.

In the aged-cow class, Barron's two well-known cows, Fairview Baroness Queen and Fairview Jubilee Queen, took second and third places respectively, being defeated by Elliott's Roan Lady. Bousfield was fourth and fifth with Beauty and Roan Lass 2nd. Elliott's Rosa Hope 21st won the two-year-heifer class and the grand championship. Barron's senior heifer calf, Lavender 47th, was made reserve champion. The winning junior heifer calf was Brawith Rose, shown by Elliott.

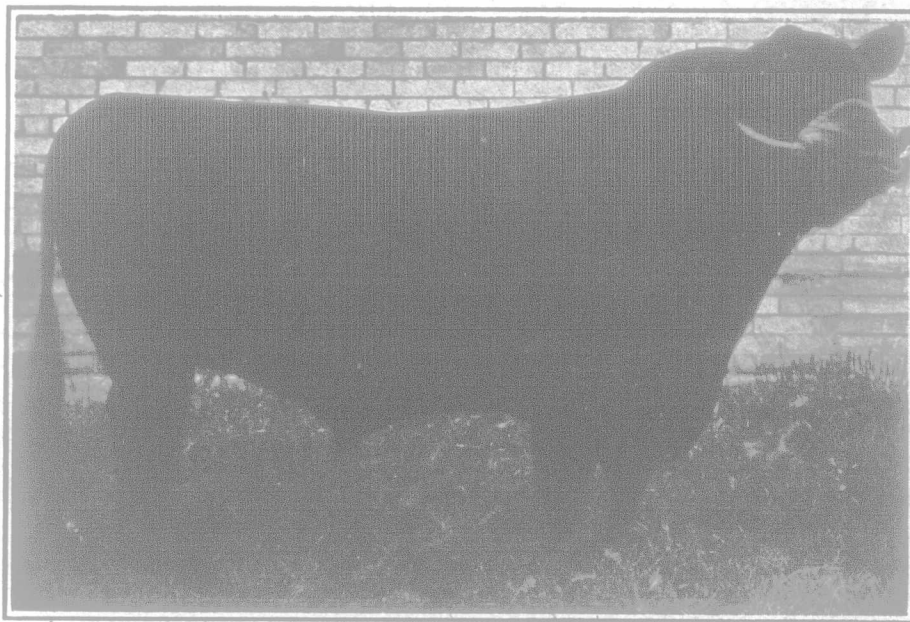
Herefords were out in strength, and the herds of the Curtice Cattle Company, Calgary; L. O. Clifford, Oshawa; J. A. Chapman, Hayfield; C. J. Field, Moosomin; and Jas. Moffatt, Carroll, contributed some strong classes which gave rise to much ring-side speculation. Beau Perfection 48th, the famous aged bull heading the Curtice herd, won his class and the grand championship. Moffatt's bull, Byron Fairfax, stood second. In the junior yearlings, Moffatt won first honors with Don Fairfax. In senior calves, George Fuller, Midnapore, Alta., won easily with Britisher Fairfax, while honors in the junior-calf class went to Beau Donald, from the Curtice herd. In the cow class, Clifford won with his well-known show cow, Miss

Armour Fairfax, but Moffatt and Chapman followed him closely with Alto Belle, and Beau Fairy, respectively. Moffatt won the two-year-heifer class with Dorothy Columbus, while Clifford was first and third in senior yearlings with Perfection Lass 5th, and Della. Rosetta Princess won the junior yearling heifer class for Moffatt, but Clifford won both calf classes; the senior with Miss Brae Real 14th, and the junior with Lady Armour Fairfax.

The Brandon Fair had one of the best Aberdeen-Angus displays in its history. The competing herds were those of J. D. McGregor, Brandon; Jas. Bowman, Guelph; Jas. Turner, Carroll; and A. C. Woods, Warman. Bowman won the premier honors in a great line-up of aged bulls with Young Leroy, which later annexed the senior championship. In the two-year-olds, McGregor won first place with Pathfinder of Gwen 2nd. McGregor likewise stood first in the senior yearling class with Black Cap McGregor, which acquired the grand championship of the breed. Woods won the first ribbon in the junior yearling class with Muskogee 29th, the remainder of the firsts in the bull classes going to McGregor. A wonderful string of females came before the judge. Bowman won first and second ribbons in the cow-without-calf class on Elm Park Rosebud 20th and Elm Park Beauty 9th, respectively. McGregor's great cow, Majesty Queen, was an easy first in the class for cow with calf at foot, and the same exhibitor won the two-year-old class with Prie of Glencarnock 3rd. The senior bull championship went to Bowman on Young Leroy, and reserve to McGregor on Pathfinder of Gwen 2nd. The junior championship went to McGregor on Black Cap McGregor, and reserve to Woods on Muskogee 29th. The grand champion bull was Black Cap McGregor, and the reserve Young Leroy. Pride of Glencarnock 3rd won the female senior championship, with Majesty Queen in Reserve. The junior female championship went to Muskogee Heather Girl, Woods' senior yearling heifer, and the reserve to McGregor on Glencarnock Pretty Rose. The grand champion female was Pride of Glencarnock 3rd, and the reserve, Muskogee Heather Girl.

**Dairy Cattle.**

Brandon has seldom had a better Holstein exhibit. Geo. Bevington, Winterburn, Alta.; Clarke & Sims, Argyle, Man., and the Glenlea Stock Farm, Winnipeg, contested the honors. The great show bull Colony Major Posch Tensen, shown by Bevington, won the aged class, and he was made senior and grand champion. Considerable interest centred round the year-old class of bulls, which brought out five good ones.



**Young Leroy.**

Senior and grand champion Aberdeen-Angus bull at Regina. Owned by Jas. Bowman, Guelph, Ont.

Bevington finally went ahead with North View Sir Pietertje. This strong young bull beat Segis Pontiac Alcartra Echo, a high-priced youngster recently purchased by the Glenlea Stock Farm. Bevington won every championship in bulls; North View Sir Pietertje winning the junior championship and Frank Faforit the reserve senior championship.

Some grand females lined up, and Clark & Sims won the cow class with their grand old cow Ruby Nig. She showed in great bloom and carried a wonderful udder. Island Bell Rooker, a beautiful three-year-old cow with great size, quality, and mammary development, won the senior and grand championship for Clark & Sims.

Rowland Ness, De Winton, Alta., brought his well known herd to Brandon to compete in the Ayrshire contest. Burnside Masterman, his herd header, won the grand championship, and all other championships went to the Alberta herd. Mr. Ness had his herd in good condition, and his young stuff makes a most creditable showing this year. A. D. McDonald & Son, Napinka, had a few head out, and they succeeded in winning second in the senior bull calf class and fourth in the cow class. Ness had some beautiful females out, and the grand champion female, Burrow Moss Lady Primrose 2nd, is one of the sweetest Ayrshires seen for some time.

**Notes on the Sheep Exhibit.**

In spite of the scarcity of labor, Manitoba breeders were forward with some excellent classes of well-fitted

sheep. In Leicesters, Geo. E. V. Smith, Crystal City; Thos. Zachary, Austin, Man., and C. Oakes, were the competitors for the honors, and they put up some good classes.

W. L. Trann, Crystal City; F. T. Skinner, Indian Head, and Archie McEwen, Brantford, Ont., put up a fine display of Shropshires. Skinner won the two shear and over ram class, with McEwen running him closely. This class was an excellent one, and the winning ram is an outstanding representative of the breed. McEwen won the majority of the firsts in rams, but Trann ran him a fast race in ewes; winning first in the two-shear-and-over class with a grand ewe. The prizes were unusually evenly distributed among the three exhibitors. Skinner won the ram championship and the reserve went to McEwen, while Trann won the ewe championship and Skinner won the reserve ribbon.

The Oxford pens were full of fine sheep. Indeed, a better showing of Oxfords has seldom been seen in the West. E. Barbour & Sons, Hillsburg, Ont., were out with some grand stuff, and these exhibitors won no less than five firsts, the championship and reserve for rams, and the reserve championship for ewes. H. S. Currie, Castor, Alta., won the ewe championship, and Peter Arkell & Sons, Teeswater, Ont., and Jos. Cockriell, Holmfild, Man., shared the bulk of the lower honors.

J. D. McGregor, Brandon, and Jas. Bowman, Guelph, were the only exhibitors of Suffolks. Their sheep were well fitted, but Bowman's had a trifle more size and breed character, and the Eastern breeder captured all firsts except one, and both the ram and ewe championships.

Peter Arkell & Sons and F. T. Skinner were the only exhibitors of Southdowns. Arkell had a strong flock out, but the Saskatchewan breeder shared the firsts with him, winning the bulk of the honors in ewes. Both championships went to Arkell, and both reserves to Skinner.

Only a few Hampshires were shown, and no Western breeders were represented. Archie McEwen, Brantford, and Peter Arkell & Sons, were the exhibitors. McEwen took everything except the two-shear-ram class, which went to his competitor on a handsome big ram of great character and smoothness. This ram won the championship.

**Excellent Fair at Regina.**

The weather was favorable to the Fair at Regina and a large attendance was enjoyed. Fresh competition entered into the live-stock contest and made matters more interesting.

In Clydesdales, Scotland's Splendor was again the grand champion stallion, while Nell of Aikton won similar honors among the females. The beef cattle classes were not much different from those at Brandon. Newton Loyalist again won the grand championship in Shorthorns, and Rose Hope 21st, the female championship. Beau Perfection 48th was again the champion Hereford bull. L. O. Clifford, of Oshawa, won all the female championships. In Aberdeen-Angus, Jas. Bowman, Guelph, had the senior and grand champion bull in Young Leroy, while E. Woods, of Warman, had the senior and grand champion female in Middlebrook Pride 9th. Rowland Ness, De Winton, Alta., won practically everything in Ayrshires, but the judge, Prof. H. Barton, put his senior

calf, Lakeview Lochinvar, over his aged bull, Burnside Masterman, for grand championship. Clark and Sims, Argyle, Man., and Geo. Bevington, Winterburn, Alta., were the chief Holstein exhibitors.

**The Fly Trouble is General.**

In reply to a communication regarding the prevalence of the warble or heel fly in the State of Iowa and as to the methods of control, the following letter was received from Dr. W. A. Dimock, of the Veterinary Medicine Division of Iowa State College. The methods of control practiced are similar to those outlined in previous issues of "The Farmer's Advocate," and the Doctor emphasizes the fact that spraying the stock undoubtedly brings relief.

"The warble or heel fly of cattle is more or less serious to herds of cattle throughout the State of Iowa. It is, no doubt, true of this parasite, as well as many others, that it is far more prevalent and serious one year than another. Just what the factors are that bring this about I am unable to say, except that in the case of beef cattle, if a large number of cattle harboring the grub are sold during the winter and early spring before the grub leaves the host it would tend to remove them from the premises, and prevent the development of the fly, while cattle affected with the grub kept on the premises until

the grub is mature and expelled would naturally furnish a large number of flies to operate during that season.

"Methods for controlling this pest are difficult to carry out, and must be extended over a number of years if appreciable results are to be obtained. The habits of the mature fly are such as to make it practically impossible to trap or otherwise destroy this insect. In the case of cattle that are kept in the stable some portion of the day or night, especially dairy cattle, and that are sprayed with some preparation to keep the common stable flies and horn flies from annoying them will tend to prevent the warble fly from attacking the animal and depositing eggs. This was beautifully demonstrated on a farm in central Iowa where a man had two milch cows that were brought to the stable each night. These animals were sprayed night and morning with a fly mixture, but were kept in the field with other cattle during the day. The following spring all the other cattle were more or less severely infected with grubs, while the milch cows which had been brought to the stable daily and sprayed night and morning were entirely free. Since these two animals were under exactly the same conditions as other members of the herd, with the exception of being brought to the stable to be milked, and the spraying, would indicate that the ordinary preparation used to prevent flies from attacking cattle would also help to keep away the warble fly.

"Where animals are badly infested with the warble but are sold to be slaughtered during the winter and early spring the grub is no doubt destroyed. In the case of dairy cattle or beef cattle kept on the premises the grub should be removed where possible from its larval habitat and destroyed during the early spring, that is before they would naturally leave of their own accord and undergo development. Various methods have been recommended; one is to insert a sharp-pointed instrument and kill the grub, this, I believe is not advisable since the dead grub would be liable to cause more or less local injury and possibly the area become infected with micro-organisms. My suggestion is that in all animals, where possible, and in many instances it would be advisable to make it possible to remove the grubs by the use of pinchers or by the hand and to destroy the grubs as they are removed. I have known of many cases where the owner or attendant would expel the grub and then fail to destroy them. This emphasizes the necessity of the stockman being informed regarding the life cycle of this parasite and pest."

## THE FARM.

### Fall Cultivation.

It is but a short time since preparation was being made for the spring crops, but already numerous fields are cleared of grain and attention must soon be turned to preparation for the 1919 crop. It has been proven beyond a doubt that on the average Ontario soil fall plowing gives a much better yield of cereal crops than does spring plowing, and it permits seeding to be done at the earliest possible date. A few years ago when labor was more plentiful than it is at present, the stubble fields that were not seeded were gang-plowed as soon as the crop was removed and then plowed deeper before the winter closed in. Later the disk or the cultivator took the place of the gang-plow, with a saving of time but yet with good results, as the surface soil was loosened thus preventing undue loss of moisture but yet starting the foul weed seeds to germinate. This practice tended towards cleaner farms than does the system of plowing but once. We believe it to be good practice to give after-harvest cultivation when possible, not only because it will mean cleaner farms but it will also tend towards larger crops. On many farms practically every grain field is seeded, down, thus necessitating the breaking up of sod for the following year's crop. Many leave the plowing of the sod until the last thing in the fall. However, if time will permit, some of the sod fields might be turned over at this season and then given surface cultivation occasionally during the remainder of the fall. This practice tends to rot the sod and less grass will appear the next spring.

It is a debatable point as to whether or not the corn and root land need be plowed after the crop is harvested. It depends a good deal on the nature of the soil. If the weeds have been kept under control and the soil is of a loamy nature, fall plowing is not always necessary. The corn stalks can be pretty well destroyed by dragging a

heavy stick of timber over the field before the frost comes out in the spring, and a good seed bed can be made by double disking and giving a stroke of the harrows. However, if the land is at all dirty and the soil of a clay nature, fall plowing is advisable. If time does not permit of doing all the plowing one would like to in the fall, let the field to be left over be the one intended for corn. Spring plowing of sod for corn usually gives very good results. One trouble with much of our land is that we have not time to give it sufficient cultivation to control weeds, conserve moisture, and aid in the liberation of plant food.

### Agents and Other Things.

EDITOR "THE FARMER'S ADVOCATE":

I wonder, now when we are being asked to conserve everything and we have got so used to reading advice on the subject that, when we pick up a paper or magazine and we do not see anything about conservation we hardly think we have gotten our money's worth—though I might just remark right here that I do not think the papers as a rule are overdoing the matter one bit, because the public must always learn "Precept upon precept, line upon line, here a little, there a little", so I hope the papers will keep it up; for they are the great formers of public opinion. It will be a good day for the world when more editors realize this. There are a noble few now who do.

However, to get back to what I started to say. It was this—Could not some man power be conserved (for more important work) by the elimination of agents. Time was, I suppose, when they were a needed class; but doesn't it look reasonable to suppose that that time is past? I have been observing the matter for a good many years and when I think of the unnecessary ducats paid out by farmers for needed farm implements it strikes me that the time has come for somebody to say something. I have no particular aversion to any agent as an individual, it is only that I think they are too costly a play toy.

There is an article advertised in "The Farmer's Advocate" that I had to buy not long ago. It is an expensive implement, but a very convenient one, so I wrote for a catalogue, prices, etc. They sent prices promptly and by return mail I sent my order. Understand I sent to the factory for the article which was shipped direct to me; but did I get it any cheaper than though two or more men in between had made a modicum of their living out of it? Not one cent. Why? Because, forsooth, the firm could not undersell their agents. I did not know at the time I ordered that they had any agent in this county. They have, as I found out later; but he does not live near me. Had there not been any agents in the case I have no doubt I could have saved at least twenty-five dollars on that purchase to apply to some other work-saver. When "the sky is the limit" for machinery now, a humble person like myself cannot see why one can't send straight to the factory and thereby save agents' wages. In years gone by farmers were not a reading people. They did not take papers and magazines specializing their profession, and one reason was that a number of them did not look on farming as being a profession. "Anybody could farm" if they had the required muscle. The "brainless" boys of the family were helped to "something better"; but that sort of talk and thought has died out and farming has at last attained to the dignity to which it is entitled. Farmers are now a reading class. They take plenty of papers. They read advertisements and know the most up-to-date ways—or are learning them—of doing things. They do not need anybody talking to them and telling them just what new machine they need. They know what they need, and lots of advertizers are helping them to the knowledge, and they will get the things just as soon as they think they can afford them. I sometimes think an agent's chief business is to make people buy things they cannot afford. Manufacturers might find a slight decrease in sales for a short time, if they did not employ agents, but the decrease would be only slight and for a short time only. As soon as folks woke up to the fact that they could get such a decrease in price as the non-employment of middlemen would cause, advantage of the improved state of things would soon be taken.

After many years and much tribulation the farmer is coming into his own; but prosperity has its perils and we will hope that his hitherto steadiness of head

will not forsake him, now that he is taking his place in the world's affairs, a place he should have occupied long ago.

Cumberland Co., N. S.

"CANADIAN."

### Peace With Honor.

EDITOR "THE FARMER'S ADVOCATE":

We have lived to see the whole world upset, countries devastated, families torn apart, the population of entire countries starving, and the balance of the human race on short or unaccustomed rations because of war.

At the present time all we have to think about is how to win success for the cause which we have made our own, we have no time to think just now about what led up to the war or just who was the man or what was the clique who started it. Our duty is plain to provide the men and provisions the authorities demand as they are required. It is a time to work and not to argue. Sometimes demands made upon us may seem to conflict to be muddled, and uncertain. Possibly we have not understood them aright, the fault may be with us, and before we indulge in unwise talk and still more unwise "letting up" on the work we are at, we should make sure of our ground. It is a time to keep a firm grip of ourselves, and especially of our tongues. The world is going through a chastisement such as never was known before. Some people think that the war is a visitation of God because humanity had been worshipping at the shrine of wealth, and ease, and had sought pleasure rather than duty, and that success, and peace will come to those nations first which learn the lesson it is intended to teach. There is much to be said in favor of the latter clause at any rate. Even though we gained the war from a military standpoint it would be a sorry defeat if the strenuous time of sacrifice had taught us nothing. Do we look on the war, and these times through which we are passing as an interpretation of the messages of a new and better personal and national life, or do we look on it as merely an obstacle to our return to such comforts, and indulgences as we were accustomed to consider the best that life afforded before the war? Some day the war will be ended, shall we be ready, or will our lesson be only half learned? There will be one point on which all nations will certainly be in agreement, and that is that they will want no more war. War is upsetting and comfort destroying whether it be fought with military machinery on blood-soaked fields, or waged by abusive words, and misunderstanding paraded in the press and in gatherings which take place in a peace loving country like Canada. The war in Europe is not the only war. There has been one going on in Canada for some time, and the forces employed have been struggling, together creating much discomfort to neutrals, and bringing distress in many cases upon themselves. Surely if the great war is to teach us anything it should teach us to stop and reflect on our dealings with our fellowmen right here at home. Why should it be necessary for farmers, manufacturers, the labor men, the transportation men, the postmen, the bankers and the government to be in any sense hostile to each other. The whole life and well being of the country depends on team work in which every man does his fair share, and gets credit for it. Canada cannot be run satisfactorily in the interest of agriculture alone any more than it can be run satisfactorily for labor or finance or manufacturing. The time has come for the different elements to consolidate. There is a plane of justice on which every honest workman can meet whether he works with his hands or with his head. The Dominion of Canada should be that plane, and whether we be farmers or manufacturers, or what not we should abolish self-seeking cliques, and be ready to meet in a committee of the whole, ready to understand the other man's difficulties, and to try to be of service to him in straightening them out knowing that if we do our duty by him, he will see to it that our difficulties will be attended to in return. We must have confidence in each other, and place the ultimate good of the Dominion above our own aspirations for power, and recognition. It is only by working together in this way that the best elements in each of the departments of our country's life will be able to produce a system of national economy which will prevent disturbances, strikes, and disagreements, and which will pave the way for Canada to fully realize what it means to have Peace with Honor.

Huron Co., Ont.

DERMOT McEVoy.

## Automobiles, Farm Machinery and Farm Motors.

### Climbing the Caledon "Mountain".

BY PROF. W. H. DAY, O. A. C. GUELPH.

#### Changing Gears.

"One of our subscribers has written in asking why the grade on the Caledon road near the mountain is so hard to climb. We understand that practically everyone has to go on 'low' up this grade, which under ordinary conditions, should be made on 'high'. Can you explain?" So writes the Editor of The Farmer's Advocate. The explanation is very simple. From the valley to the top of the "mountain" is a mile and a half or possibly two miles, up grade all the way, one ridge after another, each succeeding rise being a little steeper than the one before it. In beginning the ascent the car does not feel it and the operator speeds along at a good rate, priding himself on "the way she climbs", with the result that the engine is working at high load all the time. Under these circumstances it becomes

hotter and hotter and by the time the last ridge before the "mountain" is reached, i.e., the ridge just above the turn to the Caledon Club, the engine begins to slow down—simply and solely because it is too hot. In many cases it is necessary to go on intermediate or possibly low to make that ridge—and then there is still the mountain to climb, and sometimes cars have difficulty in making the mountain even on low. The writer has been through it with different cars, and obtains best results by taking the earlier part of the ascent rather slowly, thus keeping the engine as cool as possible for the steeper part near the top.

Last summer while doing some work in this locality I had occasion to pass up this road twice in the same day. The first time it was a through trip from Brampton to Caledon going at a good rate of speed. Although the ridge referred to was quite a trial yet the car made it on high, but for the mountain itself intermediate gear was necessary. After a short stay at Caledon I dropped

back to the foot of the ridge near the Caledon Club corner for several hours. Then with the engine cool the car took the ridge with perfect ease on high and likewise took the mountain on high. The owner of the red brick house on the west side of the road just above the Caledon Club corner related this incident to me: A motorist came to him one day to hire a team to tow his car up to the top of the mountain, as there was "something wrong with it." "There's nothing wrong with your car", said the farmer, "except that it is too hot. Let it cool off and it will be all right." He did so, and the car went up quite easily.

Some have ascribed these troubles to some peculiar effect of atmospheric pressure on the carbureter, but after giving the matter considerable attention I am satisfied that the chief cause is that given above.

It is probable, however, that in many cases there is a secondary cause contributing to the result, viz., the failure to adjust the spark lever correctly. When

beginning to climb the grade the spark should be retarded slightly—*slightly*, mark the word. For every condition of speed and fuel mixture there is an exact point at which the spark lever should be. Even half an inch either way from this point often causes one to miss a grade on high which the car would take with ease if the spark were exactly right. It is surprising how long one may drive a car before realizing the full importance of changing the spark on grades. I know at least one motorist who drove a season and a half before acquiring the art of getting the spark just right. But when acquired, one can "feel" when it is right by the way the engine pulls.

**The Double Shuffle.**

While writing about climbing grades I should like to describe what is known as the "double shuffle" method of changing gear, as I have found it very much superior to the ordinary method when changing from high to intermediate, or from intermediate to low, especially on hills. When the operator declutches, and throws out the high gear intending to change to intermediate, the cogs of the gear wheel about to become the driver are travelling slower than those of the wheel about to become the driven. And since the driver is disconnected from the engine it is possible if the car is not going too fast, to throw these gears together so sharply that the cogs will be forced in mesh without much noise and then the operator re-clutches, puts on his gasoline, and proceeds on intermediate. However, one is not always so fortunate, especially if the car is travelling at a fair speed—as soon as he declutches the coming driver, being disconnected, loses speed rapidly, indeed may stop altogether, and if he tries to force the gears, raking ensues, and it is impossible to get them in mesh until the car is nearly stopped. With the speed so low the engine cannot "pick up" on intermediate and the operator has to drop to low, with the same danger ahead, and also the possibility of stalling the engine, and the car starting to back down the hill. Many accidents have occurred in just this way. Now the "double shuffle" avoids these difficulties and dangers. This method of changing from high to intermediate is as follows:

1. Declutch.
2. Disengage the high gear and hold the lever at neutral.
3. Re-clutch, thus connecting the driver to the engine.
4. *Speed up the engine* by accelerator until the cogs of the coming driver are travelling the same rate as those of the coming driven, one can "feel" when this is the case.
5. Then slip the two gears in mesh—no forcing needed, no noise occurring—and the car keeps right on moving at the same speed as before the change.

The great advantage of this method is that it is not necessary to let the speed drop low in order to make the change. It can be done with perfect ease with the car travelling anywhere from ten to fifteen miles an hour. It takes a little time to master the method, but once acquired it is as far ahead of the ordinary method as the foot feed of gasoline is ahead of the lever feed—indeed the difference is greater than that. I am informed that "at the Front" this method is used very extensively. It can be applied going down hill as well as up. The best place to learn it is on the level with nothing else requiring attention, and with the car travelling at slow speed.

**THE DAIRY.**

**Factors Detrimental to Milk and Cream.**

BY PROFESSOR R. W. BROWN, MANITOBA AGRICULTURAL COLLEGE.  
Part II.

Healthy cow's milk without subsequent contamination is perhaps the cleanest food imaginable. However, since we know that there is still much room for improvement in the quality of the average milk and cream as sold, it is necessary to study further the factors which cause deterioration. We should have a clear idea first, of the relative importance of the avenues through which the milk is contaminated. These have been written about time and time again, but we are finding that some factors which have been studied are more prolific sources of contamination than others, and that not enough importance has been attached to certain operations in the barn and dairy.

It is always desirable, especially from the standpoint of the health of the animals and attendants, to have an up-to-date, well-lighted, properly-ventilated and clean stable. Such a stable, however, is not essential to the production of sanitary milk if we exclude the extremely dirty one with filthy surroundings, as late studies have shown. Factors such as the stable air, as affected by feeding and other barn operations, and the clipping of cows' flanks and udders are now known to be less important in comparison to influences yet to be mentioned, than was thought formerly. Under average conditions, the main factors which add dirt and large numbers of bacteria to milk are: the body of the cow; the milker; and the utensils with which milk comes in contact. Clean cows are more important than clean barns, although the latter are desirable. A certain herdsman was timed unknown to himself, to find how long it took him to curry and brush his cows. The average time required for the operation was 30 seconds per cow. This covered the work on several hundred cows. These cows, of course, were well bedded and not allowed to lie in their droppings.

**Udders Should be Clean.**

The amount of dirt which falls into milk from cows' bodies is important. Eleven per cent. of dry manure is soluble in milk, while eighty-five per cent. of fresh cow manure is dissolved in milk. The Illinois Agricultural Experiment Station carried out some experiments to determine the amount of dirt that falls from the cow's udder and flanks during milking. Sixty trials were made at different seasons of the year. With udders that were apparently clean, it was found that an average of three and a half times as much dirt fell from the unwashed udders as from the same udders after they were washed. With soiled udders, the average was 22 times, and with muddy udders, the average was 94 times as much dirt from the unwashed udders as from the same udders after washing. The amount of dirt which falls into milk during the process of milking has been reduced from 97 to 50 per cent. by the use of small-top pails. The percentage reduction will depend upon the condition of the cows. The more dirty the cows, the greater will be the reduction. Some people object to the use of these small-top pails, claiming that it is difficult to get all of the milk into them, but we venture to say that they could direct a stream of milk from its source into a cat's eye.

Where the milking is done by hand many million bacteria may get into the milk from the milker's hands, especially if not washed before beginning, and where the work is done with wet hands. As many as 45,000,000 bacteria have been washed from the hands of a man doing ordinary work around the barn. The milker need not wear a white suit, but the suit in which he does the milking should be clean.

Present day results unmistakably point to the conclusion that the two greatest causes of spoiled milk and cream are slow and insufficient cooling and the use of dirty utensils.

The effect of temperature upon the growth of bacteria in milk during the first 24 hours of its life is plainly shown by the following table. The figures represent the number of bacteria in one cubic centimeter of milk:

	50 Degs. F.	55 Degs. F.	60 Degs. F.	68 Degs. F.	86 Degs. F.	94 Degs. F.
A.	4,500	18,800	180,000	450,000	1,400,000,000 turning	25,000,000,000
B.	48,000	187,000	900,000	4,000,000	14,400,000,000 sour	25,000,000,000 sour and curdled

It is not only important to cool milk and cream to a low temperature, but the cooling should be done as rapidly as possible (within one hour), immediately after milking or separating.

**Stirring Milk While Cooling vs. Not Stirring.**

This Can not stirred	Temp. Water 44° F. About 150 lbs. of Milk in each Can.	This Can stirred during the time of cooling
Degrees	Temp. of Milk	Degrees
95	At time of placing in water.....	95
86	10 minutes later.....	78
83	20 minutes later.....	71
78	30 minutes later.....	64
70	40 minutes later.....	58
66	1 hour later.....	54

cleansed, but left thirty hours with the lids on, if filled with milk would have added to the milk an average of 1,816 bacteria per cubic centimeter.

Fifty cans washed but not steamed, and held thirty hours uncovered and inverted on a rack, if filled with milk would have added to the milk an average of 27,164 bacteria per cubic centimeter. Ten cans similarly cleansed but held thirty hours with the lids on, if filled with milk would have added to the milk an average of 128,730 bacteria per cubic centimeter.

Ninety-one milk cans that had been washed, rinsed and steamed at the dairy and covered with their lids, examined as they were about to be used on several dairy farms, showed that had they been filled with milk they would have added to the milk an average of 23,523 bacteria per cubic centimeter. The treatment of these cans at the farm was not uniform, either as to their being kept covered, or as to the length of time elapsing before their use.

The foregoing plainly shows that even though cans are thoroughly washed and steamed, but not allowed to drain at the milk plant, or creamery, upon being returned to the farms and put into use without being again sterilized with steam or rinsed with boiling water, may be a prolific source of bacteria in the raw material.

Further, these studies showed that the more complex the apparatus, the greater the possibility of contamination, if particular attention is not given in the way of sterilization. As examples of the more complex utensils used in the production of milk and cream, may be cited the milking machine and the cream separator. It is obvious that many of the milking machine parts cannot be sterilized by the same method as can separator parts but since this question was discussed in a previous article, it will not be taken up here. A cream separator which is not washed and scalded thoroughly immediately after each separation, is bound to be an important source of trouble. Too often separator parts are washed in dirty dish water, and a dirty rag is used in the process. We might use the term cloth under other circumstances, but in this connection we believe in calling

ugly things by ugly names. Brushes only should be used for washing dirty utensils. The best way to sterilize separator parts is to immerse them in boiling water and leave for at least five minutes, then laid out to drain and dry, so that they do not touch one another. A cloth should never be used to wipe the parts dry.

To further emphasize methods by which some of the more important factors that ordinarily add bacteria to milk and cause deterioration may be largely eliminated, we wish to quote experiments lately conducted in the United States, which prove that milk of low bacterial count can be produced in practically any cow barn. Reduction of bacteria in milk does not depend on the kind of barn or expensive equipment, so much as on simple, inexpensive precautions. For the purpose of this experiment, four cows were put in an ordinary frame barn. An untrained worker was employed to milk and care for the animals. No extra attention was devoted to cleaning the barn. At the end of six months the barn was no cleaner than many commercial barns.

**Value of Small-top Pails.**

Without any changes in the barn management the specialists had two cows milked into small-top pails, and the two others were milked into ordinary open-top pails. The milk from the open-top pails averaged 497,653 bacteria. The milk from the small-top pails averaged 368,214 bacteria per cubic centimeter. The use of the small-top pail without any extra



**The Small-topped Milk Pail is Best.**

caution made a difference in the average count of 129,439 bacteria per cubic centimeter.

The pails and cans were sterilized with live steam, which can easily and cheaply be done with a simple steam sterilizer, which can be made at home or can be purchased complete for from \$10.00 to \$12.00. Other conditions remained as before. The milk from the sterilized small-top pails averaged only 17,027 bacteria, a reduction of 351,187 in favor of this simple sterilization. With the open pails, sterilization reduced the bacteria to 22,677—a decrease of 474,976 compared with milk from the unsterilized, open pails.

**What Sterilization Did.**

An examination of 170 freshly washed but unsteamed milk cans showed the presence of large numbers of bacteria. Had these freshly-washed cans been filled with sterile milk, the germ content of the milk would have averaged 128,592 bacteria per cubic centimeter.

Fifty cans washed, steamed, and left thirty hours uncovered and inverted on a rack, if filled with milk would have added to the milk an average of only eight bacteria per cubic centimeter. Fifty cans similarly

caution made a difference in the average count of 129,439 bacteria per cubic centimeter. The pails and cans were sterilized with live steam, which can easily and cheaply be done with a simple steam sterilizer, which can be made at home or can be purchased complete for from \$10.00 to \$12.00. Other conditions remained as before. The milk from the sterilized small-top pails averaged only 17,027 bacteria, a reduction of 351,187 in favor of this simple sterilization. With the open pails, sterilization reduced the bacteria to 22,677—a decrease of 474,976 compared with milk from the unsterilized, open pails.

In the third step of the experiment, the manure was removed from the barn twice instead of only once a week. The udders and teats of the cows were washed before each milking. Three reasonable measures of cleanliness reduced the count in milk drawn into the sterilized small-top pail to 2,886 bacteria, and in the sterilized, open-top pail to 6,166 per cubic centimeter.

Ordinary cleanliness, it can be seen, caused a reduction of over 10,000 bacteria per cubic centimeter.

To make it easier to keep the cow clean in the final stage of the experiment, the manure was removed daily, clean bedding was supplied and the cows were cleaned with a curry comb and brush. With these final precautions, the bacterial count in the small-top pails averaged the very low one of 2,154 per cubic centimeter, or 1,197,847 bacteria less than were found in a sample when the barn and cows were dirty and the utensils were not steamed.

### Veterinarians Hold Successful Clinic at Toronto.

The Ontario Veterinary Association held its annual convention at the Ontario Veterinary College, Toronto, last Wednesday and Thursday, in connection with which was conducted a very successful and instructive clinic. Dr. E. T. Hallman, of the Michigan Agricultural College, addressed the gathering on contagious abortion in cattle, and other causes of sterility. He also supplemented his address with a practical demonstration of how to examine animals for ailments and abnormal conditions which render them non-breeders. Several live-stock men in the vicinity of Toronto brought individuals from their herds and had them examined at the clinic by Dr. Hallman, who was able in each instance to diagnose the trouble and inform the owners as to the chances of restoring the diseased organs of the cattle to a normal condition through treatment. As an example of the value of such demonstrations and of what service they could be made to render the live-stock interests seven sterile cows examined and treated by Dr. Williams at the clinic held last year at the annual convention, five were later bred successfully and restored to their respective herds in a fertile condition. One breeder was able to get six cows in calf out of eight, which before treatment were sterile, by calling in a veterinarian to act in accordance with the instructions and advice given by Dr. Williams. Dr. Hallman is also a recognized authority along this particular line, and it seems too bad that more veterinarians do not attend these clinics and equip themselves with the knowledge and skill that will make them more valuable and successful in their professional work. One breeder who had brought an animal to the clinic was heard to remark: "There are three veterinarians in my district and not one of them is here." While the convention was quite largely attended it did appear as though the value and importance of these meetings is not sufficiently appreciated by the practicing veterinarians of the Province.

The second day the convention was given over entirely to the practical work in the operating-room at the College, where several operations were performed by skilled veterinary surgeons. During the convention addresses were delivered by Dr. Chas. Higgins, formerly of the Health of Animals Branch, as well as Dr. T. H. Richards and Dr. J. A. Allen, who are connected with the Dominion Department; the latter having on exhibition a very interesting display of specimens showing the nature of various diseases and their effects.

The officers of the Ontario Veterinary Association for the coming year are: President, C. S. Macdonald, Toronto; Vice-President, J. A. Campbell, Toronto; 2nd Vice-President, R. Engle, Kitchener; Secretary-Treasurer, C. F. Ottewill, Dept. of Public Health, Toronto.

#### Views Re Contagious Abortion.

During his address and later in an interview with a representative of this paper Dr. Hallman gave expression to some statements concerning contagious abortion that should be considered by all breeders. He emphasized sanitation and stated that the fundamental principles involved must be understood before successful treatment or control can be approached. It must be known how infection leaves a diseased cow, and how it gets into a healthy one.

Abortion bacilli (the disease germs) said Dr. Hallman are given off in discharges from the body and in milk. They gain entrance with feed and water through the external genital organs while the cow is not pregnant. The bull was also mentioned as a carrier of the disease. Especial emphasis was placed on good stable management, and it was considered by Dr. Hallman as one of the most important control factors. For equipment he recommended a pail and brush with which to disinfect the buttocks of the cows and belly of the bull. To disinfect the gutter, walls and parts of the stable he recommended a 30-gallon spraying outfit mounted on wheels.

Another point dwelt upon in a manner somewhat opposed to former teaching was that of disinfection. The speaker favored irrigation rather than disinfecting the internal parts of the female and sheath of the bull. In practice, Dr. Hallman said he frequently used a disinfecting agent in the uterus and cervix, but he always irrigated the vagina with a milder solution. He never recommended vaginal disinfection. The vagina is more sensitive than either the uterus or cervix, and a cow will strain considerably when a disinfectant is used in the outer channel. To irrigate the sheath of the bull 4 ounces of borax to one gallon of water was prescribed. For irrigating the vagina of the female he advised the use of the following solution: 1 ounce salt, 1½ ounces baking soda, 1 gallon water. Mechanical cleansing and not disinfection should be the rule concerning the treatment of the internal organs.

The speaker could see no good reason for allowing cows which have aborted to go several months before breeding again, and said they might just as well be bred as soon as the reproductive organs became normal. The time required for this will, of course, vary.

Concerning vaccines, etc., Dr. Hallman said: "In so far as the use of bacterines are concerned the available evidence does not warrant their use, but there is evidence that apparently good results have been obtained from the use of living cultures on non-pregnant animals. I consider both vaccines and bacterines still in the experimental stage, and while I do not wish to discourage their use I would not like to be the means of building up false hopes concerning these preparations."

The opinion was expressed that abortion remains more less indefinitely in a herd and will manifest itself in various ways, such as retained afterbirths, sterility, calf troubles, etc. However, the herd may acquire "tolerance," and with careful management calf rearing and milk production can still be profitably carried on.

It was felt that disease is most frequently introduced through the purchase of females and by breeding to a neighbor's bull. It would likewise be dangerous practice to allow neighbors to bring cows to the premises to be bred. By raising one's own breeding stock considerable danger would be eliminated, but the extensive breeder of pure-breds must deal more or less, said Dr. Hallman, so this advice will be limited to the farmer with commercial herds.

### Holstein-Friesians in July.

The official records for Holstein-Friesian cows for the month of July show that nineteen cows and heifers were received and accepted for entry in the Record of Merit. In the mature class, Jemima Johanna of Riverside leads a class of ten with a record of 30.14 lbs. of butter and 703.4 lbs. of milk in seven days. Only one entry occurs in the senior four-year-old class and in the senior two-year-old class. In the junior three-year old class, Katie Abbekerk Fayne leads with 20.47 lbs. butter and 407.1 lbs. milk. The junior two-year-olds are headed by Colony Vrouka Pride, milk 278.9 lbs., butter 12.67 lbs.

Sixteen cows and heifers qualified for admission to the Record of Performance during July. In the mature class, Mary Grey leads with 12,091 lbs. milk, 585 lbs. butter. The three-year-old class is headed by Madoline Dora De Kol, milk 15,063 lbs., butter 748.75 lbs. in 180 days. Highlawn Pontiac Sadie leads the two-year-old class with a milk production of 13,267 lbs., making 637.5 lbs. butter in 121 days.

## HORTICULTURE.



#### A New Type of Tractor for the Garden.

Don't let the weeds go to seed in the garden.

It is not too late to plant late carrots, beets or lettuce.

The quality of celery depends on how it is handled and blanched. Do not neglect it.

Tomatoes grown on stakes make quick growth and do well but they must be kept pruned.

Fertilize the asparagus bed if you have not already done so. The plants need the nourishment from now until fall.

A handful of nitrate of soda or some liquid cow manure will help the tomatoes wonderfully at this time. Do not let the nitrate of soda touch the leaves.

The British fruit crop is very poor this year. The apple crop in the important apple counties is practically a failure and the fruit crop for jam making will be about one quarter of that for last year.

Now is the time to remove the old canes from the raspberry patch. Do it as soon after the picking season is over as possible and avoid wintering over large numbers of insects which will give trouble next year.

Strawberry beds are rarely of much value after they have yielded two crops. They should be plowed up except in the case of a home garden, here if they have been kept clean another one or two crops may be secured by thinning out the plants severely and giving good cultivation as soon as possible.

#### A Tractor for the Gardener.

The season of 1917 saw the introduction by the Ontario Department of Agriculture of tractors for use on the farms of the Province, as a measure of assistance in bringing about increased production despite the

extreme shortage of labor. The farm tractor of from 8 to 25 horse-power is no longer a new thing on our farms, but a tractor small enough to be used with profit on the small acreage and in connection with the intensive culture of the vegetable gardener is a new thing to this province and for that matter to any part of Eastern Canada. That such a small tractor has been realized is proven by the accompanying photograph, taken by a representative of "The Farmer's Advocate" when on a recent visit to the Ontario Agricultural College, Guelph. This tractor has been purchased by the Ontario Department of Agriculture and will be used in different parts of the Province in order to demonstrate to the vegetable growers just what it will do under variable conditions so that each may decide whether or not such a tractor would prove a profitable investment under his conditions.

This miniature tractor is made to develop four-horse power and consumes two gallons of gasoline per 10 hours of work, according to the experience of those who were testing it out at the College. It can be attached to anything in the way of a garden implement which will allow the operator to get hold of the handles, where the controls are situated much as they are in the case of the motorcycle. The machine can be fitted up to do belt work and has two speeds, one of 850 revolutions per minute for ordinary work and another of 1,600 revolutions per minute. According to our informant, faster and steadier work can be done than with horses. It is made to cultivate from one to three rows of vegetables and can be attached to a single horse plow. As an indication of the amount of work it is possible to do in a given time we were informed that this machine cultivated three-quarters of an acre in one hour. It is made in the United States but enters Canada duty free and costs \$285 f. o. b. factory.

Enquiring as to the number of acres which would probably justify the purchase of a tractor of this type we were told that 20 or 25 acres would be necessary. Moreover, if a man with a smaller acreage were to invest in one of these machines he would find it necessary to purchase also, a three-row seed drill, an implement not in general use on small acreages. The tractor is provided with two sets of rims for the wheels, a wide set for plowing and heavy cultivating and a narrow set for lighter work where the surface of the ground is smooth. The illustration given here shows the tractor plowing in rather loose soil with the narrow rims. The work is not being done as satisfactorily as it might be because the narrow rims allow the machine to wobble too much in the soft soil; wider rims would obviate this difficulty and make steering easier.

#### Third Fruit Crop Report.

The third fruit crop report for the season of 1918 issued by the Fruit Commissioner's Branch, Department of Agriculture, Ottawa, July 31, shows a few changes which have taken place since the July report was issued. A heavy drop, accompanied by the serious development of scab, has taken place in the apple crop of Lambton and Norfolk Counties, Ontario. Apple scab has also developed in Nova Scotia and prospects for the apple crop in British Columbia have fallen off slightly. In the latter Province a crop of 85 to 95 per cent. of last year's is expected. In Nova Scotia much of the 400,000-barrel crop will be of low grade or unmerchantable, owing to damage by canker worm or scab. Winter varieties in New Brunswick are pretty much a failure but there is a medium crop of the important early varieties. Conditions have not improved in Quebec, winter varieties being generally light. The Canadian commercial apple crop will show a decrease of 45 per cent. in Nova Scotia and 15 per cent. in British Columbia, with an increase of 25 per cent. in Ontario; Baldwins and Spys being light everywhere in the latter Province. Spraying has not been general in Ontario and scab is quite prevalent. The United States crop shows an increase of 34 per cent. in barreled apples and a decrease of 20 per cent. in boxed apples, the whole showing an estimated increase over last year of about 3,400,000 barrels. Practically no change is reported in the peach situation, except that the quality is good and the crop practically a failure in Ontario outside of the Niagara Peninsula. Lombards and Reine Claude plums are exceptionally heavy with early and Japanese varieties light. The crop report is favorable from British Columbia. The pear crop in the latter Province will be 50 per cent. larger than last year, but in the Burlington and Niagara Districts the crop will not be more than 25 and 50 per cent. of a normal crop, respectively. Prospects are hardly as favorable for grapes as last month, and the crop is not expected to exceed 75 per cent. of normal. The English apple trade is very desirous of receiving Canadian fruit, and the Canadian buyers and growers are eager to secure the English market, but there is no hope of the removal or modification of the apple embargo to Great Britain because of the lack of available steamship space.

#### The Fall Web Worm.

During this month and the month of September, large webs, sometimes as much as a yard long, may be seen on trees in the orchards and on forest and shade trees as well. Because of the fact that they are very conspicuous, they may cause considerable consternation in the mind of the fruit grower, who is not able to identify them. These webs, or worm nests, are made by the Fall Web Worm and can be distinguished from the nest of the Tent Caterpillar by the fact that the latter are made earlier in the season and are smaller. The larvae of the fall web worm are grayish-brown caterpillars

tractor of from  
ew thing on our  
o be used with  
nection with the  
er is a new thing  
to any part of  
tractor has been  
ing photograph,  
mer's Advocate"  
ario Agricultural  
en purchased by  
and will be used  
r to demonstrate  
t will do under  
decide whether  
profitable invest-

o develop four-  
s of gasoline per  
erience of those  
It can be at-  
arden implement  
of the handles,  
they are in the  
can be fitted  
eds, one of 850  
ork and another  
ording to our in-  
n be done than  
om one to three  
to a single horse  
nt of work it is  
ormed that this  
an acre in one  
ates but enters  
actory.  
es which would  
tor of this type  
ld be necessary.  
crease were to  
ld find it neces-  
drill, an imple-  
es. The tractor  
e wheels, a wide  
nd a narrow set  
f the ground is  
ows the tractor  
row rims. The  
y as it might be  
chine to wobble  
uld obviate this

port.

season of 1918  
ch, Department  
a few changes  
port was issued.  
us development  
op of Lambton  
scab has also  
s for the apple  
ff slightly. In  
er cent. of last  
of the 400,000-  
antable, owing  
inter varieties  
ure but there is  
varieties. Con-  
winter varieties  
n commercial  
er cent. in Nova  
mbia, with an  
lwins and Spys  
ovince. Spray-  
scab is quite  
ws an increase  
decrease of 20  
owing an esti-  
400,000 barrels.  
each situation,  
rop practically  
ara Peninsula.  
e exceptionally  
es light. The  
olumbia. The  
e 50 per cent.  
on and Niagara  
25 and 50 per  
Prospects are  
month, and the  
ent. of normal  
us of receiving  
s and growers  
ut there is no  
the apple em-  
ck of available

m.

of September,  
long, may be  
rest and shade  
they are very  
consternation  
ble to identify  
made by the  
from the nest  
the latter are  
r. The larvæ  
n caterpillars

About one inch long when full grown, and are thinly covered with long hair in the form of tufts; the adult is a pretty little white moth, about one inch from tip to top of the wings. There is only one generation each year of this orchard pest, the winter being passed in the pupal stage, either in the ground or under rubbish. Toward the end of June the pupæ develop into moths and these lay their eggs in dense clusters on the leaves. Upon hatching from the eggs, the larvæ all feed together, removing the chlorophyll or green substance from the leaves and leaving only a network of veins. As they work they cover themselves with a web which is extended as they feed. They continue to feed under cover of the web until nearly full grown, when they separate and look for a place to pupate.

Natural enemies are very effective in the control of the fall web worm, but it is necessary to examine the trees from time to time and whenever an infested branch is seen it should be cut off and the caterpillars destroyed, either by burning the branch or trampling it under foot. It can be easily seen that these branches should be removed while the webs are small, so as to avoid having to cut off large branches. Spraying is not necessary.

Caution in Seed Growing.

EDITOR "THE FARMER'S ADVOCATE":

In the issue of "The Farmer's Advocate" for July 4, I noticed an article on "Home Grown Seeds", the writer of which poured a generous quantity of mildly sarcastic criticism upon sundry writers on agricultural subjects who were cautioning war garden enthusiasts regarding difficulties that might be encountered in saving home-grown seed. Many of the so-called agricultural writers glean their ideas from books and their experience from conversation and are, therefore, incapable of giving a balanced and practical summary of the relative advantages and disadvantages of growing one's own seed. But all agricultural writers are not of this ilk, even the majority are not. However, lack of balance is equally evident and is probably due to a lack of practical experience over a sufficiently broad field, when the matter of seed production is claimed to be merely a matter of successfully maturing some seed. The test of successful seed production is the quality of the crop this seed produces.

*Festina lente* (Hasten Slowly). Nowhere does this motto hold more truly. It is easy to grow seed when one happens to be the only one in the immediate vicinity engaged in this fascinating hobby. It becomes considerably more difficult when a few others take it up, but when all those who have gardens undertake to grow their own seeds, and grow varieties that appeal to their personal whims and fancies and, at the same time, ignorant of the great laws governing sex reproduction (for plants possess male and female sex as truly as do the animals, though many so-called educated people do not even know this elemental law of the living world around them) in a short time such a confusion of undesirable types would result that many a gardener would have ample reason to feel discouraged with his efforts and cease growing some of our best garden crops. Such chaos, however, would not be the case with all crops, for some are improved by inbreeding and inbreed themselves under natural conditions. Seed selected from choice plants of such crops would produce very encouraging results in improvement. As examples of these crops may be mentioned peas, beans and, generally speaking, tomatoes.

If one happens to be growing only one variety of each crop and one's neighbors are growing seed of the same variety, then seed may be satisfactorily saved from such crops as sweet corn, spinach, lettuce, radish and other annuals, or even biennial seed producers, such as carrot, beet and parsnip. But when one's neighbors also determine to save seed and prefer other varieties, some means must be taken to keep the seed pure. Seed may be successfully produced where an agreement is come to, that one variety only of each crop shall be permitted to mature for seed.

A little study of both physiological and systematic botany will be found to contain many pertinent problems, and will open up fields of thought that have proved capable of producing grey hairs on many wiser heads than ours.

"AGARICUS"

POULTRY.

"A hen per acre" is a good guide.

How about the old rooster? Lock him up or kill him.

The greatest returns from money invested in poultry have always been obtained from the well cared for farm flock.

Broody hens after the hatching season is over is not good business. Break them up and they should begin to lay in about two weeks.

Some serious effort should be made to investigate thoroughly the loss which occurs from the time eggs are laid until they reach the consumer.

It is estimated that the value of eggs marketed co-operatively in Canada in 1917 was close to three-quarters of a million dollars. There is still room for a big development of this idea.

Any members of the flock which are becoming light in color about the head or that mope around and show

lameness or diarrhoea should be removed from the flock. They are probably suffering from tuberculosis. Hold a post-mortem examination of one and see.

In Prince Edward Island more than 4,000 farmers are federated in one central body for co-operative egg marketing. Prince Edward Island eggs are now the best eggs obtainable in car lots in the Dominion, according to the Poultry Division of the Live Stock Branch, Ottawa. A few years ago Prince Edward Island eggs were the poorest in the Dominion.

Capons and Caponizing.

The rearing of capons from the surplus male stock from each year's breeding operations is very largely confined to those who specialize in poultry meat production. Few capons are marketed from farm flocks and, especially at this time, it is probably just as well in the majority of cases. There are, however, certain advantages to be derived from caponizing and for those who have continued during the last few years, with the continued rise in costs which has accompanied the progress of the war, to market fowls at the larger and heavier weights, these advantages should not be lost sight of.

A capon is a male bird from which the reproductive organs have been removed and corresponds in point of utility to the steer among cattle, large numbers of which are fed annually because of their well known capacity for rapid gains and splendid quality of meat. As in the case of cattle, the castration or caponizing of the cockerel at an age of, say, ten weeks, entirely changes the appearance and physical make-up of the bird. Masculinity gives way to complete docility, sexual activities are replaced by large increases in weight, while the meat of the bird is characterized by a higher and more delicious flavor and increased quality in all respects. The chief advantage in rearing capons is derived from the fact that they can be economically fed to greater market weights than cockerels and, also because the meat is of a better quality it commands a higher price per pound, particularly if the birds are marketed in the holiday season when the needs or desires of the epicure or the lover of fresh poultry need most to be met. It has been stated that "during the same period of growth, it is possible to produce capons which will weigh one-half more than they would normally weigh," but it is probable that this statement deserves some modification. No doubt it is true during the latter part of the feeding period of capons, but certain experiments at least have shown that for possibly the first six months or until a weight of about six pounds is reached, cockerels will gain equally as fast as capons and may possibly exceed them. Naturally, however, from this time on the capon should be able to make the greatest gains since he is much less active and, therefore, uses much less of the food consumed for energy purposes.

The following table of costs will serve to give some idea of the cost of rearing capons and may also possess sufficient accuracy to point out the decreasing profit attendant upon the rise in feed prices.

Gross Costs of Raising Capons.

Item	End of 10 weeks		End of 24 weeks		End of 41 weeks		Aggregate	
	1916	1917	1916	1917	1916	1917	1916	1917
Number capons							38	39
Pounds weight (gross)	76.7	81.7	221.7	246.7	327.3	328.0		
Pounds gain (gross)			145.0	165.0	105.0	114.2		
Total cost of period (gross)	\$10.27	\$13.89	\$17.54	\$26.07	\$27.15	\$41.63	\$54.97	\$81.59
Cost per pound					\$ 0.257	\$ 0.36	\$ 0.168	\$ 0.248
Weight per bird	2.01	2.05			9.918	9.37		
Cost of feed per bird							\$ 1.66	\$ 2.32
Cost of caponizing							\$ 0.04	\$ 0.04
Income per bird							2.47	2.62
Price per pound							0.25	0.28

The figures given above were secured from experiments conducted during 1916 and 1917 at the Indiana Agricultural Experiment Station, with White Plymouth Rocks, and show very plainly that although a higher selling price was secured in 1917 than in 1916 the net profit was greatest in 1916 because of lower feed costs. Some of the birds in the Indiana experiments were sold as broilers and others as roasters, both classes of market fowl returning better profits than the capons. This merely emphasizes what has been said previously in these columns relative to the decreasing profit in market poultry since prices have begun to soar. Doubtless, conditions in Eastern Canada would be found much the same as those in Indiana so far as relative profits are concerned, could similar figures be obtained.

The months of June, July, August and September are best for caponizing. Spring-hatched chickens then weigh about a pound and a half, or two pounds and can be grown ready for the market during December to March when roasters are scarce, the heavy supply noticeable during the fall and early winter having fallen off. Capons, therefore, fill the demand between the cockerel or roaster and the spring broiler seasons. Caponizing can be done at any time between the ages of two and six months. The organs are insufficiently developed previous to two months and too firmly established for safe removal after six months. Size is really the best guide, about one and a half pounds being the proper weight. It is wise, too, to caponize early-hatched birds, since the operation can be performed before the hot summer weather sets in.

Although the operation is comparatively simple and can be performed by anyone after it has been

witnessed once or twice, it is not wise to attempt it unless one has practiced on dead birds, or seen it done by an expert, for the simple reason that an exact knowledge of the location of the organs is necessary, otherwise fatalities will inevitably occur. Durable and rigid instruments are necessary and can be secured in sets at varying prices. The operation itself is perhaps the most dangerous of all forms of castration because the testicles lie internally and very close to the heart and a careless move might easily sever a large artery or tear some vital organ.

Birds about to be caponized should be starved for twenty-four to thirty-six hours before the operation and should be kept in a clean airy coop. It is a good plan to shut up the selected cockerels at night and keep them without feed until the second morning when, if the light is good enough, the operation should be performed. Good light is absolutely essential and if cloudy weather prevails the operation should be postponed.

Pointers For Exhibitors and Fair Boards.

BY F. C. ELFORD, C. E. F., OTTAWA.

In the preparation of dressed poultry there are several points that require consideration. Crate feeding is the best system to flesh the birds: about a month before the show put into the feeding crate a number more than are required in the exhibit. A few may not come along as well as the others and there is always a risk of making a mistake in the killing or plucking. A mixed ration of finely-ground grain gives best results, and one of the best feeds for this mixture is good plump oats. These should be finely ground, however, or, better, have the coarse hulls sifted out. For the best results milk, and preferably buttermilk, is almost indispensable. The feed can be given twice or three times a day as most convenient.

In starving the birds they should be left without feed for at least twenty-four hours before they are killed, during which time they can be given a drink of water. This drink is appreciated by the birds and it helps to wash out the crop and intestines. After killing, however, any substance left in the bowels should be squeezed out as it invariably turns green after being killed a few hours and not only looks disagreeable but is unsanitary. The killing should always be done by bleeding through the mouth. The plucking should be done dry and all birds uniformly plucked. As to the feathers left, it is not a good plan to leave too many. A few around the neck are not objectionable but any on the wings or the thighs on roasters or broilers are not advisable. Cool the birds thoroughly but slowly. See that the heat all comes out of the body instead of being driven in. Quick cooling has a tendency to drive the heat into the bones and they will turn black and decomposition soon set in. Gradual but thorough cooling on the other hand drives the heat out of the body and leaves it in good condition to hold up in appearance and to keep for a longer period.

In selecting the birds for the exhibit see that all birds selected are evenly fleshed, that is, that none of them are over-fleshed and none of them underfleshed; see that they have an even distribution of flesh over the individual as far as possible. Undue fatness in certain sections is not desirable but an even distribution with a nice finish, a sort of kid-glove feel to the skin, is what is desired. If the birds are to be exhibited in a case or carton see that they are packed tightly. The packing has much to do with the award. They should be fitted in snugly and no room left for shifting. As to whether the birds are packed with back or breast up depends very largely upon the individual taste. Before packing, all dirt, blood, stray feathers or anything that may have accumulated on the birds during the killing operation should be carefully removed without using water in the operation.

Preparation by Fair Boards.

Any preparation by the exhibitor is largely lost if suitable preparation is not also made for the exhibits on the part of the Fair Board. In fact, the arrangements made by the Fair Board have much more to do with the continued success of the exhibits than the preparation made even by the exhibitors themselves. No doubt the accommodation at the average fair is improving. There is, however, still need for more improvement along this line. Where the shady side of a fence or the back of the pavilion is the only accommodation provided, the poultry exhibits are not likely to be ever very large or attractive. A suitable building should be provided and there should be, above everything else, plenty of light. There ought to be wire coops

provided by the Association and the ideal method is to stage them in single tiers with good wide aisles between. The old system of using the exhibitors' coops and placing them on tables or on top of each other beside the wall is not satisfactory, nor does it do justice to the exhibit, the judge, or the visitor. A good live director should be in charge of the poultry work and not one assigned to this department simply because he is not fit for any other, as is too often the case. The director should arrange for the receiving of all birds and the cooping of them according to varieties, and should know where they are cooped so that he can assist the judge in his work. If ever there was a time when the poultry prize lists needed revision, it is at present. As a rule, the majority of prizes are awarded to classes that are called "fancy" that is, they are not utility birds in any way and they are on the list simply because the Fair Boards want to make a show or want to induce professional exhibitors to bring their fancy birds so as to fill up the coops. This is no time when any fair should countenance encouragement to any class of stock that will not produce and no patriotic fair board can conscientiously continue to offer the bulk of the prizes for birds, the chief production of which is feathers. More than ever the utility end of the show must be emphasized, and in order to provide the special interest which some fair boards feel the fancy end has provided, any features that will encourage production and that will help eliminate waste should be introduced.

All birds belonging to what might be called the utility classes, that is, birds that can be recommended to the ordinary man as good producers in either eggs or flesh, should receive emphasis. Better prizes should be given to all such classes. Prizes for breeding pens should be increased and a sales class might be introduced. In the sales class, birds should be entered that are for sale and information on the coop as to the prize and facts in reference to the breeding. The sale of these birds should be made through the Director in charge, or the Secretary of the fair. To encourage beginners, it might be well to have a beginners' class where only those who have never exhibited before be allowed to exhibit.

#### Egg Laying Contests.

In order to stimulate an interest and to substitute something for many of the fancy classes which might be eliminated, a laying contest should receive careful consideration. Laying contests have been carried on at two of our Canadian winter fairs and have proven very attractive. They might be of practical benefit to some of our later fall fairs, though during the earlier fairs they are not so easy to conduct. Where it can be conducted, however, a laying contest will prove the main drawing card in the poultry exhibit and is of such a utilitarian nature, in that it draws attention to production, that it should be tried out wherever possible. Along the same line also is a test of crowing. Up to the present these tests have not been made as far as I know, at least in a general way, in America. In some of the European countries, however, before the war they were very popular and considered as one of the best features in connection with the selection of a male bird.

#### Educational Features.

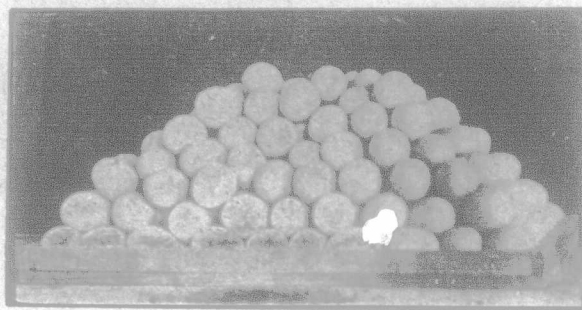
More features of an educational nature should be introduced. Local poultry supply firms might be given more encouragement to demonstrate incubators and other poultry appliances designed for the saving of labor and increasing the egg yield. Government educational exhibits and demonstrations could in many cases be secured. Demonstrations as to how best to kill and pluck, select the layers, caponize, build poultry houses, etc., could be introduced with very little expense and would be much appreciated. In some cases even moving pictures might be considered, from which much instruction could be imparted. In fact, the reorganization of poultry exhibits is not only advisable but is essential. We are asked as patriotic citizens to produce and again to produce, to eliminate waste of all kinds, which includes the loafer in the poultry house. It is not a question of choice, it is a question of absolute necessity, and if our foremost citizens who are usually found on the boards of Fairs Associations, do not take the question up more seriously than they are doing, what is to be expected from the 90 per cent. of our citizens who are not so favored?

#### Crate Feeding.

Crate feeding is not generally practiced among farmers, for the simple reason that the poultry on the farm is regarded as more or less of an unimportant sideline. Where the flock is given more than the ordinary amount of attention, however, and where quite a large number of chickens are raised every year, it should be profitable to do a certain amount of crate feeding before killing the surplus for the market. Crate feeding is nothing more or less than the enclosing of birds in small coops or crates for a few weeks before killing for market. The advantage of this method of fattening is that it keeps the birds quiet and under control. Crate feeding makes it possible to utilize every bit of the food eaten to increase the weight of the bird, since no flesh is wasted nor muscles hardened by exercise. The flesh that is put on during this finishing process is put on more cheaply than in any other way, and the value of the whole carcass is increased from ten to twenty-five per cent.

Best results from crate feeding are usually obtained from cockerels of a general-purpose or heavy breed. Plymouth Rocks, or Wyandottes, or Rhode Island Reds, such as are found on nearly every farm which does not specialize in the strictly egg breeds, can be crate-fed with success. However, the flesh of any bird is improved by crate feeding, as one might naturally

expect. The ration that is usually given for feeding is some kind of finely-ground grain, in variety, mixed with milk, making a kind of sloppy feed. Oats, barley, corn and buckwheat are all good, and it should always be remembered that it is much better to provide a variety in the ration than to feed a single ground grain alone. The milk that is used should preferably be sour milk, or buttermilk if it is available. Sour milk is one of the most valuable poultry feeds it is possible to use. The birds should not be fed for twenty-four hours after they are put in the crate, and then should be fed in such a way as to develop what might be termed a ravenous appetite. In other words, they should be fed sparingly for several days so as to keep them hungry while gradually increasing the amount of feed given until they are getting all they will eat. The fine point in crate fattening chickens is to get the greatest possible amount of feed into each individual bird without having any one of them lie down on the job. The business of every bird in the crate is to eat all it can possibly hold and still maintain an appetite which is always prominently displayed at feeding time. It is better to feed the birds only twice a day and give them just what they will eat up clean. After the feed, clean out any food that is left in the trough. It is also a good practice to dust for lice before starting to feed and again before killing. The object of this is quite obvious, in that anything which will detract from the absolute comfort of the birds will make it impossible for them to fatten most rapidly.



Less Than a Year's Work for One Hen.

## FARM BULLETIN.

### Harvest Leave to Soldiers.

It was reported last week that more than 2,200 soldiers from London Camp left Carling's Heights on six weeks' leave of absence to participate in the work of harvesting the crops from the farms. Some of these men had been warned for the next overseas draft, but the necessity for providing labor for agriculture was very great and participation in farm work by these soldiers was made possible by a formal order applicable to all parts of Canada, issued by the Militia Department, August 9. This order governs the harvest leave granted to members of the Canadian Expeditionary Forces in all parts of Canada and reads as follows:

"Subject to the instructions of general officers commanding, harvest leave will be granted by officers commanding units to men who were working on farms immediately before they joined for duty. The leave will be to work on a specified farm, but not necessarily on that on which the man concerned was previously working. It may be extended to men in medical category A, B, or C, but need not be preceded by issue of clothing, inoculation, vaccination or more documentation than particulars of recruit. It will be without pay.

"Men now in districts other than that in which they joined will, if they go to specified farms in their home districts, be furnished with return transportation to the headquarters of that district, if they desire or require it.

"Harvest leave will be limited to six weeks, and may be cancelled at any time by wire or letter. The six weeks' period may commence when the soldier desires.

"Men in categories lower than 'A' to whom leave has already been granted will be granted an extension in accordance with local harvest needs to a total not exceeding eight weeks, and they will be immediately so notified by letter or, if necessary, by wire."

### Honey Crop Report.

The crop reporting committee of the Ontario Bee Keepers' Association, consisting of Messrs. Wm. Couse, H. G. Sibbald, and W. J. Craig, met in Toronto, Thursday, August 8, 1918, together with the President, Wm. Armstrong, and Secretary-Treasurer P. W. Hodgetts. The Executive Committee of the Association was called in for a consultation owing to the serious situation existing at present with regard to sugar for fall feeding. The Ontario average crop per colony was reported as 62.4 lbs., and reports were received from more than five hundred members in Ontario as well as from correspondents in Quebec and the United States.

A very disturbing feature in the market situation with regard to honey is the ruling of the Canada Food Board that no sugar can be obtained for fall feeding. As a result of this ruling bee keepers will be forced to retain from twenty-five to forty per cent. of the average crop, and feed it back to the bees. Losses in bees last winter were much heavier than normal because of the unusual severity of the winter and the lack of stores. The Committee therefore urges that all bee-keepers protect themselves against further loss by ample feeding this fall. The report of the Committee with regard to markets and prices is given herewith:

"In view of these conditions, the committee recommends the following prices:

Best quality light extracted, wholesale, 24c. to 27c. per lb.

Best quality light extracted, retail, 5c. to 8c. higher.

No. 1 comb, wholesale, \$3.00 to \$3.75 per dozen.

No. 2 comb, wholesale, \$2.00 to \$3.00 per dozen.

"At the present time the market is very strong both here and in the United States. All last year's crop is out of the retailers' hands. Enquiries have been received for large quantities for shipment overseas, but it is doubtful whether under present conditions in regard to sugar, any can be secured.

Bee-keepers are cautioned not to sell second grade honey for table use, but to sell it to biscuit manufacturers. The prices recommended are f. o. b. in 60-lb., 10-lb., and 5-lb. tins, the former being net weight, the latter being gross weight. The lower prices should be quoted to wholesale and commission men and the higher whole sale price to retailers. The size of the order and style of package should be taken into account in determining the retail price."

### Report of Agricultural Societies.

The eighteenth annual report of the Agricultural Societies of Ontario, and the published report of the 1918 convention of the Ontario Association of Fairs and Exhibitions, has just come to hand. There is in this report some very interesting information regarding the work of the fall fairs, which is not generally known. We learn, for instance, that the sum of \$72,131 will be granted to the fall fairs of the Province of Ontario during 1918, and that the amount of the grant paid for 1917 was \$72,249. These amounts are divided up among the 350 agricultural societies in the Province. In addition to this sum, special grants amounting to \$5,000 are being made to fairs held in districts such as Algoma, Manitoulin, Muskoka, Parry Sound, Sudbury, etc. Four hundred and twenty-two dollars was granted for stallion shows in 1918; \$368 for stallion and bull shows; \$189 for seed fairs; \$250 as special grants to Indian societies, together with the total of \$5,000 to the Canadian National, Central Canada, exhibitions, and the Western Fair.

The grant made by the Legislature to agricultural societies which held Field Crop Competitions in 1917 amounted to \$14,200, of which \$1,150, the largest amount granted in any County or district, went to Parry Sound. Grey County came second with \$1,050, and Bruce County third with \$800. It is stated in the report of the Superintendent, J. Lockie Wilson, that the first grant received from the Government by agricultural societies for Standing Field Crop Competitions was \$1,000. In ten years the grant has been increased to \$25,000, the Government providing judges free of charge. During the past ten years, according to the Superintendent's report, members of agricultural societies have received in prize money from the larger exhibitions and winter fairs the sum of \$29,750 for exhibitions of grain and sheaves from prize-winning fields in Standing Field Crop Competitions, while the agricultural societies themselves have paid to their members for this work the sum of \$65,000. Only 185 societies in the Province have taken up this field crop work, and about 7,000 candidates now enter fields annually in these competitions.

The grants to societies suffering losses in gate receipts through wet weather amounted in 1917 to \$8,812. An analysis of the prize money paid by the agricultural societies of Ontario, in addition to the three larger exhibitions, shows that of a total of \$285,353.98, the various classes of live stock were encouraged by prize money in the following proportion: Horses, \$75,679.43; cattle, \$55,940.79; sheep, \$24,193.31; swine, \$14,024.20; miscellaneous, \$115,516.25. The total cash prize money amounted to \$206,271 while the total expenditure for agricultural purposes exclusive of the three larger exhibitions amounted to \$221,518. The value of land and buildings held by the agricultural societies in Ontario amounts to \$1,040,255, while the total actual receipts of all the societies amounted in 1917 to \$517,972, the total expenditure being \$489,334. Members' fees amounted to \$30,260; municipal grants, \$45,709, and cash donations \$43,993.

### Excursion to Monteith Farm.

The annual excursion to the Monteith Demonstration Farm and Soldiers' Training School was held on August 8. A large crowd was in attendance, various parts of the Northland being well represented. On the average, the crops through Northern Ontario are believed to be the largest in the history of that district, and at the time of the excursion were looking their best. Not only did those in attendance have an opportunity to meet their neighbors of the Northland and discuss conditions and have a social time, but they had the opportunity of hearing addresses from prominent men from old Ontario. Among the speakers were Hon. G. Howard Ferguson, Minister of Lands, Forests and Mines; Hon. F. C. McDiarmid, Minister of Public Works; J. H. Grisdale, Acting Deputy Minister of Agriculture in Canada; W. Toole, Professor of Animal Husbandry, Guelph; Frank Hens, Chief Dairy Division Instructor for Western Ontario, and Miss H. Graydon.



# Toronto, Montreal, Buffalo, and Other Leading Markets

## Week Ending August 8. Receipts and Market Tops.

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

	CATTLE						CALVES					
	Receipts		Top Price Good Steers (1,000-1,200)				Receipts		Top Price Good Calves			
	Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Same Week	Week Ending	
	Aug. 8	1917	Aug. 1	Aug. 8	1917	Aug. 1	Aug. 8	1917	Aug. 1	Aug. 8	1917	
Toronto (Union Stock Yards)	3,889	5,149	4,439	\$15.00	\$11.00	\$14.75	643	729	1,050	\$16.75	\$14.50	
Montreal (Pt. St. Charles)	1,263	753	1,050	13.50	10.85	12.50	799	445	734	15.00	13.50	
Montreal (East End)	1,170	983	766	13.50	10.85	12.50	597	377	473	15.00	13.50	
Winnipeg	5,884	5,467	5,686	15.80	9.00	14.00	339	342	299	14.00	10.50	
Calgary	3,751	940	3,346	15.00	8.50	14.25						
Edmonton	1,177	547	777	12.25	7.75					42	113	

	HOGS						SHEEP					
	Receipts		Top Price Selects				Receipts		Top Price Good Lambs			
	Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Same Week	Week Ending	
	Aug. 8	1917	Aug. 1	Aug. 8	1917	Aug. 1	Aug. 8	1917	Aug. 1	Aug. 8	1917	
Toronto (Union Stock Yards)	4,998	8,368	4,252	\$20.00	\$17.75	\$20.00	3,723	2,274	1,713	\$19.00	\$17.25	
Montreal (Pt. St. Charles)	1,364	1,262	1,159	20.75	17.75	20.15	1,058	1,515	1,180	18.00	15.50	
Montreal (East End)	1,097	614	769	20.75	17.75	20.15	812	719	950	18.00	15.50	
Winnipeg	4,858	4,720	6,372	20.50	16.60	19.50	497	440	426	17.50	12.50	
Calgary	2,939	2,935	2,591	19.25	16.25	18.50	500	310	738		13.00	
Edmonton	1,791	513	1,973	18.15	15.00	18.00	114	10	96		12.00	

### Market Comments.

**Toronto.** With barely twenty-five hundred cattle in the pens on Monday morning the market showed more activity than for some time past. There was a good demand for heavy cattle and while the inquiry was partly for the export trade, there was also considerable buying on local account. As mentioned last week there exists a fairly strong demand for this class of cattle for slaughter for the overseas trade. The tone of the market for cows, bulls, and light weight butcher cattle was a little better than during the previous week. The inquiry for these classes, however, is limited and should heavy supplies come forward a depression of the market would probably result. During the latter part of the week there was very little change in prices, while the demand for heavy cattle continued active. Among the highest sales of cattle made during the week, were several loads averaging twelve hundred and twenty-five to twelve hundred and seventy-five pounds that sold at \$15.25 per hundred; a number of sales were made at \$15.50, while on Thursday a few odd sales were made at \$15.90 per hundred. Steers weighing from ten hundred to twelve hundred were in good demand and for well finished cattle of eleven hundred to eleven hundred and fifty pounds, from \$14 to \$14.50 per hundred was paid. Steers of ten hundred and fifty to eleven hundred and fifty pounds sold from \$13.25 to \$14, and medium and common steers from \$11.50 to \$12.50. For handy-weight steers and heifers under ten hundred pounds, \$13.25 per hundred was about the top price, while most of the best animals in this class were weighed up from \$12 to \$12.75, those of medium quality from \$10 to \$10.75 and those of common quality from \$8 to \$10 per hundred. The market for cows and bulls was about steady with that of the previous week; extra good cows sold up to \$10.50 per hundred, good cows from \$9.25 to \$9.75, those of medium quality from \$8 to \$9, and common from \$7 to \$7.75. Bulls moved at about a similar level as the cows, although really choice bulls sold as high as \$11. Canners and cutters sold from \$6 to \$6.75. Trading in stockers and feeders is very quiet at present and there is very little movement to the country. Choice calves were in improved demand and \$16.75 per hundred was about the top figure; medium and common calves, however, were slow of sale.

Lambs were subjected to a rather severe cut during the week. The run was the heaviest of the season. Top lambs were weighed up at \$18.50 per hundred on Thursday or almost \$5 below the previous week's closing figure. Sheep were a little easier, best light sheep bringing \$15 per hundred. There was no change in the hog market. Prices remained steady during the week at \$20 per hundred for selects, fed and watered. Two or three decks, however, sold at \$20.25. There is a steady undertone to the market at present. Of the disposition from the Yards for the week ending August 1, Canadian packing houses purchased 738 calves, 3,348 butcher cattle, 4,405 hogs and 307 sheep. Local butchers purchased 183 calves, 229 butcher cattle, 181 hogs and

CLASSIFICATION	No.	TORONTO (Union Stock Yards)		Top Price	MONTREAL (Pt. St. Charles)		Top Price
		Avg. Price	Price Range Bulk Sales		Avg. Price	Price Range Bulk Sales	
<b>STEERS</b>							
heavy finished	97	\$15.00	\$14.00-\$15.50	\$15.50			
good	277	14.00	13.00-14.50	15.00	34	\$12.50	\$12.20-\$13.50
1,000-1,200 common	84	12.50	11.00-12.75	12.75	16	11.75	11.50-12.00
good	386	12.74	12.00-13.50	14.00	84	12.00	11.00-12.50
700-1,000 common	489	10.50	9.50-10.75	11.00	197	9.00	8.50-9.50
good	187	13.25	12.50-13.50	14.25	16	10.00	9.50-10.50
HEIFERS fair	142	10.75	10.00-11.00	11.00	30	9.25	8.50-9.50
common	84	9.00	8.50-9.50	9.75	127	8.00	6.75-8.25
good	350	10.00	9.50-10.50	11.00	56	9.75	9.00-10.00
COWS common	778	8.00	7.50-8.50	9.00	223	8.25	7.25-8.75
good	44	10.15	9.75-10.50	11.00	22	9.00	8.00-9.50
BULLS common	157	8.00	7.50-8.50	10.00	335	8.00	7.50-8.25
CANNERS & CUTTERS	208	6.50	6.00-7.00	7.00	115	6.50	6.00-7.50
OXEN							
veal	632	14.50	13.00-16.00	16.75	709	9.00	8.00-14.00
grass	11	8.00	7.00-9.00	9.00	90	8.25	8.00-8.50
good	110	9.75	9.50-10.00	10.00			
STOCKERS 450-800 fair	309	8.50	8.00-9.00	9.50			
good	73	10.75	10.50-11.00	11.00			
FEEDERS 800-1,000 fair	112	10.25	10.00-10.50	10.50			
selects	4,657	20.00	20.00-	20.00	1,078	20.60	20.50-20.75
HOGS (fed and watered) heavies	26	20.00	20.00-	20.00	27	20.60	20.50-20.75
lights	104	18.00	17.00-19.00	19.00	160	20.10	19.50-20.75
sows	206	17.03	17.00-18.00	18.00	89	18.00	18.00
stags	5	16.00	16.00-	16.00	10	17.00	16.75-17.75
good	3,122	18.52	18.00-19.00	19.00	170	18.00	18.00-
LAMBS common	76	16.57	16.00-18.00	18.00	718	17.00	17.00-
heavy							
light	403	13.94	13.00-15.00	15.00	57	13.00	13.00-
SHEEP common	122	8.79	8.00-10.00	10.00	115	12.50	12.50-

307 sheep. Canadian shipments were made up of 6 calves, 702 stockers, 41 milch cows and 76 hogs. Shipments to United States' points consisted of 90 calves, and 370 butcher cattle. The total receipts from January 1 to August 1, inclusive, were: 149,495 cattle, 40,813 calves; 217,537 hogs and 24,965 sheep; compared with 136,850 cattle, 32,520 calves, 286,071 sheep and 22,175 hogs, received during the corresponding period of 1917.

### Montreal.

An improvement in quality as also in weight characterized the increased offerings of cattle at the yards in comparison with the weight and quality of the receipts of the previous two to three weeks. As a result, sales of butcher cattle were made at higher prices than were paid during the preceding week, although the market was generally quoted at unchanged levels. There was an improved demand for weighty steers and cows, while cattle for boning and freezing again sold readily at strong prices. The highest sale of the week was that of twelve steers averaging eleven hundred and ninety pounds each at \$13.50 per hundred. Twenty-five mixed steers and heifers weighing slightly over ten hundred pounds were weighed up at \$12.50, and another lot of eighteen

head sold at a similar price, while numerous sales of mixed butcher stock weighing around ten hundred pounds per head, were made at \$12. Of the steers weighing less than ten hundred pounds, on sale, twenty-six head moved out at \$12 per hundred and most of those of good quality from \$9 to \$11. The best cows offered sold exceptionally well at the best prices of the week in mixed lots with steers. In addition a number of good quality cows were sold separately from \$9 to \$10.50 per hundred, while most of the sales of those of medium quality were made between \$8.25 and \$9. Heifers were weighed up mostly in mixed lots with steers and cows. An increased number of canner cattle was offered but under a brisk demand all receipts were quickly purchased at prices equal to, and in a number of cases higher than, the prices paid for the offerings of the previous week. Sales of milch cows were made around \$100 per animal. Bulls were on hand in liberal numbers and while the majority were of light weights and of inferior quality, a fair number of the animals were of a much better quality than those received for some time. Sales of the best quality bulls were made at \$9, \$9.25 and \$9.50 per hundred; most of the sales of those of good quality were made between \$8 and \$9, while common bulls sold mostly around \$7.50 and as low as

\$5.20. Calves sold readily from \$8 to \$15 per hundred. Shipments were made during the week to United States' points, at prices ranging from \$8.50 to \$9 per hundred. A considerable number of grass calves were included in the offering. Receipts of sheep and lambs at the two Yards were fewer than during the previous week, and, as a good outlet existed, those on hand were readily disposed of at prices for lambs in some instances, \$1.20 per hundred above the previous week's market. Sheep sold from \$12.50 to \$13. Hog receipts were again light in volume although more by five hundred compared with those of the previous week. A considerable number of lights were included in the offerings. Select hogs sold mostly from \$20.85 to \$20.75 per hundred, fed and watered, while a few sales of light hogs were made at \$19.50. Sows sold from \$17.75 to \$18 and stags from \$16.75 to \$17.75. The market closed strong in tone and unchanged at the opening prices of the week. Pr. St. CHARLES.—Of the disposition from the Yards for the week ending Aug. 1, Canadian packing houses and local butchers purchased 217 calves, 54 canners and cutters, 251 bulls, 718 butcher cattle, 1,159 hogs and 977 sheep and lambs. Canadian shipments were made up of 163 calves and 27 milch cows. Ship-

## THE ROYAL BANK OF CANADA

Capital Authorized - - \$ 25,000,000  
Capital Paid Up - - - 12,911,700  
Reserve Funds - - - 14,564,000  
Total Assets - - - 321,000,000

HEAD OFFICE, MONTREAL

Branches throughout every Province  
of the Dominion of Canada

ACCOUNTS OF FARMERS INVITED  
SALE NOTES COLLECTED

SAVINGS DEPARTMENT  
AT ALL BRANCHES

ments to United States' points consisted of 354 calves.

The total receipts from January 1 to August 1, inclusive, were: 20,486 cattle, 48,507 calves, 37,672 hogs and 12,202 sheep; compared with 21,319 cattle, 42,238 calves, 49,811 hogs and 9,040 sheep, received during the corresponding period of 1917.

**EAST END.**—Of the disposition from the Yards for the week ending August 1, Canadian packing houses and local butchers purchased 724 butcher cattle, 349 calves, 756 hogs, and 950 sheep and lambs. Canadian shipments were made up of 42 butcher cattle and 13 hogs. Shipments to United States' points consisted of 114 calves.

The total receipts from January 1 to August 1, inclusive, were: 18,823 cattle, 36,707 calves, 23,635 hogs and 10,453 sheep; compared with 23,153 cattle, 33,857 calves, 28,526 hogs and 1,075 sheep, received during the corresponding period of 1917.

### Buffalo.

**Cattle.**—Cattle prices on anything at all desirable at Buffalo last week, were very satisfactory—shipping steers especially selling to most excellent advantage. Canada supplied about all of the shipping steers offered and these moved very readily, being licked up in short order. Best weight Canadians sold around \$16.65 and \$17 and more of the good weight kinds could have found very satisfactory sale. There were around possibly fifty to sixty loads of steers out of Canada the past week, running in the main to the medium and lighter kinds, with a few loads of good weight steers. Choice butchering stuff sold strong, the advance on these, as well as on shipping steers generally ranging from 25 to 50 cents above the previous week. Canadian heifers sold up to \$13.25, with extra fancy Canadian cows landing at \$14. Fact is, Canadians topped the market prices all round last week. A fair, medium and commoner kind of grass butchering stuff sold lower, by fifteen cents to a quarter. Stocker and feeder trade showed some improvement, bulls, except for the best fat kinds, looked lower by a quarter and a good, strong market was had on milk cows and springers. Offerings for the week totaled 5,575 head, as against 5,350 head for the previous week and as compared with 4,325 head for the corresponding week a year ago. Quotations:

**Shipping Steers—Natives.**—Choice to prime, \$17 to \$17.50; fair to good, \$16.50 to \$16.75; plain and medium, \$13.50 to \$15; coarse and common, \$11.50 to \$12.50.

**Shipping Steers—Canadians.**—Best heavy, \$16.50 to \$17; fair to good, \$14.50 to \$15.50; common and plain, \$11.50 to \$12.50.

**Butchering Steers.**—Choice heavy, \$16.50 to \$17; fair to good, \$15.25 to \$16; best handy, \$14.75 to \$15.25; fair to good, \$12 to \$13.50; light and common, \$9.50 to \$10.50; yearlings, choice to prime, \$16 to \$16.50; fair to good, \$13 to \$15.

**Cows and Heifers.**—Best heavy heifers, \$13 to \$13.50; fair to good, \$11 to \$12; good butchering heifers, \$11 to \$12; fair butchering heifers, \$9 to \$10; very fancy fat cows, \$11.50 to \$13; best heavy fat cows, \$9.50 to \$10.50; good butchering cows \$8.75 to \$9.25; medium to fair,

## Borrow to Buy Cattle



12

"Mixed Farming" is the big money-maker today. Of course, grain and fruit and vegetables pay well—but beef and bacon, butter and cheese, are piling up the profits for the farmer.

Milk more cows—fatten more cattle—raise more hogs. If you need money to do it, come to The Merchants Bank. We are glad to assist all up-to-date farmers.

## THE MERCHANTS BANK OF CANADA

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

\$8.25 to \$8.50; cutters, \$7 to \$7.25; canners, \$6.25 to \$6.50.

**Bulls.**—Best heavy \$11 to \$11.50; good butchering, \$10 to \$10.50.

**Stockers and Feeders.**—Best feeders, \$9.50 to \$10; common to fair, \$8.25 to \$9; best stockers, \$9 to \$9.50; fair to good, \$8.25 to \$8.75.

**Milchers and Springers.**—Good to best (small lots) \$100 to \$140; in carloads, \$80 to \$100; medium to fair, (small lots) \$75 to \$85; in carloads, \$65 to \$80; common, \$45 to \$50.

**Hogs.**—New records were made at Buffalo last week. Monday several decks of good handy hogs sold at \$20.80 but the bulk of the crop moved at \$20.75.

Tuesday, heavies sold at \$20.75 and light hogs brought \$21, with one deck \$21.05. Wednesday's market was ten to fifteen cents higher; Thursday top was registered at \$21.15 and Friday two decks and a bunch scored \$21.25. Pigs sold in the same notch as Yorkers; roughs ranged up to \$18 and \$18.25 and stags went from \$15 down. The past week receipts were 8,500 head, for the week previous there were 11,688 head and for the same week a year ago the run totaled 8,800 head.

**Sheep and Lambs.**—A light supply was offered again last week, grand total being only 2,300 head. Offerings were against 1,854 head for the week before and 1,650 head for the same week a year ago. As a result of the light supply, trade was considerably improved. Monday top lambs sold at \$18 and culls ranged from \$16 down. The next four days the market on lambs was firm. Sheep were steady all week. Wethers sold up to \$14 and ewes from \$13 down.

**Calves.**—Last week started with top veals selling generally at \$19 and the next two days the bulk of the tops had to take \$18.50. Thursday the best ranged from \$18.50 to \$19 and Friday the bulk brought the latter price. Top Canadian calves the past week sold up to \$18.50 and \$18.75 and good handy culls reached up to \$17.25. Heavy fat calves were quoted from \$12 to \$15 and the rough ones from \$7 to \$10. For the past week receipts were 2,400 head, as compared with 2,729 head for the week previous and 2,100 head for the same week a year ago.

### Toronto Produce.

Live stock receipts at the Union Stock Yards, West Toronto, on Monday, August 12, consisted of 160 cars, 3,031 cattle, 274 calves, 1,006 hogs, 693 sheep and lambs. Heavy steers strong; top, \$16.25 for 28 head, average weight 1,335 pounds. Butcher steers and heifers steady; fat cows 25 cents lower; others steady. Bulls, milkers and springers, stockers and feeders, steady; calves and sheep strong. Lambs \$1 higher. Hogs 20 cents, fed and watered.

#### Breadstuffs.

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

**Oats.**—(According to freights outside) Ontario, No. 2 white, 85c. to 86c., nominal; No. 3 white, 84c. to 85c., nominal.

Manitoba oats, No. 2 C. W., 90¼c.; No. 3, C. W., 87¼c., (in store, Fort William); No. 1 feed, 84¾c.

**Barley.**—Malting, \$1.20 to \$1.22, nominal.

**Peas.**—According to freights outside, No. 2, nominal.

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

**Rye.**—No. 2, nominal.

**Flour.**—Manitoba flour, war quality, \$10.95. Ontario flour, war quality, \$10.85, in bags, Montreal; \$10.85, in bags, Toronto.

#### Hay and Millfeed.

**Hay.**—Track, Toronto, No. 1, \$17 to \$18 per ton; mixed, per ton, \$15 to \$16.

**Straw.**—Car lots, per ton, \$8 to \$8.50, track, Toronto.

**Bran.**—Per ton, \$35.

**Shorts.**—Per ton, \$40.

#### Hides and Skins.

Prices delivered, Toronto:

**City Hides.**—City butcher hides, green, flat, 13½c.; calf skins, green, flat, 30c.; veal kip, 22c.; horse hides, city take-off, \$6 to \$7; sheep, \$3.50 to \$5.50.

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

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

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

#### Farm Produce.

**Butter.**—All classes of butter again remained fairly stationary in price, selling as follows on the wholesales: Creamery, fresh-made, pound squares, at 46c. to 47c. per lb.; creamery solids, at 45c. to 46c. per lb.; dairy, 40c. to 42c. per lb.

**Oleomargarine.**—32c. to 33c. per lb.

**Eggs.**—Eggs also sold at unchanged prices, wholesale, selling as follows: No. 1's selling at 48c. to 49c. per doz.; and selects at 51c. per dozen.

**Cheese.**—Cheese sold at unchanged prices during the past week: Old and new cheese selling at 25c. per lb. wholesale, and twines at 25½c. per lb.

**Poultry.**—Spring chicken receipts were heavier and prices slightly lower during the past week. The following prices were quoted for live weight: Spring chickens, 35c. to 38c. per lb.; roosters, 18c. per lb.; fowl, 4 lbs. and under, 24c. per lb.; over 4 lbs., 27c. per lb.; ducklings, per lb., 25c.; turkeys, per lb., 30c.; turkeys, old, per lb., 25c.

#### Wholesale Fruits and Vegetables.

Apples were shipped in in larger quantities, and were generally of better quality; selling at 30c. to 80c. per 11-qt. flat baskets and 75c. to \$1.25 per 11-qt. lenos.

Canadian cantaloupes gradually increased in quantity, selling at 75c. to \$1.25 per 11-qt. basket, and \$1.50 to \$2 per 16-qt. basket.

Blueberries were shipped in heavily and were mostly of better quality; some extra choice ones being received, selling at \$1.50 to \$2.50 per 11-qt. basket.

**Cherries.**—Cherries are gradually decreasing and advanced in price, Morrellos selling at \$1.50 to \$1.90 per 11-qt. basket, and Montmorencys at \$1.75 to \$2.25 per 11-qt. basket (from 50c. to 90c. per basket higher than a year ago).

**Currants.**—Black currants continued to command extremely high prices, selling

Incorporated 1855

AT ANY OF THE BRANCHES OF  
**The Molsons Bank**  
FARMERS ARE WELCOME

Local Managers are instructed to consult with them, and by every legitimate means assist in securing the utmost development of our farms.

Savings Department at all Branches.  
Interest at Highest Current Rate.

at \$2.75 to \$3 per 11 qts., and \$1.50 to \$1.75 per six-quart basket.

Lawton berries varied in quality and thus in price, selling at 20c. to 30c. per box.

**Peaches.**—Canadian peaches are beginning to come in more freely; selling at 35c. to 50c. per 6-qt. flats; 50c. to 75c. per six-quart lenos; and 75c. to \$1 per 11-quart basket.

**Pears.**—Pears sold a little better at 65c. to 85c. per 6-qt. basket, and 90c. to \$1 per 11-qt. basket.

**Plums.**—Prices in plums ranged from 40c. to 85c. per 6-qt. basket.

**Raspberries.**—The demand for raspberries declined, causing prices to do the same; selling at 24c. to 30c. per box.

**Tomatoes.**—Tomatoes became quite scarce and materially advanced, selling at 75c. to \$1.25 per 11-qt. basket for outside-grown, and \$1.25 to \$1.50 for the hot-house.

**Beans** firmed a little, selling at 40c. to 50c. per 11-qt. basket.

**Beets** kept stationary at 25c. per dozen bunches.

**Cabbage** brightened a little, selling at \$2.75 to \$3 per bbl.

**Celery** came in freely; selling at 40c. to 50c. and 75c. to \$1 per dozen bunches.

**Corn.**—Corn in sacks sold at 25c. to 30c. per dozen. Some choice in baskets going at 40c. per dozen.

**Eggplants** kept firm at \$1.50 to \$2 per 11-qt. basket.

**Potatoes** were quite scarce, advancing to \$2.35 to \$2.50 per bag.

### Chicago.

**Hogs.**—Top, \$20.05; butchers, \$19.25 to \$20; light, \$19.50 to \$20.05; packing, \$18.25 to \$19.15; rough, \$17.75 to \$18.25; pigs, good and choice, \$18 to \$18.50.

**Cattle.**—Steers above \$18.25 and top class of butcher cattle with the close last week; others unevenly lower; middle grade steers \$1 under best time last week; calves steady.

**Sheep.**—Lambs closing 35c. to 50c. higher than a week ago; yearlings little changed; sheep strong to 25c. higher.

### Cheese Markets.

Cornwall, 23¼c.; Vankleek Hill, 22¼c.; St. Hyacinthe, Que., 22¼c.; Montreal, finest easterns, 22¼c. to 23c.; New York, fresh specials, 25¼c. to 26c.; average run, 25c. to 25½c.

### His Point of View.

This week's story from the front: A certain padre was visiting a wounded Scotsman in hospital. The good man found the patient looking very unhappy and depressed, and, hoping to cheer him up, offered to write a letter home for him, to which he assented.

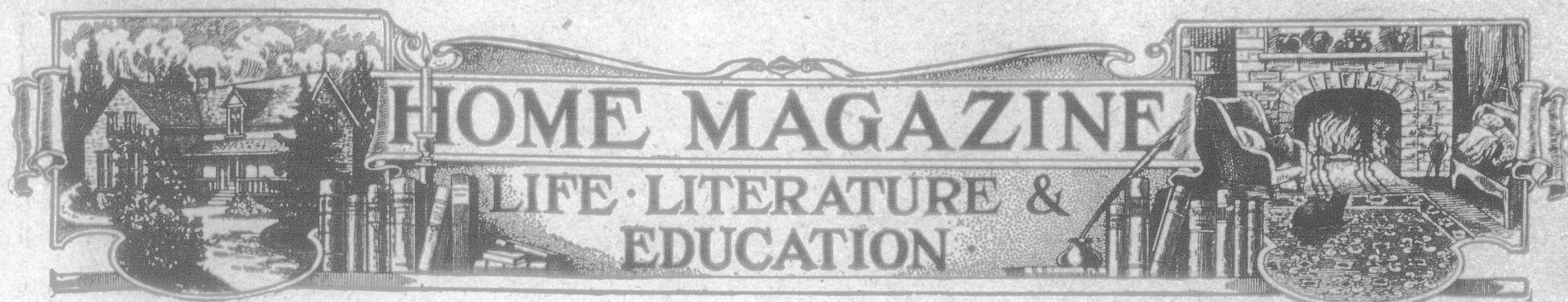
The padre accordingly drew a table with writing materials up to the bedside, but Jock was so tongue-tied that he found it impossible to begin.

At last the padre said, "Come along now, we must make a start as I'm in a hurry. What do you want me to say?"

Jock made no answer.

"Well," said the padre, "shall I begin, 'My dear wife'?"

"Aye," came Jock's reply, "pit that doon. That'll amuse her."



### Do You Remember?

BY ETHELWYN WETHERALD.

Do you remember the drive we took,  
Years ago, in the early fall,  
When the moonlight lay like the visible  
look  
Of God, deep brooding over all?

The prairie had broken into bloom  
Of golden-rod, like a web unrolled,  
And there wasn't a tree to cast its gloom  
Over all that lustrous sweep of gold.

Never a house for miles and miles  
Save our airy castles' columns and  
towers,  
That rose in dimly magnificent piles  
Above a foundation of moonlit flowers.

Miles and miles through the loneliness,  
A boy and a girl and a slow, slow  
steed,  
The young hearts fluttering to express  
Their highest thought and their deepest  
need.

No hill of hardship, no vale of despair,  
But a golden plain and a golden sky.  
We felt that life was thrillingly fair,  
And cared not to ask the reason why.

Ever so long ago, and we—  
How have we drifted each from each!  
The road to the height where we longed  
to be  
Is all untraversed by smile or speech.

But still you remember that vanished  
year  
When we rode alone in the smile of  
God,  
And all of our wealth on this mortal  
sphere  
Was poetry, youth and golden-rod.  
—Sel.

### Training Little Children.

Helpful Plays Can be Carried on, While Mother is Busy With Her Household Tasks.

[Suggestions by mothers who have been kindergartners. Issued by the United States Bureau of Education, Washington, D. C., and the National Kindergarten Association, 8 West Fortieth Street, New York.]

BY MRS. PRINCESS B. TROWBRIDGE.

Often mothers say to me, "Don't all the things you do with your children take most of your time?" By no means. I am a mother of three, and do all my own work, except washing and ironing, and I have to do sewing without end. A busy mother will make suggestions which can be carried out while she is busy at her household tasks. Stories may be told. For instance, baking will suggest the story of "The Gingerbread man." This can be found in "Best Stories to Tell to Children," by Sara Cone Bryant. Paring an apple or a squash makes the opportunity to tell about the seeds hidden in their cradle, how in the winter they go to sleep, and so on. Make a whole story of it. A few days ago I told my 3-year old baby this story and sang to her:

I know of a baby so small and so good,  
Who sleeps in a cradle as good babies  
should.

Sleep, baby, sleep.

I know of a mother so kind and so warm,  
Who covers this baby from all cold and  
harm.

Sleep, baby, sleep.

Several days later we had another  
squash to prepare, and immediately  
she said, "Mother, sing about the  
baby." Later, on request, she told her  
older brother and sister the story of  
the seed babies.

It well is to make much of holiday

celebrations. Have the children pre-  
pare little gifts for a birthday. Per-  
haps it may be only to draw a picture.  
On Valentine's Day we always make  
valentines. Use scrap pictures and  
paste them on colored cardboard. Or  
use paper doilies, cutting out the cen-  
ter and pasting on a piece of cardboard,  
with an appropriate picture under-  
neath. This makes a pretty little valen-  
tine of paper lace. Cut out hearts of  
red cardboard or paper and string  
them together in graduated sizes, on  
red ribbon or twine.

At Christmas time even the two-year-  
old can make something. A simple  
matchholder may be made as follows:  
Cut from cardboard a circle about four  
inches in diameter. Cut a slit one-  
third of the diameter at each end.  
Fold the lower half upwards, turning  
the cut edges in and pasting them to  
the upper semi-circle to form the holder.

To make a match scratcher cut a  
piece of sandpaper any desired shape and  
paste on cardboard. A Christmas picture  
or bell may be pasted at the top of the  
cardboard. Penny calendars can be  
used by the children in endless ways.

Mats for the dining table are also  
easily made. Cut a six-inch circle of  
cardboard with a circular hole in the  
center, and wind with raffia. Picture  
frames can be made in the same way,  
cutting the cardboard any shape de-  
sired. There are endless things children  
can make with water colors or crayons  
and cardboard, using colored paper  
and the Perry pictures. Perry pictures  
illustrating all sorts of interesting subjects  
can be bought for one cent each. A

Let me urge fathers as well as mothers  
to enter into the life and play of their  
children. For only when the father lends  
his aid in the process of child training  
can there be perfect unity. By working  
together mother and father can lead the  
children to understand the life about them.  
They can teach them to know and to love  
nature. They can direct the emotions,  
develop the intellect and strengthen  
the will. And as a result the children  
will naturally come to feel and under-  
stand the Divine love which lies only  
half concealed behind all things.

## Hope's Quiet Hour.

### Next Station—Salem!

After that also King of Salem, which is, King of Peace.—Heb. 7:2.

You need not study the context of my text to-day. I have only put it there to remind you what "Salem" means.

A few days ago I was on a train near  
Boston and I heard a man behind me say  
to a companion: "Next station—Salem!"  
The text given above flashed instantly  
on my memory and the words sounded  
to me like a beautiful message from God.  
"Next station—Peace!" to those men  
now struggling along the way of war.  
Peace on earth, or—after that also (that  
station-gate of Death) a meeting with  
the King of Salem—the King of Peace.

(there are books to suit all tastes in the  
library) or writing or working. Two  
of our number are dubbed "the farmer-  
ettes", and they were working in the  
garden while the rest slept, and came to  
breakfast in their khaki working dresses.

Do you think the guests go about with  
long faces and hushed voices? You  
should see the happy faces and hear the  
jolly laughter which echoes through the  
living-rooms and down the long tables  
at meal-times. Long faces! Why, if it  
were not for the magazines, newspapers  
and war-books in the library we might  
almost forget the war entirely and fancy  
we had already reached the next station—  
the New Jerusalem, the Vision of Peace  
eternal.

A tablet in the hall informs each guest  
as she enters that the House is called  
"Adelynrood" in memory of Adelyn  
Howard and all companions and friends  
who, having shared our common life  
and worship, do now rejoice in the more  
perfect vision of the face of Christ.

Rejoice and be glad with them all ye  
that love them,  
Rejoice for joy with them all ye that  
mourn for them."

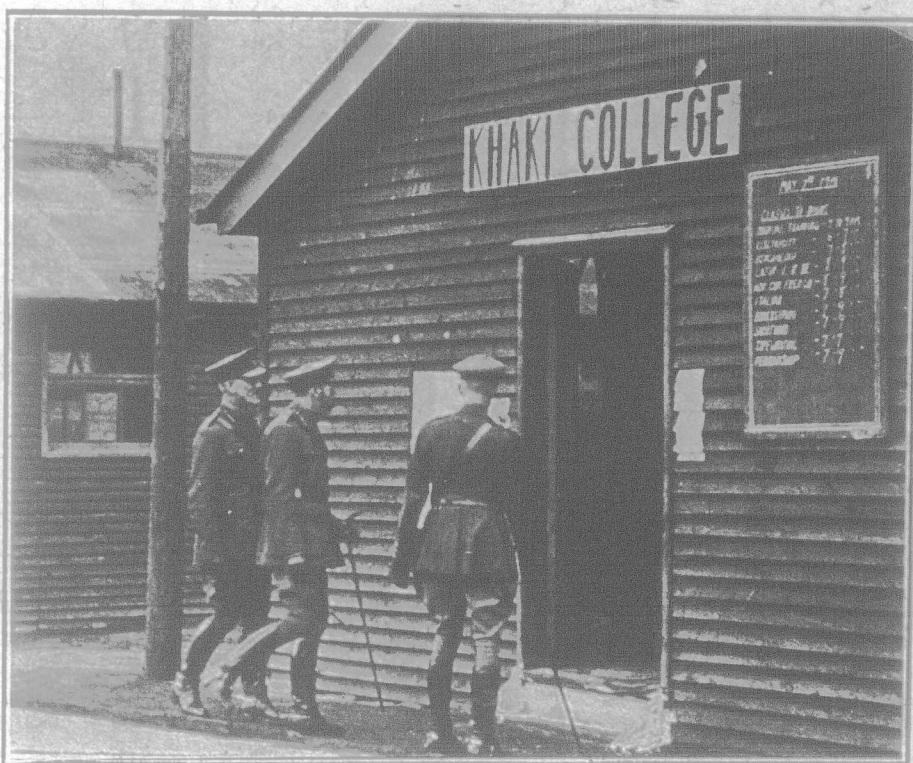
To-morrow, July 30, we shall carry out  
that request and celebrate with rejoicing  
the 20th birthday of Miss Adelyn Howard,  
who was "born into Life Eternal" July  
30, 1898. Her friend, Miss Morgan,  
who built this Rest-House, has written  
in a little book called "Adelyn's Story,"  
this explanation of her action.

"It is because I want her never to be  
forgotten but to be always remembered  
in her house through many coming  
seasons and the passing years, and that  
from the beside of her grave just as it  
did from her beside while on earth shall  
always spring joy out of pain and love  
to men, that I have put my whole heart  
into the building of Adelynrood and I  
am writing this for you."

It is written for you—for each one who  
reads the inspiring message—the story  
of a happy warrior of God, who used  
her "rood" (cross) for a staff to help her  
on her way and a banner to encourage  
dispirited companions of the Cross.  
Through suffering from hip disease, and  
shut in with God, her room was a centre  
of brightness and healthy interest in all  
questions, local or world-wide.

Miss Morgan writes: "For her room  
at the old Adelynrood" (not this building,  
which is so big and beautiful) "I chose  
as her especial memorial a picture of an  
apple orchard in the full white bloom of  
spring against a blue May sky. It has  
an inscription with her name and the  
date of her birthday into Paradise, with  
a text from her favorite Book of Revela-  
tion, 'They shall walk with Me in white;  
for they are worthy.' Is not that an  
inspiration to us all? In these days of  
eager service we must not forget that the  
highest privilege coveted by a friend of  
Christ is to walk with Him in white—  
and that privilege can be enjoyed any-  
where; in any post on the great battle-  
field where the Great Captain places  
a soldier He is ready to share the watch.

Yesterday evening we gathered in a  
big open-air room—shut in only by wire  
gauze, so that the wind (symbol of the  
Holy Spirit) could blow through with  
refreshing coolness. There we listened  
to a lovely young woman—a doctor—who  
is going as a medical missionary to China.  
She said that many of her college friends  
wondered at her choice—for she had been  
offered work in France—and she ex-  
claimed, with an eager smile on her face,  
"Of course everybody wants to go to  
France!" She evidently thought that one's  
natural instinct was to choose the post  
of greatest danger if it was also the post  
of greatest service. But the medical  
mission for training Chinese women  
doctors in Canton, which was begun about  
15 years ago and has already sent out



Khaki College.

The college boys at the front have not altogether given up college work while at the big war. Back of the lines is this "college," in which work may still be carried on. Sir Robert Falconer, President of the Toronto University, recently went over to France to give some lectures. The illustration shows King George inspecting the very unique school.

catalogue will be sent upon request by  
the Perry Picture Co., Malden, Mass.

Children never tire of making chains  
for decorating purposes out of colored  
paper. Take a strip of paper about four  
inches long and half an inch wide and  
make a ring by pasting one end over  
the other; slip another strip through  
this ring, and paste ends together, and  
so on. Our children make paper chains  
for one another as birthday presents.  
They always bring delight. White and  
colored chains can be used as Christ-  
mas tree adornments and give the added  
pleasure of letting the child feel he has  
helped make the tree beautiful.

Then the train passed through the  
place which is called "Salem" in the  
railway timetables, and soon after I  
arrived in a place which deserves the  
name of "Peace", though it is really  
called "Adelynrood."

Here many women come and go—  
women who consider it their highest  
joy to be friends of Christ. Three times  
a day they gather in the beautiful chapel  
to speak to Him. They are working for  
Him in various parts of His vineyard, but  
here they have been invited to come  
apart with Him and rest awhile. Through  
the big living rooms, or out in the grounds  
they gather in groups or sit apart reading

nearly 100 trained workers, seemed to her a greater call from God. In all human probability the mission would have to stop the hospital work which was so tremendously needed, unless she put her strong young life into the task. The work in France would certainly go on without her, so she had set her face towards China, and asked our prayers (will you pray also?) to speed her on her way. She told us that Chinese women would rather die than be approached by male doctors, so there was tremendous need of women doctors. Her only fear is that the pressing character of the work may crowd out the quiet times so needed for gaining daily strength from God. She is also determined to do real mission work, reaching sick souls as well as sick bodies. This morning I had a little chat with her and she told me that she wanted to be an artist, but did not see how that could help her much in missionary work; so she laid aside that ambition and began her medical studies, on purpose to go out as a medical missionary. If you could see the happy face of Doctor Mildred Jenks, and hear her lighthearted laughter, you would think that the prospect of being a missionary was a great adventure, full of thrilling interest. Yet she has studied the situation, and knows that much of her work in China will be as dull as the soldiers find the long weeks of inaction in the trenches. For one thing, she has to begin by studying the language—no easy job!

But to return to the story of Adelyn Howard's victorious life. During the last three years on earth she suffered intensely, but tried to hide her pain, refused the help of opiates, and kept her heavy cross as a secret with her Lord. Her eyes were turned towards Paradise, and visitors—catching her spirit—often entrusted her with messages to give to friends in the land beyond death. She had received an intimation that the next station for her was Salem, and her thoughts were bright with anticipation.

Miss Morgan writes in her little book: "A mother came in one day and sent a message to her little baby, who must have been quite grown up by that time in the other life, but a little baby is always a little baby to empty mother arms. Adelyn said to me, 'I try specially to remember messages that mothers have sent to their little children whom they have never seen grow up'." During her last days on earth a bag for contributions towards a hospital (which she was anxious to have built in her home town) hung beside her bed, with this appeal beneath:

"This learned I from the shadow of a tree Which to and fro did play upon the wall, Our shadow selves, our influence may fall Where we can never be."

To which she added the words: "So through the sunshine of God's love May this my shadow prove."

She announced that any contribution, from one cent to one hundred, would give her real delight. Is it any wonder that the hospital soon became an accomplished fact?

Every Saturday evening the guests in Adelynrood sing her favorite hymn: "For all the saints, who from their labors rest." Though I have never seen anything but the pictured face of that glad saint for whom this House is named, I felt as if she were a personal friend as I joined in that grand hymn of triumph last Saturday.

The Presence of Christ is not easily forgotten in this atmosphere, where before every meal we stand and sing together the beautiful "Adelynrood Grace":

Brother and Lord, among Thy children sitting,  
Lord of our toil, Bestower of our rest,  
Lord of our feast, to Thee as is most fitting,  
Praises and thanks we bring, our whole heart's best:  
JESU, be Thou our Guest.

The King of Salem, Who is King of Peace, is certainly the honored Master of this House. As I sit on the balcony (where my bed stands every night) and tell you about this restful, inspiring break in my everyday life; as I lift my eyes and see the grass, trees and sky (there are no houses to obstruct the view of God's handiwork) it seems to me that the promise which came to me on the train has been wonderfully fulfilled: "Next station—Peace." But it is not

yet the real Salem—only a station on the line of life—in another week I expect to go back to my little flat, No. 6 West Ave., Toronto.

DORA FARNCOMB.

### The Beaver Circle

[Rules for Beaver Circle: Write on one side of the paper only. Do not use pen-name. Put name, age, class and address at end of letter.]

### The Circus Elephant.

BY CHARLES ALBERT FOTH.

The hot sun glares down the dusty street  
As onward swings the line of tramping feet;  
Chariots, encroaching nervous dancing heels,



Look Like Busy Beavers, Don't They?

Roll gorgeously along on rattling wheels.  
In glinting tinsel suits of red and green  
On horses gaily decked the troop is seen;  
Bands blare their fear-inspiring tunes  
While, mouthing at the crowd, droll pantaloons  
Mark out the timid ones for saucy gibe,  
Or with meaning look some deviltry describe.

"Alas for me! how little did I know  
Back in the jungle, of such weary woe,—  
That in my old age I should tramp the streets,  
Beg from the children fragmentary sweets,  
Bow, scrape and plod before a gaping throng  
And to this flimsy world of show belong!  
What memories are mine! What years fled by

Life's true delights of which one never tires!

Alas for me! how little did I know  
Back in the jungle, of such weary woe!"

### Elephants' Curious Teeth.

Whoever has looked inside an elephant's mouth has seen a strange sight. Elephants have no front teeth, and they never eat flesh or any food that requires tearing apart: Eight teeth are all they have, two above and two below on each side, huge yellow molars as wide as a man's hand. Over these hay and fodder are shifted by the queerest, ugliest tongue in the whole animal kingdom, a tongue that is literally hung at both ends, having no power of movement except in the middle, where it shifts back and forth from the side, arching up against the roof of the big mouth like a wrinkled pink serpent. Elephants, like human beings, have two sets of teeth.

Anyhow, a handful or a real big pile;  
Pack 'em, sonny, in your bag, and smile!  
Smile! smile!

When you meet another traveller in the rain,  
Greet him with a cherry grin and just explain  
Your partic'lar little wheeze  
So that he may make it his,  
This will help a lame dog over many a stile;  
"Pack your troubles in your kit-bag!  
Smile! smile! smile!"

When you come to camp and by the red fire stand,  
When you know the long night's done and dawn's at hand,  
Open then your kit-bag wide,  
Take a cautious peep inside,  
And you'll find you've carried every toilsome mile  
Just an empty kit-bag! Trouble can't stand Smile!  
—BY CHARLES INGRAM STANLEY.

### A Game for Summer.

"Target toss" is recommended by "Good Health" as a lawn game. Draw three circles on the grass—the first one to be one foot in diameter, the second two and a half feet, the third three feet. Stand about ten feet away from the edge of the outer circle. A bean-bag is used to toss into the circles. If it enters the small circle, twenty-five is counted. The second circle counts fifteen, the third five. Any number of people may play.

### The Little Tune.

I made a little tune one day,  
And, oh, 'twas very dear;  
I tried to sing it in the woods,  
The birds came out to hear.  
A saucy squirrel coughed and laughed  
Upon the chestnut bough;  
I think he liked the little tune,  
I wish I had it now.

'Twas all about the dancing brook,  
The silver summer rain;  
I sang it high, I sang it low,  
I hummed it o'er again.

Then in the parlor down I sat  
And tried so hard to play;  
That darling little tune of mine  
Jumped up and ran away.

My fingers fumbled, stiff and queer,  
And bumped each other so;  
And when I tried the dancing brook,  
The big keys grumbled low.

I've never found my little tune;  
I think of it each day;  
I wonder why the darling thing  
Got scared and ran away?

—By Kate Louise Brown.

### Senior Beavers' Letter Box.

Dear Puck and Beavers.—As I saw my first letter in print I thought I would try again. This time I am going to tell you what work I have been doing this summer in haying to help my daddy.

I live on a farm of 40 acres. I have a flower-bed and some garden to look after. This summer I have been trying to do my best to help my daddy. When he goes to rake the hay I take a fork back to help put it up in bunches. I don't have to but my daddy doesn't care. Every morning I get up at five o'clock and milk a cow.

I go out in the field and drive the horses, and when we come up I drive them on the slings. When the load is off I get the sling ropes and put them on the back part of the wagon and put the fork on while my daddy is up in the mow moving away the hay.

I am only twelve years old, and this summer I passed into the junior fourth book. I have passed every examination since I have started to school, and if I have no bad luck I will be through school by the time I am fourteen years of age. I will close with a riddle, wishing to see my letter in print.

Riddly, Riddly, Randle, Row,  
My father gave me some seed to sow,  
The seed was black, the ground was white,  
Riddly, Riddly, Randle, Row.

Ans.—Ink and paper. Violet Shaver.

Port Dover, R. R. No. 2, Ont.

Dear Editor.—I wish to become a member of the Beaver Circle, and this is my



Feeding the War Calf.

In centuries since I first heard the lion's cry,—  
Back in those scorching wilds of Africa—

Youth with its freedom and its happy ways!  
How like a dream seem all those vanquished days,  
The smell of forest depths whose cool retreat

Invited sanctuary from the noontide heat,  
The sparkling rivers fresh for bath or drink,  
All things to satisfy the heart's desires,

When no ray of sunlight pierces darkness through,  
When with stiff and stubborn back  
You ascend the rugged track,  
Don't go growling every inch of each long mile:

"Pack your troubles in your kit-bag!  
Smile! smile! smile!"

Pack your troubles in your kit-bag!  
Pack 'em tight!  
Don't go counting each one over! They're all right!

Like as not you'll find they are  
Smaller than you thought them, far.

first letter. My father takes "The Advocate" and likes it fine. I also like to read the Beavers' letters, they are very interesting. We have lived on a farm all our life. I am fourteen, I tried the Entrance this year. I have a brother in France two years now. He has never been wounded. We have three little kittens; their names are Marne, Verdun and Vimy. I called them after three great battles. Well, as my letter is getting long I will close with a riddle.  
In a fountain crystal clear,  
A golden apple doth appear,  
There are no windows in this stronghold  
Yet thieves break in and steal the gold.  
Craigmont, Ont. EDITH BELLISLE.  
(Age 14.)

Little Bits of Fun.

"Mary," said the teacher, "What is the spinal column?"  
"The spinal column," said Mary, "is what my head sits on one end of and I sit on the other."  
STANLEY.

Tommy saw a small tug towing a large ship, and heard the tug whistle loudly.  
"Oh, Papa," he cried, greatly excited.  
"See! The big boat's got the little one by the tail and it's squealing."—Mrs. L. P. LAMOREAUX.

"Mamma!" said a little boy, after coming in from a walk, "I've seen a man who makes horses."  
"Are you sure?" asked his mother.  
"Yes," replied he; "he had one nearly finished when I saw him; he was just nailing on its back feet."—Sel.

Bright Boston Pupil—"What is the meaning of 'alter ego'?" asked the teacher of the beginners' class in Latin. "It means the 'other I,'" responded a pupil.  
"Give me a sentence containing the phrase."  
"He winked his alter ego."—Boston Transcript.

Grace's uncle met her on the street one spring day and asked her whether she was going out with a picnic party from her school.  
"No," replied his eight-year-old niece, "I ain't going."  
"My dear," said the uncle, "you must say, 'I am not going.'" And he proceeded to give her a little lesson in grammar: "You are not going. He is going. We are not going. You are not going. They are not going. Now can you say all that?"  
"Sure I can," responded Grace quite heartily. "There ain't nobody going."—Selected.

Bobby was enjoying the roses in grandmother's garden. All went well until he chanced to poke his wee freckled nose deep into the heart of a blossom which sheltered a great buzzing bee. With a howl of terror, Bobby fled to his grandmother's skirts. When his sobs were quieted, he explained: "Those are very wild roses in your garden, grandmother. One of them gr-r-rowled at me drefly."

Their parrot had died, and young Master Tommy, with his little sister Jennie, had just concluded the funeral service over the grave of their feathered pet.  
"I s'pose Polly is in heaven now?" remarked Jennie, tearfully.  
"Yes," returned Tommy; "I s'pose she is."  
"She's got wings, but she wouldn't be an angel up there, would she?" inquired the little maid, anxious about the bird's present status.  
"Oh" cried Tommy; "she wouldn't be an angel; only people is that."  
"Then what do you s'pose she is now?" persisted his sister.  
Tommy thought for a moment. Then the light of inspiration dawned on his beaming countenance.  
"I s'pose Polly is a bird of paradise now," he announced, joyfully.—"Waif."

Our Junior Beavers.

The Good Square Cow.

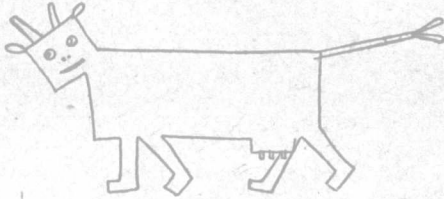
BY DAVID M. CORY.

If a cow slips in a meadow  
Of clover pink and sweet,  
Do you think she'll break the buttercups  
That grow about her feet?

The cat-tails are not really tails  
Of pussy cats, you know;  
They're only just a kind of grass  
That in the meadows grow.

The tiger-lily isn't fierce,  
Although her name is so;  
She's just like all the flowers  
That sweetly nod and blow.

Now, children, get a ruler  
And a pencil sharpened fine,  
And see if you can draw a cow  
That's just as nice as mine.



Junior Beavers' Letter Box.

Dear Puck and Beavers.—My father has taken the Farmer's Advocate for a number of years. I am not going to school at the present time as we are having our summer vacation. I am in the Junior third class, and am 10 years old. I like going to school. Our teacher's name is Miss Pyne and I like her fine; she is a good teacher. Isn't this a terrible war? I have a brother in France; he is there since March. We get a letter from him nearly every week or two.

On the 24th of May my sister and her chum and I were fishing. I caught two fish and my sister and her chum did not get any. It was the first time my sister ever was fishing.

I have a little garden; it is doing nicely. Our teacher took a snapshot of my garden and me.

I think I will have to bring my letter to a close. Hoping the w. p. b. is sick when this arrives, and hoping to see my letter in print.

FLORENCE HAID.

R. R. No. 3, Wallenstein, Ont.

Dear Puck and Beavers.—It is a long time since I have written to your Circle, but I had scarlet fever and I could not write then.

I have a plot of carrots and asters to look after, and this morning I hoed 2 rows of mangels. I have a brother training in Toronto. He is not old enough to go overseas yet. My three sisters were thinning apples in the orchard this afternoon; they have been working hard all holidays. I am glad to say I passed my exam's this year. I hope all the other Beavers did. I will be in the Sr. II when I go back to school. Our teacher's name

will be Miss Ward after holidays. I hope the w. p. b. is getting a drink when this arrives. I remain,  
HELEN GILBERTSON, (age 9 yrs.)  
R. R. 2, Simcoe, Ont.

Dear Puck and Beavers.—This is my first letter to your Circle. We take the Farmer's Advocate and like it fine. I am raising ducks to help win the war. I had a pet goose last summer and I have two pet kittens this year. I have a garden all my own. I have lettuce, radish, carrots and potatoes in it, and I hoe it all myself. I am in the first book at school. I will close with a riddle.

Up the road I saw a load of one-eyed soldiers. Ans.—A packet of needles.  
LUELLA TOMLINSON, (age 8 years.)  
R. R. No. 1, Seagrave P. O.

[What a busy little Beaver you are, Luella! We wish you success with your garden and ducks, but don't let the ducks get into the garden. You write a nice neat little letter for a "first-book" lassie.—Puck.]

Dear Puck and Beavers.—This is my first letter to your charming Circle, so I thought I would try and write one. I am ten years old next month and go to school every day. I never missed a day all last winter. I have one brother and one sister; their names are Harold and Margaret. Papa takes "The Farmer's Advocate" and thinks it is a great paper. I am in the first reader, and there are four in my class. Isn't this war terrible? I have one uncle in the trenches, and I wish the war was over. Papa drives the mail every day. Well, I guess I have wrote enough for this time. Hoping to see this letter in print, and wishing the Beaver Circle every success.

JEAN P. AFFLECK.

Centerville, P. E. Island. (Age 10.)

Dear Puck and Beavers.—This is my first letter to your Circle. I am going to tell you about my pets. We have a dog; his name is Jack. We got him when he was a little pup, and now he is a very big dog. He is very clever and playful and a good watch dog. He won't let a stranger in the house if we are all away, but he is not cross if we are home. I had seven pretty little kitties, I got harness for five of them; and I have a pet chicken. I will close with a riddle.

Why is a hill like a pill? Ans.—One is hard to get up, the other is hard to get down.  
MARGARET MCKENZIE.  
Campbellton, Ont. (Age 8.)

Beaver Circle Notes.

Special mention for neat, well-written, well-spelled, well-punctuated letters.—Jean Affleck.

From this time henceforth "special mention" will be made of the names of those who write outstandingly interesting, helpful or neat letters.

Alice Taylor, Mansfield, Ont., wishes some of the Beavers to write to the Circle "who are helping in the gardens for the Allies' great cause."—We should all like to see such letters.

Several letters had to be left out because they were written on both sides of the paper, which is very difficult for the busy printers.

The following wish some of the Beavers to write to them:

Seniors.—Ivy Graham, R. R. 1, Grenville, Ont.

Juniors.—Dorothy Saunders, (age 9), R. R. 3, Jarvis, Ont.; Mary Jackson, (age 9), R. R. 1, Malton, Ont.

Honor Roll.

Seniors.—Edna Saunders, Ivy Graham, Matilda Falk.

Juniors.—Dorothy Saunders, Mary Jackson.

Seniors.—Gladys McIntyre, Kathleen Lee; Jack Keller, Myra Davis.

Juniors.—Mary Trumbull, Joe Dodge, Alice Larkin, May West, Reggie Holmes.

Riddles.

What has one foot and its heart in its head? Ans.—A cabbage.

What has four legs and cannot walk? Ans.—A stove.

Sent by Matilda Falk, R. R. 1, Gads-hill, Ont.

What has hands and can't wash its face? Ans.—A clock. Sent by Gladys McIntyre.

A white house full of meat,

Ans.—An egg.

I went to a tree with apples on, I took no apples off, I left no apples on.

Ans.—There were just two apples on the tree; I just took one off and that made just one apple off and left one apple on. Sent by Kathleen Lee.

A plumber and a painter were working in the same house. The painter arrived late and the plumber said to him, "You're late this morning."

"Yes," said the painter, "I had to stop and have my hair cut."

"You didn't do it in your employer's time, did you?" asked the plumber.

"Sure, I did," said the painter; "it grew in his time."



A French General Returns the Salute.

Three Canadian lads in France on the left. Canadian War Records.

## The Ingle Nook

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

### On "Color."

I suppose that, in choosing the colors for either clothes or house-furnishings, we should be permitted to select just whatever gives us most pleasure. After all we are the ones who have to live in the houses and walk about in the clothes, and really it shouldn't be anyone else's affair if we elect to go about in a cerise dress and live in a sky-blue room.

At the same time it must be remembered that certain standards of good taste have become recognized, and it is well to know what they are. By a little consideration of them and experimenting with them, we may possibly approve, and, in time, even find our own tastes becoming finer.

A very few women, it is true—women with that undefinable thing called "style", about them—may occasionally venture upon bright colors in clothes but even they are almost sure to venture upon them "gingerly",—daring to use just a flash of them on the hat, or in tie, or scarf, or sweater coat.

As a rule it is a savage taste, that glories in bright, crude colorings—except in the few places for which they are peculiarly suitable. Savages and wild primitive people everywhere love unadulterated greens, and blues, and orange and red, or mixtures if them in violent plaids or stripes, whether that mixture be carried out with any regard to harmony or not. But the cultivated taste recoils from these crudities, just as the ear trained to music recoils, almost with pain, from a discord.

The cultivated taste in seeing demands, in short, softness of tone (for there is tone in color as well as in music), delights in indescribable nuances, and insists on harmony always.

—Thus, there is a crude pink that delights the savage.—My lady who understands colors and combinations of color, shudders at the sight of it, but becomes ecstatic over pale shell pink and grayish "old" rose.

Similarly "Paddy" green, except in small quantity, is a horror to the trained eye, while "reseda" and quiet olive—combined with complexions to suit—are a joy forever; bright red is a color only to be worn in touches, while some of the tones of mahogany and "wine" may be ventured upon for whole costumes by the "right" people; bright ball blue is unsafe, while "Alice" and "Copenhagen" shades may be worn with impunity, as may always "Navy" blue and the very beautiful dark shade known as "midnight". There is one brown that is harsh and ugly; several, including "Nigger", a soft golden, and tobacco shades, are quite desirable. Clear chrome yellow is seldom to be attempted, except for evening dress, while the dull shades and all the tones of "cream" may be entirely safe. Purple may be a startling horror, but the tones of it is "prune", "heliotrope" and "mauve", are usually quite beautiful if discreetly used.

Black, white and gray are, of course, invariably quiet and in good taste, although the complexion must be consulted—as in case of every other color—before they are selected, usually black and gray call for white or cream next the face, and, perhaps a touch of brighter color in embroidering or jewelry.

Brown, rather oddly, simply insists for its best effect, on "everything to match". Hat, dress, coat and shoes should all be of the self-same color, although, very likely, a touch of vivid contrast—say an ornament on the hat or a flower pinned to the fur (if in winter) may be needed to prevent an effect of deadness. In choosing this contrast it is well to remember that golden brown calls for a bright deep yellow, and "nigger" brown for deep old rose. Brown is pre-eminently the color for fall and winter. It looks well when the leaves turn to autumn tints, and holds its own until winter has quite ended. Green, however, in the darker tones of olive and myrtle, follow as a close second, while "prune", "murrain", "wine", dark gray, black and navy blue are all good winter colors.

Colors dedicated to spring and summer are the blues, light grays, white, cream, and all the light shades of pink, green and yellow; with, for cool days, navy, dark gray, and black.—This summer, for instance, dresses of black Duchess satin or crepe de chine, with white collars and cuffs are, as the dressmakers say, very "good", especially if fairly short and worn with white kid or buckskin pumps or Oxfords and white silk stockings.

SOME people, while possessing enough taste to prevent them from choosing harsh colors, seem to buy without any regard to their own personal coloring—just as a misguided few buy wall-paper without considering in the least the rugs and upholstery. A red haired woman, for instance, has a perfect obsession for mauve or blue, wearing them on every occasion, quite failing to see that they kill her really beautiful hair. On one occasion a friend induced her to fall back upon a pretty shade of green,—and presto! she was a different woman. But still she returns to the flesh-pots and buys mauve.

It is likely that no red-haired woman could look well in mauve or any of the brighter blues; yet, speaking in general, there is no rule which can be given for securing becomingness. The color of eyes and hair may be some index, but, after all, the hue of the skin must be most consulted. As a rule very dark navy blue is safe for everyone, but it is an exception. Dark women with clear skin have, perhaps, the largest range to choose from; the blues, grays, pinks, greens, browns and heliotropes are all theirs, also black and white, although cream is usually more becoming to a dark person than dead white.

Fair-haired women with blue eyes should, on the contrary, confine themselves to blues, reseda green, black and white, and may, possibly, venture on the light grays if blessed with pink cheeks; while their red-haired and auburn haired sisters simply must, if they would look their best, hold fast to black, white, olive and reseda green, and the warmer shades of brown.

In each case the particular tone of each color must be chosen with reference to one's own especial brand of complexion, a few shades off may make a disastrous difference.

IT is really every woman's duty to make a study of the colors and "lines" that suit her best. She owes that to her friends, who like to see her "look nice".—And it is a study that requires very little time. Everyone has a mirror, and looking in it with critical and comparing eye, once in a while, affords a lesson worth learning. Besides, one may take a cue occasionally from the remarks of one's friends. When two or three people say, in succession, "Why, how well you are looking!" it may be advisable to make note of the color and outline of the clothes one happens to be wearing.

IT has been a real pleasure to get away from war-talk to-day, all the more so since the Allies are now winning so splendidly as I write, on this 27th of July, that the end of the war begins to seem nearer.

And now, having got somewhat on the subject of clothes, I may tell you that we are making arrangements with a new pattern company, and hope to give you fashion pictures again—and a very satisfactory service—in plenty of time for the fall sewing. JUNIA.

### War-Time Cookery.

(From the Food Controller's Office.)

**Johnny Cake.**—One cup cornmeal, 1 cup flour, one-third cup sugar, 1½ cups sour milk, 1 tablespoon molasses, ½ teaspoon soda, ½ teaspoon baking powder, 1 teaspoon salt. Mix and sift dry ingredients twice, and gradually add sour milk. Beat well and bake in a shallow, greased pan, in a moderate oven.

**Potato Biscuit.**—One-half cake, 1 cup milk, 2 cups flour, 4 cups mashed potatoes, 1 egg, ½ tablespoon sugar, 1 level tablespoon butter, ½ teaspoon salt. Baked potatoes are best. Mash enough to make a quart. Place in a bowl; add salt, sugar and butter. Heat 1 cup milk to lukewarm and blend the yeast cake in it, add enough flour to make a sponge—about ½ cup. Set sponge in a warm place, free from draught, to rise. Bring

balance of milk to boiling point and add it to the potato mixture. Then add the well-beaten egg and rest of flour and mix all well. Let rise in a warm place. Butter a baking-dish and drop the mixture in spoonfuls, as the dough should not be handled. Let rise again and bake 15 to 20 minutes.

**Potato Biscuit No. 2.**—Two cups flour, 1 cup mashed potato, 3 teaspoons baking-powder, 1 level teaspoon salt, 1 level tablespoon fat, 1 level teaspoon sugar, liquid to make a soft dough. Sift flour, baking-powder, salt and sugar together. Work fat in, add mashed potato, then milk to make a soft dough. Roll out ½ inch thick, cut into cakes and bake 15 minutes in a hot oven.

**NOTE.**—Potato cakes are best when served very hot.

**Nut Bread.**—Three cups graham flour, 5 level teaspoons baking powder, 1½ teaspoons salt, 1 cup chopped nuts (not too fine) or 1 cup raisins washed and floured. Mix together flour, baking-powder and salt; add milk and water, sugar or corn syrup, and nutmeats or raisins. Mix well and put into a greased loaf pan. Let stand 30 minutes in a warm place, then bake in a moderate oven 40 to 45 minutes.

**To Boil Fish.**—Clean, cut off fins, take out eyes, wrap in cheesecloth and put in boiling water to which have been added salt and a tablespoon of vinegar. The water must not boil vigorously. Allow 10 minutes for each pound and 10 minutes extra for a large fish. When done drain and serve very hot on a hot dish with appropriate garnishes and sauce.

**To Bake Fish.**—Clean as above; rub with salt, fill with stuffing, and sew edges together. Dredge with flour and put a little fat in the pan. Bake every 10 minutes. Cook in a hot oven. Allow 10 minutes for every pound of fish and 10 minutes extra. Garnish and serve with drawn butter or fish sauce.

**Stuffing for Baked Fish.**—One cup breadcrumbs, ¼ teaspoon salt, one-eighth teaspoon pepper, 1 teaspoon chopped parsley, 1 teaspoon onion (grated), 2 tablespoons melted dripping, ½ teaspoon mixed seasoning. Add milk if a moist dressing is required.

**Garnishes for Fish.**—Parsley, sliced lemon, cress, pickle slices, etc., may be used.

**Fish Sauce.**—A white sauce may be used, or egg may be added to it. Also chopped pickles, parsley, etc.

### Some Pickle Recipes.

**Small Cucumber Pickles.**—Three hundred very small fresh green cucumbers, 1 cup salt, 2 sticks cinnamon, 2 cups sugar, 1 tablespoon cloves, 1 tablespoon allspice (both whole), 3 bay leaves. Wash cucumbers, cover with cold water and add the salt. Let stand over night. In the morning drain and dry with a very clean towel. Put in a preserving kettle, and add alternately a cup of cider vinegar and a cup of water until cucumbers are just covered. Add the sugar, spices and bay leaves and cook just long enough to be tender. Seal in glass jars.

**Mixed Pickles.**—Two quarts green tomatoes, 2 quarts ripe tomatoes, 3 green peppers, 1 large ripe cucumber, 1 bunch celery, 3 large onions, 2 tablespoons mustard, 1 small cabbage, ½ cup salt, 3 pints vinegar, 2 lbs. brown sugar. Wash and prepare vegetables and chop all together, cover with salt and let stand over night. Drain in morning and when mixture is fairly dry add the vinegar, sugar and mustard mixed together, and boil 1 hour. Seal in bottles.

**French Pickles.**—One peck green tomatoes, 6 large onions, 1 cup salt, 3 qts. vinegar, ¼ lb. white mustard seed, 2 lbs. brown sugar, 1 tablespoon celery seed, 1 tablespoon ground cloves, 2 qts. water, 1 tablespoon each of ground ginger, ground allspice, ground mustard and ground cinnamon, ¼ to ½ teaspoon cayenne pepper. Slice tomatoes and onions and spread on plates. Sprinkle with salt and let stand over night. Drain and boil gently for 20 minutes in 1 qt. vinegar and 2 qts. water, then put in a colander to drain. Take 2 qts. vinegar, add the spices and vegetables and boil slowly ½ hour. Seal while hot. Half this quantity will do for a small family.

**Chili Sauce (Uncooked).**—Twenty large tomatoes, 4 onions, 1 cup sugar, 2½ cups vinegar, ¼ teaspoon red pepper, 5 teaspoons salt, 2 teaspoons cinnamon, 2 teaspoons cloves, 1 tablespoon white

mustard seed. Scald and peel tomatoes; chop and drain over night. Add other ingredients.

**Chutney.**—One and one-half lbs. apples, 1¼ lbs. onions, 1 lb. brown sugar, 1 lb. seeded raisins, 2 oz. ginger, 2 oz. mustard seed, ½ oz. cayenne pods, 1 oz. garlic, 3 to 4 pts. vinegar, 1 teaspoon salt. Peel apples, onions and garlic, and chop apples and onions coarsely. Mince the garlic fine (it may be omitted). Cook with the salt, sugar and vinegar until soft and press through a ricer, or very fine colander. Add the raisins, cut in bits, the thinly sliced ginger, the crushed cayenne pods and mustard seed. Mix well and leave in a warm place until morning, then seal in wide-mouthed bottles.

**Cucumber Catsup (Uncooked).**—One dozen large cucumbers, 2 medium onions, 2 tablespoons grated horse radish, 1 teaspoon sugar, ½ teaspoon cayenne, 1 teaspoon salt, ½ teaspoon white pepper, vinegar. Pare good-sized green cucumbers, remove seeds and grate fine. Add grated onions, horseradish, sugar and spices, and cover with cold vinegar. Put in glass jars and seal.

**NOTE.**—Always sterilize jars before putting anything in them.

### Methods for Keeping Vegetables and Fruits.

#### Canned Sweet Corn.

Take the corn while the kernels are still very small, otherwise cut off the tips of the kernels and with the back of the knife press the pulp from the rest of the kernel. Use only this pulp for canning. Fill the jars with the kernels cut from the cob or with the pulp; fill to overflow. Set the jars on a folded cloth laid over the rack in a steam cooker or in a boiler fitted with a rack; put the covers in the kettle beside the jars; put lukewarm water into the kettle to the height of the rack or higher; cover the kettle and let cook three hours after boiling begins. Fill the jars to overflow, using one of the jars of corn or simply boiling water, adjust the rubbers and covers and let cook three-fourths of an hour. Seal without disturbing the covers.—American Cookery.

#### Apple, Plum, Peach and Quince Butter.

Wash the fruit thoroughly, cut it in pieces, cover it with water and cook until soft; rub it through a coarse sieve and measure the pulp. Add half as much brown sugar and a tablespoonful each of ground cinnamon and cloves to every four cupfuls of pulp. Simmer till thick and store in jars. Sterilization is not necessary. The apple butter is improved if boiled in sweet cider and equal parts of apples and quinces may be used in making quince butter.

The pulp from jelly, if not squeezed too dry, may be used in making these butters.—Pictorial Review.

#### Save the Elderberries.

Elderberries may be canned, just as any other fruit. Add a little lemon to give flavor.

Here is the recipe for Elderberry Chutney.—Three quarts elderberries, 3 onions, 2 teaspoons whole cloves, 2 tablespoons ground ginger, 1½ cups brown sugar, 2 cups seeded raisins, ½ teaspoon red pepper, ½ teaspoon mace, 2 teaspoons mustard seed, 2½ cups vinegar, 2 tablespoons salt. Cook till thick and put in sterilized jars.

**Elderberry, Plum or Grape Catsup.**—Two quarts fruit, 1 cup sugar, 1 tablespoon each of cloves, cinnamon and allspice, ¼ teaspoon cayenne, mild vinegar to cover. Cook the fruit in the vinegar until soft. Rub through a sieve, add sugar and spices, cook and seal.

#### New Method of Jelly-Making.

Every one who has ever made jelly knows how uncertain it is, and how almost impossible it is, to make jelly with the ripe fruit usually offered in the market. A new method of jelly-making changes all that, and really perfect, firm jelly can be made if the directions are carefully followed. Most jelly-makers know that the combination of sugar with the pectin in the fruit juice is responsible, in large measure, for the firmness of the finished

peel tomatoes; Add other  
 1 lb. apples, 1 lb. sugar, 1 lb. 2 oz. mustard 1 oz. garlic, 1/2 oz. salt. Peel and chop apples. Add the garlic. Cook with water until soft or very fine. Cut in bits, the crushed seed. Mix and place until wide-mouthed

product; but it is comparatively a new discovery that the presence of fruit acid in sufficient quantity is fully as important as the pectin. This is the reason why under-ripe fruit usually jellies better than the fully-ripe fruit of the same sort. So much for the "why". Now as to the "how" of the new process. Prepare the fruit as usual by mashing and boiling with as little water as may be sufficient to prevent burning. Drip, but do not squeeze, the jelly bag. To the juice add three-fourths of its weight in sugar, and one teaspoonful of tartaric acid to every quart of juice. Bring the mixture to a boil, and pour at once into jelly glasses. This jelly will be firm, and absolutely clear. Then take the pulp and add an equal quantity of water. Boil, and mash with a spoon, and drip again. With the juice so obtained, proceed as before. The second run of juice jellies as readily as before, but the product is not quite so clear. Some fruit, notably crabapples and green blueberries, will give a third run of juice which makes jelly of good texture, but not clear. The secret of the new process is the addition of the proper quantity of acid, and taking care not to boil the jelly longer than five minutes.—Suburban Life.

**Freshly Hulled Corn.**  
**A DELICIOUS FOOD.**

In Grandmother's mother's house freshly hulled corn was a most popular breakfast and supper dish, and it is now being prepared in many homes and meeting with a very generous welcome. Freshly hulled corn is far more delicious than any commercially canned, for freshness is as essential to hulled corn as it is to June peas.

It is usually eaten in milk and is a most wholesome, economical and nutritious food, suitable for children and adults. The food value of hulled corn is: Water, 74.1%; fat, .09%; mineral matter, .5%; protein, 2.3%; carbohydrates, 22.2%; calories, per pound, 490.

There is an undeniable tendency to revert to the delicious and wholesome foods of the last century and in this hulled corn is rapidly becoming most popular. The hulled corn vendor is reappearing on the streets and in the markets of southern cities. Many women are finding in its preparation a gainful occupation, for they can easily sell it to their neighbors at a good profit.

To prepare it, dissolve half a ten cent can of Giant lye in a quart of water and dilute to three gallons with more water in a large iron kettle. Put in four quarts of shelled corn and keep slightly below the boiling temperature, until the hulls have started to break. Then put into a large pan of cold water and rub with the hands thoroughly to loosen the hulls. Take off the hulls and scum from the water and add fresh water several times during the simmering. Stir well with wooden spoon. Change the water five or six times and wash and rub until the corn is white and clean. Keep it in cold water over night, then wash four or five times with hot water.—Claudia Murphy, Consultant in Home Economics, N. Y.

**Screwing Tops—Hot Water Method.**

An expert in canning says: Many screw down the lids after they have stood awhile. This a mistake, as several years of experimenting has proven. When the fruit is hot and the lid is screwed down the rubber becomes warm and adheres to the can. It stands to reason if this is broken when the fruit is cold it is likely to admit air. Another economical way to can fruit is to put it up in hot water. Many kinds of fruit keep better and have a fresher taste than canned in the old way. Fill your cans with fruit as it is prepared for ordinary canning. Place jar in pan of hot water and put a silver knife or spoon in the jar to keep it from breaking. Pour boiling water on the fruit and cover it lightly with the lid; after standing ten minutes pour this off and fill up the can again with boiling water, put on rubber and screw down top, and the work is done. Rhubarb, gooseberries, blackberries, raspberries, keep perfectly canned in this way, and with the two latter the flavor is better if the sugar is not cooked into the fruit when opened. It may be put in some little time before the meal so it will dissolve. If you have never tried this method, begin in a small way with gooseberries and rhubarb and see how easy it is and how good. It is al-

most impossible to tell it from the freshly gathered fruit.—Sel.

**The Scrap Bag.**

**Time for Cooking Fall Fruit.**

- Whole, peaches, 20 minutes.
- Halved pears and quinces, 20 minutes.
- Whole crabapples, 30 minutes.
- Sliced pears, 30 minutes

**Time for Cooking Vegetables.**

Green vegetables should be thoroughly washed and then put into water just beginning to boil. Salt should not be added until they are nearly done. The time for cooking vegetables must depend largely upon their age and the length of time they have been out of the ground, but the following approximate table may be useful:

- Beets, 30 minutes or more
- Brussels sprouts, 15 minutes or more.
- Cabbage, 8 minutes or more.
- Carrots, 30 minutes or more.
- Cauliflower, 20 minutes or more.
- Celery, 30 minutes or more.
- Fresh tomatoes, 20 minutes or more.
- Green corn on the cob, 8 minutes or more.
- Green peas, 15 minutes or more
- Lima beans, 2 hours or more.
- Macaroni, 30 minutes or more.
- Onions, 30 minutes or more.
- Oyster plant, 45 minutes or more.
- Parsnips, 30 minutes or more.
- Potatoes 20 minutes or more.
- Rice, 20 minutes or more.
- Spinach, 20 minutes or more.
- Squash, 25 minutes or more.
- String beans, 30 minutes or more.
- Turnips, 30 minutes or more.

**Making A Broom Last.**

Always keep the broom brush end up, when not in use and it will keep its shape longer and wear better. Soaking it in warm water occasionally will also add to its life. When it has been worn too short rip out all but the upper row of stitching, soak in hot soapsuds, press the straws together into shape and dry thoroughly. It will last quite a while longer.

**Ends of Soap.**

It pays to have a soap-shaker for using ends of coarse soap for dish-washing, etc. Save ends of fine soap in a cheese-cloth bag and use for the hands.

**Use for Stale Bread.**

Stale whole wheat bread can be used as a cereal if run through the chopper and browned in the oven. Serve like grape nuts, with cream and sugar.

**Renovating Hemstitching.**

When hemstitching gives way join the cloth to the hem with narrow novelty braid or insertion.

**Saving Potatoes.**

To take away as little of the potato as possible when peeling, put the potatoes into rapidly boiling water for 10 minutes, then take out, cool and peel.

**Making Flavorings at Home.**

Keep all peach pits, dry them then crack the meats and chop them up, put in a bottle and cover with alcohol. The result will be a very fine "almond" flavoring for cakes and puddings. Lemon or orange flavoring may be made in the same way from the grated peel, only the peel does not have to be dried. Be sure the alcohol is pure grain alcohol.—Wood alcohol is poisonous.

**Keeping Meat in Crock.**

An easy way to keep fresh frying pork is to slice and fry the meat, then pack in layers in a stone crock, pouring hot fat over each layer and being sure to have the top completely covered with fat. Beef, chicken, etc., may be canned quite as easily as vegetables. Use the 3-day method, as given in May 30th.

**Preserving Vegetables in Brine.**

String beans, cucumbers, etc., may be kept for winter use by packing in brine in crocks. Pack the vegetables in and cover with a solution made by stirring salt in the water until it is very strong. Cover and put a weight on. Keep in a cool place. Before using soak the vegetables, then cook and cover with cider vinegar.

**LIPTON'S**



**Tea Offers You Choicest Blends at Lowest Prices**

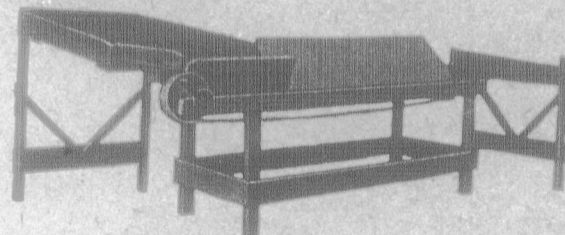
Unless one is a Tea taster or blender it is not easy to prove this statement, yet it is absolutely true. The whole prestige of the Tea business of Sir Thomas Lipton is behind it.

There isn't a Tea being sold in Canada that, price for weight, can begin to compare in quality with Lipton's. Make this test. Buy a packet of Lipton's Tea at a price of about 10c a pound less than you pay for the Tea you ordinarily use.

Make Lipton's according to the directions in the package. The result, we are certain, will make you for all time a devotee of Lipton's.

**LIPTON'S**  
**TEA PLANTER, CEYLON**  
**THE UNIVERSAL TEA**

300 CUPS TO THE POUND SOLD EVERYWHERE



**The Gifford Fruit Sizer**

FOR APPLES, PEACHES AND PEARS

Simple in construction. Made of strong material. Carry it any place. Weight, 200 lbs. Capacity, operated by hand, 300 bbls. in ten hours. Impossible to bruise fruit it does not drop. Gives cheek measure on every apple. Guaranteed to size fruit to your satisfaction. Write to-day for illustrated booklet and prices. Agents wanted.

R. J. LOWREY, Canadian Distributor, Box 245, St. Davids, Ont.

**STUDY, PLEASURE AND PROFIT**

Living under surroundings that involuntarily lure youth to outdoor pleasures and foster the desire for healthy exercise; surrounded by congenial companions and the helpful influences of College life, students at

**ALBERT COLLEGE, BELLEVILLE, ONT.**

can pursue their studies, happy contented, and with the profit gained from thorough teaching.

Commercial and Stenographic courses are given special attention, and only the most modern business methods taught. Complete courses in Literature, Music, Expression, Art, Theology, Physical Culture, etc.

\$100 Scholarship in Agriculture open to either sex

School Re-opens September 9th, 1918

Write for information and year book to

H. N. BAKER, B.A., D.D., Principal.

**ONTARIO LADIES' COLLEGE**

WHITBY - ONTARIO

Public School to Second Year University, Household Science, Music: Instrumental, Vocal, Commercial, Elocution, Art.

School Re-opens Sept. 11, 1918

Civic and Parliamentary Studies, Gymnasium Work and Swimming.

For Calendar apply to Rev. F. L. Farwell, B. A. Principal.

# More Pork and More Profit

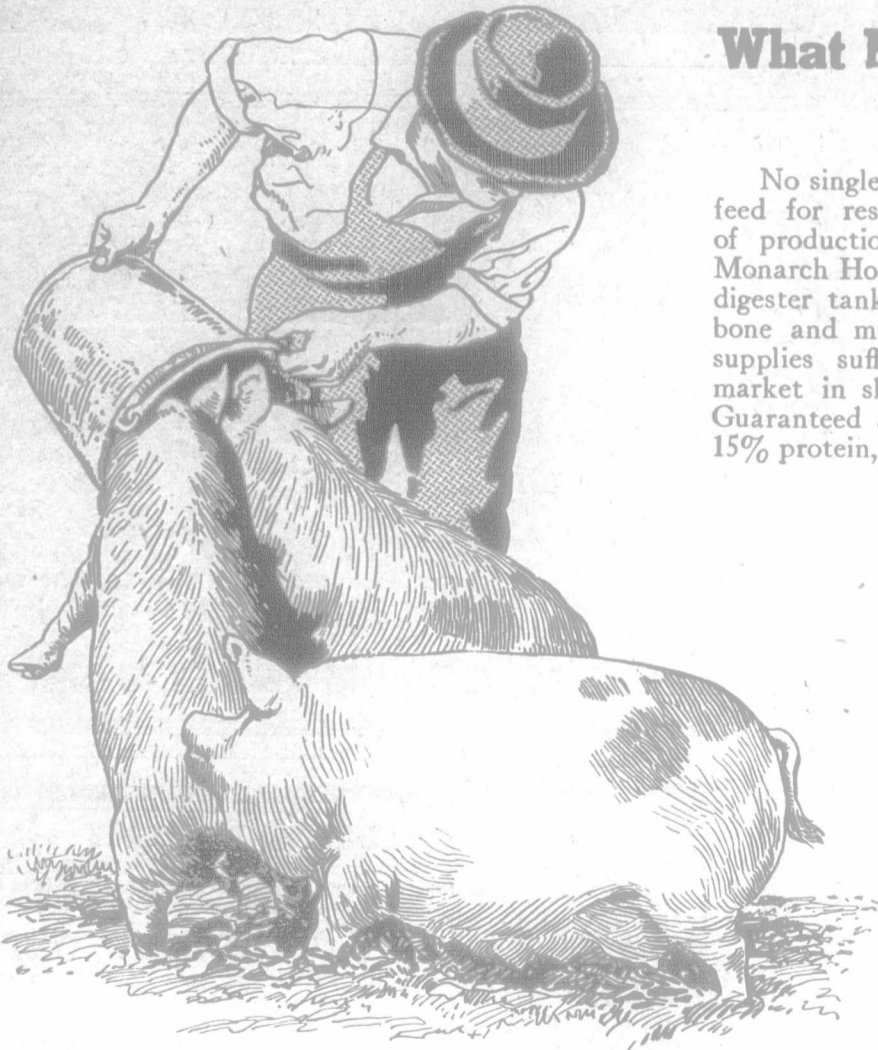
## Heavier, Cheaper Hogs in Less Time

HOW to round your hogs into tip-top shape for an eager market at lowest cost—that is the problem Monarch Hog Feed is solving for farmers every day. Monarch Hog Feed is a properly balanced feed, supplying every requirement for sturdy hogs with stamina, energy, vigor and size; it has exactly the right proportion of protein and fat to finish your hogs in the shortest time.

# Monarch Hog Feed

makes more pork and better pork; it shortens the hogs' stay on the farm and reduces cost of production; it gets hogs to market in best condition; in fact it solves the problem of economical feeding in these strenuous times of high-priced feeds—and there's money in good

hogs nowadays. Improper feeding is one of the causes of soft bacon, declares Prof. G. E. Day in Ontario Agricultural College Bulletin No. 225. Monarch Hog Feed used along with the proper amount of roughage means good hard bacon that gets the best prices.



## What Monarch Hog Feed is made of

No single feed can equal the properly mixed feed for results as to gain per day and cost of production. The principal ingredients of Monarch Hog Feed are shorts, corn products and digester tankage. This combination is rich in bone and muscle forming ingredients, and also supplies sufficient fat to bring your hogs to market in shortest time and in best condition. Guaranteed analysis of Monarch Hog Feed is 15% protein, 4% fat.

### Monarch Dairy Feed

has guaranteed analysis of 20% protein and 4% fat. It is a properly mixed combination of Oil Cake Meal and Cotton-seed Meal with the bulky feeds, bran and corn meal. Though very rich, ensuring splendid results, it can be fed alone.

### Sampson Feed

This general purposes feed is somewhat similar to Monarch Hog Feed, except that oil cake meal is used instead of digester tankage: it gives results for both cattle and hogs. Guaranteed analysis 10% protein and 4% fat.

Pigs "go for" Monarch just as they are doing in the picture. It is a palatable, easily digested feed. For profitable results it is the most dependable feed—and, remember, you can depend upon getting it, while mill feeds are often unobtainable.

Give it a trial. Order a ton from your dealer and note results. If your dealer does not handle Monarch feeds, send us his name and we will see that you are supplied.

## The Campbell Flour Mills Company, Limited

West Toronto

Ontario

10

### "Putting Down" Eggs.

**W**ATER-GLASS (soluble sodium silicate) is the preparation universally recommended for putting down eggs for winter. A commercial water-glass solution may be obtained at most drug-stores, but the better method is to buy the powder and make the solution, following directions. One part water-glass to 9 parts water is the right proportion, and the water should be boiled to remove impurities, then cooled, before making up the mixture. Glazed earthenware crocks are the best containers, and always there should be two inches of solution over the eggs.

If there is a choice between cheaper and dearer water-glass, always buy the best; the cheaper powder sometimes turns alkaline and the eggs will not keep so well in it. To be sure make a pinch into solution and test it with a bit of red litmus paper, which also can be bought at a drug-store. If the paper turns blue you may know that the solution is alkaline.

Infertile eggs are usually considered the best for keeping; but always the eggs should be as fresh as possible and put into the solution as gathered. Keep in a cool place.

Other methods for keeping eggs are, (1). Gather perfectly fresh eggs (prefer-

ably infertile), rub well with lard then wrap each in a bit of paper and pack, small end down, in a crock. Keep in a cool place. (2). Make a brine of 1 cup rock salt, 1 cup unslaked lime and 8 gallons boiling water. Stir the brine occasionally until cool then put the eggs in. Keep in a cool place.

### War and the Birds.

N. TOURNEUR, THUNDERSLEY, ENGLAND.


Certain wild things, as a rule, seem unfrightened and wholly undisturbed by the long spells of the tremendously heavy gun-fire on the Western Front. It is

singular to note that, though the birds there may be silenced by a thunder-storm, they sing continuously through the deafening roar of a heavy bombardment of the trenches. The lark rises singing between the lines, and the wren plays among the brambles, despite the thundering of the guns.

When, as in the Forest of Argonne, one leaves the more leafy soil of the surface path for the mud of a communication trench,—and surroundings where trees and undergrowth have suffered more severely, and where one can only set his foot at the risk of his life,—plant, insect, and bird life again go on undisturbed. It is, as it were, as if war with all its appalling



**"SHOO-THE-FLY"**



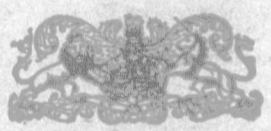
**STEWART'S FLY CHASER** for horses, cattle, pigs and sheep; is one of the most necessary protections for live stock. The fly season is a serious problem for the dairyman; milk cows fall off in their usual flow of milk to an alarming extent of one-third. This means to each dairyman his net profits during the best season in the year. The solution of the problem can be demonstrated by applying STEWART'S FLY CHASER during the entire season. When the fly is removed the cows eat well, rest well and milk well.

Horses are extremely sensitive when flies approach them, become unmanageable, sweat too freely, fall away in flesh, their coat and skin become dead and rough in appearance. The fly, according to the best authorities, carries diseases from one animal to another, and also to food for daily use of man, which may contain germs. Consequently the fly should be exterminated by using STEWART'S FLY CHASER.

STEWART'S FLY CHASER should be sprayed on newly-shorn sheep; it will combat flies, kill nits, prevent irritation of the skin which may terminate in eczema and prolific in the cause of falling off wool.

Apply STEWART'S FLY CHASER on brood sows and litters, it will make them thrive better, rest better and look better. STEWART'S FLY CHASER is without an equal on the market, non-irritant, safe and clean.

**Try It Once—Once Used Always Used.**  
If your dealer has not got this, write us direct.  
Manufactured only by  
**DR. J. G. STEWART, V. S.**  
156 Simcoe St. Toronto, Canada  
Price, \$1.50 per gal., f.o.b., Toronto.



SEALED TENDERS addressed to the undersigned, and endorsed "Tenders for Temporary Barracks, Rosedale, Toronto, Ont.," will be received at this office until 12 O'CLOCK NOON, TUESDAY, AUGUST 27, 1918, for the construction of temporary barracks, Rosedale, Toronto, Ont.


Plans and specification can be seen and forms of tender obtained at the offices of the Chief Architect, Department of Public Works, Ottawa, and the Clerk of Works, Postal Station "F," Toronto, Ont.

Tenders will not be considered unless made on the forms supplied by the Department and in accordance with conditions set forth therein.

Each tender must be accompanied by an accepted cheque on a chartered bank, payable to the order of the Minister of Public Works equal to 10 per cent. of the amount of the tender.

By order,  
**R. C. DESROCHERS,**  
Secretary.

Department of Public Works,  
Ottawa, August 9, 1918.



**ALMA LADIES' COLLEGE**  
(Canada's National Residential School for Girls)

**OPENS ITS THIRTY-EIGHTH YEAR ON SEPTEMBER SIXTEENTH, NINETEEN HUNDRED AND EIGHTEEN**

Thorough courses in Music, Art, Oratory, High School, Business College, Domestic Science and Superior Physical Training

For terms, address: **R. I. Warner, M.A., D.D.,** President, St. Thomas, Ont. 33

**Seed Wheat for Sale**

Dawson's Golden Chaff Wheat (a good sample) from a field of 37 bushels per acre. Will book orders for quantities. Order immediately.

**WELDWOOD FARM**

Farmer's Advocate, London, Ontario

You'll be proud to own and exhibit to your friends the handsome, beautifully-toned, well-made

**SHERLOCK-MANNING**  
20th Century Piano  
known as  
"Canada's Biggest Piano Value"

Write Dept. 18 for catalogue "T."  
**THE SHERLOCK-MANNING PIANO CO.**  
London (No street address necessary) Canada

turmoil had now become so familiar to the kingdom of birds and wild animals that it had lost its power to frighten.

During the winter and spring of 1914 and 1915, however, wild animals of all kinds, scared by the heavy cannon and rifle firing, fled from Germany and parts of Austria, and entered the Swiss forests and the Alps. They included wild boars, deer of several kinds, goats, etc., as well as innumerable wild fowl; and, in the Lower Engadine, even bears entered the Swiss Yellowstone Park, as it is termed. The lakes and rivers of Switzerland were crowded by the denizens of the air and the marshes, and fowls were busy, till shooting was prohibited by the Swiss authorities, and sharp imprisonment instead of fines dealt out to offenders against the law. The strangers were then allowed to have a rest in peace and comfort before continuing their journey southward to warmer climes.

There is no doubt whatever it was the war that frightened the animals and birds from their accustomed haunts, and crowded the Swiss lakes and forests. A large number of wild bears from the Black Forest entered the Jura Alps, across Alsace and Lorraine, and in passing through the fighting armies were noticed by many of the scouts and other soldiers.

Use and wont, however, prevail in wild life, even as they do in human. Deer again feed in the glades of the Forest of Argonne, despite the hurricane of shells that may fall but a few miles away, till every thing green disappears, shredded and pulverized, into the torn earth, and only stumps of trees are left protesting mutely against the folly of man. And, here, too, in the Forest of Argonne, an officer taking his morning ride may come upon the magnificent wild boars still frequenting the lonely thickets.

It may be probable, though, that this long period of great hostilities is influencing bird life in another and more remarkable way. The roar of the heavy artillery may possibly have diverted or retarded the movements of birds on their migratory course. And a curious effect has been noticed in the Midlands of England, and elsewhere: every year since the war began, the swallows and martins and other migrants are loath, very loath, to leave.

**The Windrow.**

Some of the finest battleships of the United States Navy are now associated with the British fleet.

An Italian has perfected an invention to make artificial limbs work like real ones

The new light and fast British tanks are known as "whippets". They were first used in the action at Villers-Bretonneux.

Belgian dogs used for locating wounded soldiers are now fitted with gas-masks made especially for dogs.

Mrs. E. B. Filsinger, the poet known as "Sara Teasdale", has been awarded the Pulitzer Prize by Columbia University.

Some time ago a committee in Canada took up the question of a national flower; the decision has not yet been announced. Now there is a similar step afoot in the United States, the choice there lying so far, between golden rod and columbine.

General Guillaumat, who for a time had charge of the defense of Verdun, has been recalled from Salonica to become Military Governor of Paris. The circumference of entrenchments and fortifications now surrounding the city measures 80 miles. During the last five months the Germans attempted 114 air raids on Paris, but of over 300 machines used only 22 flew over the city.

Premier Lloyd George has once more promised that the British Dominions will take their part in the formulation of peace terms for the whole British Empire. "Canada, Australia and New Zealand," he said, "have all contributed their share of sacrifice, and they are entitled to an equal voice with the representatives of these islands."

Quentin Roosevelt, the youngest of Col. Roosevelt's sons, who was shot down in an air-battle in France, was only 20 years of age. Two of his other sons,

Captain Archie and Major Theodore Roosevelt, Jr., have been awarded the Croix de Guerre for conspicuous bravery under fire; the other, Captain Kermit Roosevelt, is with the British forces in Mesopotamia.

An attempt to forestall a sugar crisis is being made by the new Sugar Equalization Board in the United States. This board is another publicly owned corporation. Its capital, \$5,000,000, is supplied by the President out of the funds at his disposal for "extraordinary purposes", and the money will be expended in maintaining beet sugar factories, even, for a time, at a loss.

**Smiles.**

After many trials and tribulations, Mrs. Timson had managed to get a "maid" of sorts.

"Now, Thurza," said she, "be careful about the water. We only use the well water for drinking, as we have to pay a man to pump it. The rainwater is good enough for washing up and so on."

After tea Mrs. Timson asked: "Did you remember about the water, Thurza?"

"Oh, yes, mum!" said Thurza. "I filled the kettle half full of water from the butt, and the other half with water from the well. I thought the bottom half might as well be getting hot at the same time for washing up after tea."

Among the Japanese economy is held to be a high virtue. Two old misers of Tokio were one day discussing ways and means of saving.

"I manage to make a fan last about twenty years," said one, "and this is my system: I don't wastefully open the whole fan and wave it carelessly. I open only one section at a time. That is good for about a year. Then I open the next, and so on until the fan is eventually used up."

"Twenty years for a good fan!" exclaimed the other. "What sinful extravagance! In my family we use a fan for two or three generations, and this is how we do it: We open the whole fan, but we don't wear it out by waving it. Oh, no! We hold it still, like this, under our nose, and wave our face!"

Not infrequently women of wit direct their shafts against the clubs so beloved and frequented by mankind. In Ralph Nevill's story of "London Clubs" and their origins and uses are some examples of wit aimed in the opposite direction.

The original conception of a London club was a retreat to which West End men might betake themselves, certain that the troubles and worries of the outside world would not follow them into a building which they regard as a temple of dignified seclusion and repose.

Perhaps the best description of a club as it existed in former days, was that given by a witty bishop, who defined it as a place "where women ceased from troubling and the weary were at rest."

Another amusing definition was once given by George Augustus Sala. "A club," said Sala, "is a weapon used by savages to keep the white woman at a distance."

An Irishman employed in a large factory had taken a day off without permission and seemed likely to lose his job in consequence. When asked by his foreman the next day why he had not turned up the day before, he replied: "I was so ill, that I could not come to work to save me life."

"How was it, then, Pat, that I saw you pass the factory on your bicycle during the morning?" asked the foreman.

Pat was slightly taken back, then regaining his presence of mind, replied: "Sure, sir, that must have been when I was going for the doctor."—Pittsburg "Chronicle Telegraph."

**Replacing the Horse.**

Mrs. Overwater had a deadly gleam in her eyes as she entered her butcher's and said in a withering voice:

"Mr. Aichboan, how do you account for the fact that there was a piece of rubber tire in the sausage I bought here yesterday?"

"Ah, my dear madam," responded the butcher, rising to the occasion, "that just serves as an illustration of how the motor car is replacing the horse everywhere nowadays."

**7% With Safety**

We can offer investors a well-secured 7 per cent. mortgage Debenture stock. The issue—\$2,500,000—is secured by a mortgage on assets, valued at \$15,000,000, of a large Canadian pulp and paper company. Present net earnings are more than four times the interest requirements. A new mill, now nearly completed, will increase the company's earnings.

Investors in this Mortgage Debenture Stock share in the surplus earnings of the company with the development of business. Your savings could not be more profitably invested with safety, so that you cannot do better than write at once for further information. Address:

**Graham, Samson & Co.**  
INVESTMENT BANKERS

85-G BAY STREET,  
TORONTO

**Soldiers.**

(TED ROBINSON IN CLEVELAND PLAIN DEALER.)

Her kitchen girl had left her, and she'd all the work to do

Upon the day the plumbing broke and let the water through;

The baby had the chicken pox—she had to go and see

The doctor on the subject, and she fell and sprained her knee.

A passing neighbor brought her home—the fire'd gone out by then—

She ate a frigid meal, and then she got her ink and pen.

And wrapped a shawl around her, and beneath the evening lamp

She wrote a letter to her Man—a soldier down in camp.

"Dear John: Your loving letter was received to-day. I hope

You're well. I keep so busy that I have no time to mope.

The weather's cold, but beautiful, and Spring is on the way.

The baby's got a tooth. I took a trip down town to-day

And Mr. Johnson picked me up in his big motor car

And brought me home—you can't believe how kind the neighbors are!

Baby and I've decided we will lead the simple life

And stay at home for quite a while. With lots of love,

Your Wife."

Her name is Mrs. Legion, and she's quite well known to me.

Her husband is a soldier of his country, So is she.

**Not Worth the Difference.**

George Washington Miles applied for a license to marry Dinah Carsons and paid over his \$2. On the way out he seemed to recollect something and returning to the clerk's office asked to have the name changed to Deborah.

"Can't do it," explained the clerk, "too late now. All the forms made out and entered on the record book and everything. Cost you \$2 more for a new license."

"But I ain't got no use for this here license if I marries Deborah," expostulated the negro, grinning. "Why for can't you-all just scratch out that there name and write Deborah instead?"

"Can't do it," repeated the clerk. "Two dollars more for a license to marry Deborah if you've changed your mind."

"Well," after a moment's hesitation, "I guess it'll have to go at Dinah. There ain't no \$2 difference 'tween them two gals."

**Rare Facts.**

It appears that a social worker of not precisely the right type called on the wife of a soldier on what turned out to be her washing day.

As a natural result the soldier's wife was not particularly pleased to see her visitor; but the latter, instead of cutting her visit short, as anybody possessing proper tact would have done under the circumstances, stayed on, plying the woman with all sorts of more or less irrelevant questions concerning herself and her absent spouse.

"Oh, you needn't worry yourself any more about me, ma'am," snapped the exasperated wife at last, turning to her wash-tub. "You see we're both doing our bit. He's bearing arms and I'm baring mine."

the birds thunder through the bombardment as singing men plays thunder-  
onne, one the surface munication trees and severely, not at the and bird It is, as appalling

# FALL WHEAT

## Seed May Be Scarce. Farmers Should Secure Their Supplies Early

IN spite of the severe experience of the past season, there is still a great deal of interest in Fall Wheat in Ontario, and it is very important that the acreage should be maintained. Seed is likely to be somewhat scarce, and farmers should make arrangements for their supply early, and, as far as possible, do so through their usual channels.

### Fall Wheat Seed \$2.50 bus.

In order to supplement local supplies, the Ontario Department of Agriculture has arranged for a limited quantity of No. 6 wheat from New York State, a variety which corresponds with Dawson's Golden Chaff in Ontario. This will be available at \$2.50 per bushel in bulk at Ontario distributing points.

The world is in dire need of wheat, and although the satisfactory crops of the current season have improved the food situation, there is no doubt there will be a strong demand for wheat for some years to come.

## Ontario Department of Agriculture

Parliament Buildings, Toronto

HON. GEO. S. HENRY  
Minister of Agriculture

DR. G. C. CREELMAN  
Commissioner of Agriculture



# STONE'S FERTILIZER

## For Fall Wheat

Manufactured by WM. STONE SONS, LIMITED. Head Office, Woodstock, Ont. Factory, Ingersoll, Ont.



**FARM FOR SALE—A HUNDRED-ACRE** farm in the County of Prince Edward, three and one-half miles west of the village of Wellington, suitable for stock, grain or truck farming. Large brick house and a frame tenement, large basement; barn, silo, and outbuildings. Buildings worth \$6,000. Terms reasonable. Apply to: T. G. Raynor, Seed Branch, Dept. of Agriculture, Ottawa.

**WANTED TO HEAR FROM OWNER** HAVING farm for sale. Mrs. Booth, Pulaski, Iowa, U.S.A.

**WANTED—MARRIED COUPLE** WITHOUT children for country residence. Man for general farm work and take care of small herd Short-horn cattle. Woman as cook and light house-work in family of three adults. Permanent position. References required. State wages. N. S. Robertson, Arnprior, Ont.

**WANTED—AN OPERATOR** FOR TRACTION Ditcher. State experience. Also bright lad to set grades and assist operator. Box 58, O. A. C., Guelph, Ont.

**WANTED—A WOMAN MANAGER** FOR small farm in connection with Girls' Educational Institution. Practical knowledge of Dairying, Poultry and Horticulture. A teaching knowledge of Domestic Science preferred. Correspondence solicited. Apply P. O. Box 461, Sherbrooke, P. Que.

## LIVE POULTRY

We are open to handle large quantities of live spring chickens or live poultry of any kind; highest market prices paid according to quality. Write us for quotations; Prompt returns  
**Henry Gatehouse & Son, 348 Dorchester St. W., Montreal**

## GLADDEN HILL AYRSHIRES

A choice bull calf two months old; sire, Fairvue Milkman, dam, a granddaughter of Primrose of Tanglewyld, for sale. Also a few females.  
**Laurie Bros., Agincourt, Ontario**

**WANTED** Alsike, Timothy, Red Clover, Ontario Grown Alfalfa, and White Blossom Sweet Clover. If any to offer please mail samples, and we will at once let you know highest prices we will pay f. o. b. your station. **TODD & COOK, Seed Merchants, Stouffville, Ontario**

**Wanted—Cockshutt Riding Plow**  
Also 7-inch Grain Grinder.

Address  
Box 2, Farmer's Advocate, London, Ontario

## WANTED

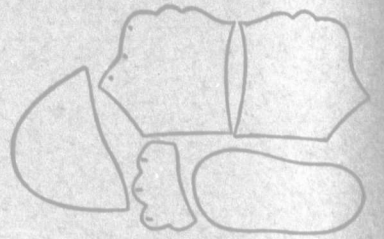
Live Fowl

**WALLER'S, 702 Spadina Ave., Toronto**  
WRITE FOR PRICE LIST

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

## A Baby's Shoe.

Any woman can draw out a pattern of the required size by following the accompanying illustrations. The shoes may be made of white pique, duck or flannel, nicely herring-boned with pretty thread.



Pattern For Baby's Shoe.



Homemade Baby's Shoes.

## She Pinched 'Em.

Queen Mary sent a beautiful bouquet that had been presented to her to a soldiers' hospital. To show their appreciation the inmates commissioned one of their number to stand at the hospital gate the following morning, holding the gift when the queen passed. He did so—with rather unexpected results. Queen Mary, seated in her car, saw the soldier standing there, bouquet in hand, and assuming that he wished to present it to her, she reached out and took it. After she had thanked him, her car passed on.

The soldier stood quite dumfounded—then recovering his speech, he said: "Well, she's pinched 'em."

## Not to be Beaten.

They were two small girls, and they were arguing as to which of their fathers had done the most in the war.

Said she of the flaxen hair: "My father's a hero; he had the V. C. pinned on his breast by the King."

But the blonde was not to be beaten: "Oh," she sniffed, scornfully, "why, that's nothing. My father has a lovely wooden leg, and the King himself nailed it on."

## Thousands of Men Required for Harvesting in Western Canada.

Thousands of men are required to help in the work of harvesting the Western crop. The C. P. R. has completed arrangements to transport to the West this great army of workers.

For those going from points in Ontario to Manitoba, Saskatchewan and Alberta extra trains will be operated through to Winnipeg (the distributing point) without change.

Going trip West, \$12 to Winnipeg. Returning trip East, \$18 from Winnipeg.

Consult C. P. R. Agents regarding transportation arrangements west of Winnipeg.

Going date: August 20th and August 29th—All stations in Ontario, west of Smith's Falls, up to and including Toronto, on Lake Ontario Shore Line, and Havelock—Peterboro Line, also from stations Kingston to Renfrew Junction, inclusive, and from stations on Toronto-Sudbury line. From stations on Sault Ste. Marie branch. From stations on main line, Beauceage to Franz, inclusive. From stations, Bethany Junction to Port McNicoll and Burketon-Bobcaygeon.

August 22nd and August 29th—From stations west and south of Toronto, up to and including Hamilton and Windsor, Ont., on Owen Sound, Walkerton, Teeswater, Wingham, Elora, Listowel, Goderich, St. Mary's, Port Burwell and St. Thomas branches, and stations Toronto and north to Bolton, inclusive.

Further particulars from any C. P. R. Ticket Agents, H. J. McCallum, C. P. A. London, Ont., or W. B. Howard, D. P. A. Toronto, Ont. Advt.

### Agricultural Development in India.

The following is a letter received by J. B. Spencer, Chief of the Publications Branch Department of Agriculture, Ottawa, from S. Higginbottom, an ex-student of the O. A. C. and now Agricultural Mission Worker in India. Undoubtedly the letter will be of interest to many of our readers who are interested in what is going on in India and in the part played by that great country in increasing the world's supply of food:

"The Gwalior exhibition has just closed and after it is all over it is said to have been the largest and most interesting on record in Central India. The North India Mission entered on a new era in mission work, for all the agricultural arrangements for the exhibition were in its hands. Mr. Griffin with his tractors actually plowing, his harrows, harrowing, his pumps pumping, and his fine crops of pedigree wheat and grain, proved an attraction superior to the wrestling arena. Dr. Kenoyer, in his beautiful research laboratory with experiments of all kinds under way that the Indian farmers could see and understand, his charts, microscopes, seed-testing, was more popular than the Indian juggler who makes the mango tree grow and bear fruit under a gunny bag.

"Mrs. Wisner with her demonstrations of fruit canning and vegetable preservation, showing the people of India a cheap, sanitary and easy way of saving food was more popular than the nautch girl. The Maharajah brought down the ladies of the place to see and learn her methods. As he was a mere man he could not go in under the canopy which was kept strictly purdah. The fruits and vegetables were grown in the palace gardens, the jars were made in the state pottery, common Indian cooking vessels were used and the common Indian portable stoves gave the fire for cooking and sterilization. Thus attention was drawn to the fact that India could do these things for herself just as well as depend upon Europe and America for preserved fruits and vegetables. A few days after Mrs. Wisner had shown the Rani and Princesses how to can and put up food, the Maharajah sent them back to demonstrate to Mrs. Wisner how well they had learned their lessons. He wanted to be sure they got it right, as he will have to eat the things they put up.

"Mr. Slater came over with a lot of his chickens from Etah to manage the poultry part of the exhibition. It was the best poultry show I have ever seen in India. The judging was done by Sir Edwin John of Agra who knows his job and the interesting fact emerged that all the first prizes and grand championships were won, not by imported birds, but by birds bred in the country from imported stock. From now on India will be less dependent upon importations but can develop types suited to her own needs. This is of the greatest importance to the poultry interests of India, and Mr. Slater has good reason to be happy over the outcome of his years of labor to introduce better poultry among the low caste convert as a way to improving their economic condition and fitting them to pay the salaries of their own preachers and teachers.

"We are anxiously waiting to know what reinforcements we can expect as every one of us is so sadly overburdened that good work is impossible with our students, and unless we give them the best we have, they will not be able to meet the large demands that India will make on her leaders in this great warfare against ignorance and poverty. It becomes increasingly difficult to manage without laboratories and class rooms, as the number of eager young Indian students multiplies. We are all praying that even during the great war these things may be given to us.

"The latest figures show that India has nearly four million more acres under wheat than in 1915, nearly as much extra under rice, while the area under cotton has increased over four million acres in the same time, her increase in acreage and in yield per acre of sugar shows that she will soon supply her own needs and have a surplus. Thus India is doing her bit to feed a hungry world and with proper equipment and leader-

*Devonshire,*



[L.S.]

CANADA.

## PROCLAMATION

GEORGE the FIFTH, by the Grace of God of the United Kingdom of Great Britain and Ireland and of the British Dominions beyond the Seas, KING, Defender of the Faith, Emperor of India.

To all to whom these presents shall come or whom the same may in any wise concern,—GREETING :

A Proclamation of conditional amnesty respecting men belonging to Class 1 under the Military Service Act, 1917, who have disobeyed our Proclamation of 13th October, 1917, or their orders to report for duty, or are deserters or absent without leave from the Canadian Expeditionary Force.

E. L. NEWCOMBE, } WHEREAS consider-  
Deputy Minister of Justice, } able numbers of men  
Canada. } belonging to Class I under our Military Service Act, 1917, called out on active service in our Canadian Expeditionary Force for the defence of Canada under Our Proclamation of 13th October, 1917, although they have thus become by law soldiers enlisted in the Military Service of Canada,

AND WE DO HEREBY STRICTLY WARN AND SOLEMNLY IMPRESS UPON ALL SUCH MEN, and as well those who employ, harbour, conceal or assist them in their disobedience, that, if they persist in their failure to report, absence or desertion until the expiry of the last mentioned day, they will be pursued and punished with all the rigour and severity of the law, SUBJECT TO THE JUDGMENT OF OUR COURTS MARTIAL WHICH WILL BE CONVENED TO TRY SUCH CASES or other competent tribunals: and also that those who employ, harbour, conceal or assist such men will be held strictly accountable as offenders and subject to the pains, penalties and forfeitures in that behalf by law provided for their said offence.

Have failed to report for duty as lawfully required of them under the said Military Service Act and the regulations thereunder, including the Order in Council duly passed on April 20 last,

Or have deserted,  
Or absented themselves without leave from our Canadian Expeditionary Force,

Provided however that nothing contained in this Our Proclamation is intended to release the men aforesaid from their obligation to report for duty as soon as possible or to grant them immunity from arrest or detention in the meantime for the purpose of compelling them to perform their military duty; Our intention being merely to forego or remit the penalties heretofore incurred for failure to report, absence without leave or desertion incurred by those men of the description aforesaid who shall be in the proper discharge of their military duties on or before the said twenty-fourth day of August, 1918.

And it is represented that the very serious and unfortunate situation in which these men find themselves is due in many cases to the fact that, notwithstanding the information and warning contained in Our Proclamation aforesaid, they have misunderstood their duty or obligation, or have been misled by the advice of ill-disposed, disloyal or seditious persons.

Of all of which Our loving subjects and all others whom these presents may concern are hereby required to take notice and govern themselves accordingly.

AND WHEREAS we desire, if possible, to avoid the infliction of the heavy penalties which the law imposes for the offences of which these soldiers have thus been guilty, and to afford them an opportunity within a limited time to report and make their services available in Our Canadian Expeditionary Force as is by law their bounden duty; and as is necessary for the defence of Our Dominion of Canada.

IN TESTIMONY WHEREOF, We have caused these Our Letters to be made Patent, and the Great Seal of Canada to be hereunto affixed. Witness: Our Right Trusty and Right Entirely Beloved Cousin and Counsellor, Victor Christian William, Duke of Devonshire, Marquess of Hartington, Earl of Devonshire, Earl of Burlington, Baron Cavendish of Hardwicke, Baron Cavendish of Keighley, Knight of Our Most Noble Order of the Garter; One of Our Most Honourable Privy Council; Knight Grand Cross of Our Most Distinguished Order of Saint Michael and Saint George; Knight Grand Cross of Our Royal Victorian Order; Governor General and Commander-in-Chief of Our Dominion of Canada.

NOW KNOW YE that we in the exercise of Our powers, and of Our good will and pleasure in that behalf, do hereby proclaim and declare and cause to be published and made known THAT THE PENALTIES OF THE LAW WILL NOT BE IMPOSED OR EXACTED as against the men who belong to Class 1 under Our Military Service Act, 1917, and who have disobeyed Our Proclamation aforesaid; or who have received notice from any of Our registrars or deputy registrars to report for duty on a day now past and have failed so to report; or who, having reported and obtained leave of absence, have failed to report at the expiry of their leave, or have become deserters from Our Expeditionary Force, PROVIDED THEY REPORT FOR DUTY ON OR BEFORE THE TWENTY FOURTH DAY OF AUGUST 1918.

At Our Government House, in Our City of OTTAWA, this FIRST day of AUGUST, in the year of Our Lord one thousand nine hundred and eighteen, and in the ninth year of Our Reign.

By Command,

*Thomas Mackey*

Under-Secretary of State.



**BOB LONG**  
UNION MADE  
**OVERALLS**  
SHIRTS & GLOVES  
*Known from Coast to Coast*  
**R. G. LONG & CO. LIMITED**  
TORONTO CANADA



**A BETTER SEPARATOR AT A LOWER PRICE**

**VIKING CREAM SEPARATOR**

The Viking Cream Separator is made of the finest materials. It is scientifically constructed by separator experts. The Viking skims to a mere trace, has greater capacity, is easy running, simple to clean, strong and durable yet lowest in price. Write for Free Separator Book.

Swedish Separator Company  
Dept. U 5152, W. 12th St., Chicago, Ill., U.S.A.  
WAREHOUSES  
Calgary, Alberta Winnipeg, Manitoba  
Regina, Saskatchewan

**IRON AGE**


**POTATO DIGGERS**

answer the farmers' big questions: How can I get my potatoes out quickly with less help and fewer horses? How can I have my tubers ready for a high-price market safely put away before freezing?

The **IRON AGE** Digger rolls the potatoes out in long rows ready to gather, clear of dirt, weeds and tops. It turns short into next row, or can be backed.

The staunch, powerful, and dependable No. 155 shown here will take care of the heaviest conditions. Made by specialists in potato machinery—in business over 22 years.

**THE BATEMAN-WILKINSON CO., Ltd.**  
Box 41  
Toronto, Canada.  
Send for Catalog



**ABSORBINE**  
TRADE MARK REG. U.S. PAT. OFF.

will reduce inflamed, swollen Joints, Sprains, Bruises, Soft Bunches; Heals Boils, Poll Evil, Quittor, Fistula and infected sores quickly as it is a positive antiseptic and germicide. Pleasant to use; does not blister or remove the hair, and you can work the horse. \$2.50 per bottle, delivered. Book 7 R free.

**ABSORBINE, JR.**, the antiseptic liniment for mankind, reduces Painful, Swollen Veins, Wens, Strains, Bruises; stops pain and inflammation. Price \$1.25 per bottle at dealers or delivered. Will tell you more if you write. Liberal Trial Bottle for 10c in stamps.

W. F. YOUNG, P. D. F., 258 Lyman's Bldg., Montreal.

**DR. PAGE'S SPAVIN CURE**

Cures the lameness from Bone-Spavins, Side-Bones, Ringbones, Curbs, Splints, etc., and absorbs the bunches, does not kill the hair, absorbs Capped Hocks, Bog-spavin, thick pastern joints; cures lameness in tendons; most powerful absorbent known; guaranteed or money refunded. Mailed to any address. Price \$1.00.

Canadian Agents:  
**J. A. JOHNSTON & CO.**  
Druggists  
171 King St. E., Toronto, Ont.

ship to distribute the improved varieties of wheat, rice, cotton and sugar cane, she can do much more. She has the agricultural population and land and if trained demonstrators could go among this great people, India could make a quicker and larger food response than any other country on earth. In view of the probable shortage in all countries affected by the war, is it not good sense and good religion for America to largely increase the number of American agricultural missionaries at this time?

"I have been on tour nearly all the time since annual meeting in October. In November I took a five-day railroad journey to Coonoor in South India to attend the National Missionary Council (The Edinburgh continuation committee) as convener of the committee on Agriculture and Industry. What amazed and gladdened me, was the complete revolution in Missionary thinking on this subject. It is now recognized as part of the liberating Gospel Jesus brought into the world to do men good. I am now conferring with missionary bodies all over India with a view to establish in each language and climatic area a school for training mission leadership in rural education. This will do more to help India to help herself than anything else I know. In December I sat as a member of the Board of Agriculture at Poona, a Government body. It was inspiring to see the way these men, each one carrying great burdens, assumed greater in order that India may do its best to furnish food and fibre to the allies. The rest of my time was taken up with work in Gwalior and Bikaner. Allahabad saw very little of me. I realize this can only go on as a war measure until other men can come out better prepared than I am for these great tasks. I just got home for the closing examinations and will spend most of the hot weather at my desk getting caught up on work that ought to have been done long ago. My colleagues have been even busier than I without the inspiration of meeting so many other men, and it is wonderful how God sent men of the proper training and out-look to help us to carry on here.

"The leper asylum grows both in number and interest. It has been a good year there, excellent gardens and crops. Many of these poor folk reflecting Christ and witnessing for Him in a way that humbles me, and makes me grateful for anything I can do to ease their pain and comfort them in their distress."

**Gossip.**

The manager of Flintstone Farm, Mass., writes as follows regarding recent sales they have made:

"We have recently sold to Clark Wright, of Middlefield, Mass., an excellent herd bull prospect, sired by Glenside Dairy King, the sire of 5 young animals that sold in the late May sale for an average of nearly \$1,500 each, whose dam was Mamie's Minnie, with a 3-year average of 15,610 lbs., and whose sire was Imp. Royal Darlington. The calf's dam, Glenside Roan Fern, is producing well on official test. She is a daughter of General Clay, with 30 Record-of-Merit daughters, and of Fern's Model, with records of from 8,000 lbs. to 10,000 lbs., is full sister to Fern of Conococheague, that has a record of nearly 12,000 lbs. We have sold to Wellington Smith, of Lee, Mass., three exceptionally good Berkshire sows, all bred to our senior herd boar, Sensational Lord Premier 2nd. We have also sold to J. M. Deely, of Lee, Mass., a sow bred to our junior herd boar, Highwood Rival 250th, that was farrowed September 5 of last year and that now weighs over 400 lbs. We believe this mating will produce some exceptional pigs."

**Watch Yourself Go By.**

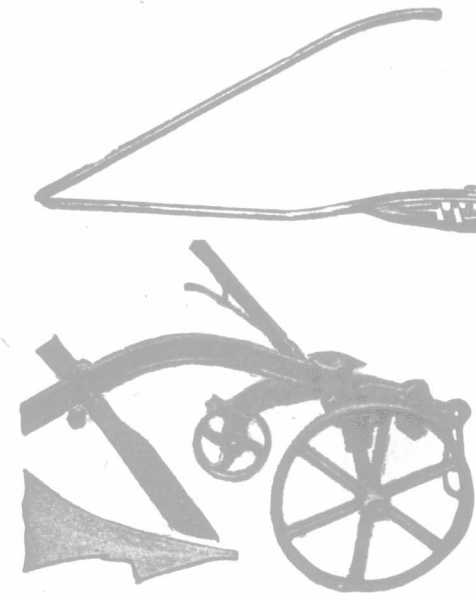
Just stand aside and watch yourself go by: Think of yourself as "he" instead of "I". Pick flaws; find fault; forget the man is you. And strive to make your estimate ring true. The faults of others then will dwarf and shrink, Love's chain grows stronger by one mighty link. When you with "he" as substitute for "I" Have stood aside and watched yourself go by.—Tennessee Extension Review.



**WILLIAMS**  
New Scale **PIANOS**

THE outward beauty that distinguishes a Williams New Scale Piano is an index of its intrinsic worth. Ideals are built into every one of these famous instruments—ideals of craftsmanship that make for the most enduring quality.

Bungalow Model, \$450.00  
**THE WILLIAMS PIANO CO., LIMITED, OSHAWA, ONT.**  
Canada's Oldest and Largest Piano Makers



Write for full particulars and prices of the

**DICK**  
(Patented)  
**Lying Grain Lifter**

to fit any make of a binder. Also the famous

**Dick Lever Plow Wheels**

which fit any make of a single walking plow, either short or long beam.

**Dick Agricultural Works, BOLTON, ONTARIO**  
T. A. DICK, Manager

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

**ROOFING**  
AT FACTORY PRICES

WE ARE THE LARGEST DISTRIBUTORS OF READY ROOFING IN CANADA. WE SELL DIRECT TO USERS. WE CAN SAVE YOU MONEY. WRITE FOR FREE SAMPLES.

**HALLIDAY COMPANY, HAMILTON**  
FACTORY DISTRIBUTORS CANADA

**SALEM SHORTHORNS**

Herd headed by Gainford Marquis (Imp.), undefeated in England and Canada. Sire of the winning group at Canadian National, 1914, 1915, 1916. Can supply cattle, both sexes, at all times.  
J. A. WATT, ELORA, ONTARIO

**Shorthorns** Herd headed by Pride of Escana, a great son of Right Sort. Several bulls and a few females with calves at foot for sale. Herd of over seventy head.  
A. G. FARROW (between Toronto and Hamilton), Oakville, Ont.

**PLEASANT VALLEY FARMS**

Present offering—A number of good young Scotch cows with calves at foot and rebred to (Imp.) Newton Grand Champion; also a number of 2-year-old heifers bred to same sire. Suitable for good herd foundations; priced to move them. Inspection invited.  
GEO. AMOS & SONS, Farm 11 miles east of Guelph, C.P.R. MOFFAT, ONTARIO

**SPRING VALLEY SHORTHORNS**

Herd of seventy head, straight Scotch, good individuals. Headed by the great show and breeding bull, Sea Gem's Pride 96365, and Nonpareil Ramsden 83422. We have for sale four as good young bulls as we ever had, and a few females. **KYLE BROS., Drumbo, Ont.** (Phone and telegraph via Ayr.)

**BLAIRGOWRIE SHORTHORNS**

I have females all ages and bulls of serviceable age. Worth while to come and see, or write **JOHN MILLER Myrtle Station, C.P.R., G.T.R. ASHBURN, ONTARIO**

**ESCANA FARM SHORTHORNS**

Five Bulls for Sale. One roan senior yearling; one choice twelve months white calf; by Right Sort (Imp.); one select, dark roan, ten months calf; by Raphael (Imp.); one roan red yearling, for grade herd. Farm 1/4 mile from Burlington Jct., G.T.R.  
**J. F. MITCHELL, Limited BURLINGTON, ONTARIO**

**MILKING SHORTHORNS**

Herd headed by Dominator 10629; cows with records up to 11,000 pounds of milk in a year. Bulls ready for service for sale. Heifers and cows for inspection.  
Weldwood Farm, Farmer's Advocate, London, Ontario.

**Dual-Purpose Shorthorns**—CROWN JEWEL still heads the herd. Present offering is 5 bulls, from 13 to 18 months. Prices from \$200 to \$250. Also some good breeding females, either bred or with calves at foot. All registered and priced to sell.  
**JNO. ELDER, HENSALL, ONTARIO.**

Books in the Home.

There are too few books in most homes. There is cause for this, at least people offer this as an excuse: "We have no time to read." This is a poor excuse, and little better than none. Every man and woman has time to read if they are only willing to take that time, and none ought to deny themselves that time. Reading improves and develops the mind, and the mind ought to be developed in proportion to the body. If it is not people become mental dwarfs, and physical giants. They have small, indolent minds, and big bodies. The chief industry of the West is agriculture, and for six months in the year the farmers and their wives have little time to devote to mental culture. Winter provides more time for them to read and to study. The writer is of opinion that a regular systematized method of reading should be adopted by farmers, and by people of any, and of all occupations.

This is an excuse such as those who care nothing for books would make. No desire for knowledge can hardly be said to be natural. Most people desire to increase in knowledge as in stature.

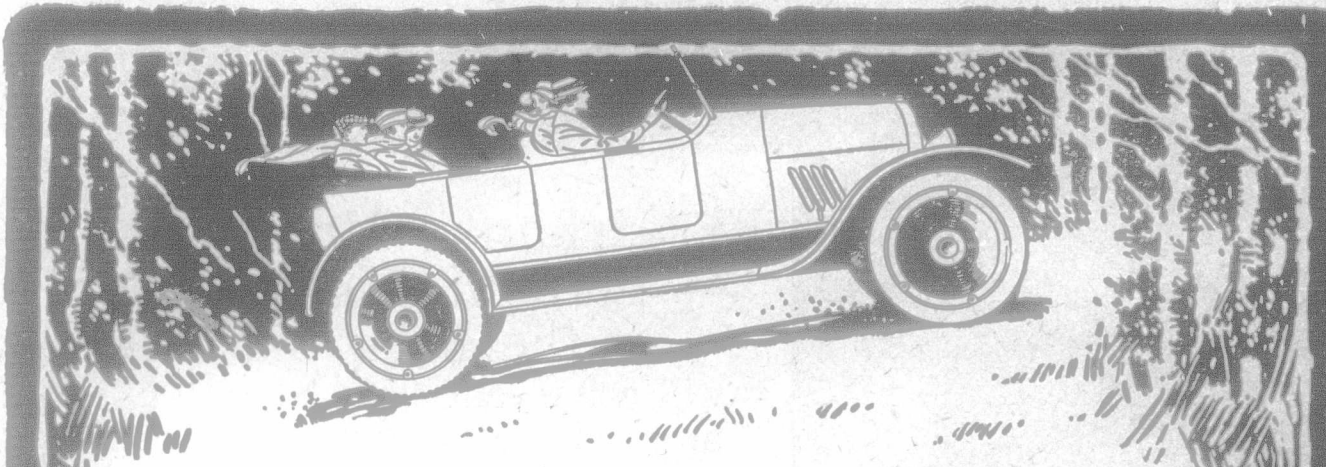
Those who make excuse for not having books do not know the value of books. A book contains the best thought and most grammatical construction of its author. He has put his very best into it, and his work should be read and re-read and mastered because of that. It is a good thing to get another's thoughts and words, and to assimilate them. It is knowledge gained, and is the best way to acquire a vocabulary. It will broaden the vision, deepen the interest in others, and give a different outlook on life.

There is education in books—a wide education. And all that many of our foremost orators and politicians have received, they have received from books which they have read and studied after they have finished school. Many of them got but very little schooling. Abraham Lincoln fitted himself for the presidential chair of America by reading every book he could secure as a boy. Gypsy Smith, though not an educated man, has a beautiful literary style which he has secured from books, and he has been invited to the pastorate of large city churches. The men and women who have done the most for the world's good have made themselves what they are by reading and studying outside the college. Indeed, they were never able to go to college. It was just until a few years ago that any one could take his Bachelor of Arts degree from Queen's University, Kingston, without attendance at college. Men and women have qualified for, and have become proficient in many lines of study by following a course of systematized study at home.

Education is to-day within the reach of all. Colleges and educational institutions have the ablest teachers and professors, specialists in all lines and branches of study. There is free access to many or to most of these institutions at a minimum charge. There are night schools which young men and women can attend who must work through the day. There are correspondence schools which give a good course of training in certain branches where theory alone is required, and practice can be found at home. Text books in all the arts and sciences can be purchased and studied at home. Education is almost free; it only requires ambition to get it.

Just a word about distinction between books. All books do not belong to the same class. There are good books, and bad books, books that will make, and books that will unmake the individual, books that will inspire to the noblest service, and books that will lead to sensuality and crimes. To the first class belong the Bible, Thomas a Kempis' "Imitation of Christ," Bunyan's "Pilgrim's Progress," Homer, Virgil, Shakespeare, the Poets, Green's "Short History of England," "Arabian Nights," Bacon's "Essays," and Emerson's "Essays," and many others. These are only a few among hundreds of the best books. To the second class belong dime novels, and all like trash which should not have a place on any bookshelf.

It does not take a learned scholar to distinguish between wholesome and unwholesome literature, books that will create and develop pure, high morals, and books that will debase and demoralize. The one who has read good books can soon make this distinction. In many



## BRISCOE HILL-CLIMBING

**H**ILLS have no terrors for those who drive Briscoe Cars. Where others have to shift gears, the man in a Briscoe goes right along "on high." Benjamin Briscoe built the half-million-dollar Briscoe Motor to stand every test a motor could be put to. It has stood them. And the rest of the car is built like the motor—built for service.


**THE CANADIAN BRISCOE MOTOR COMPANY, Limited,**  
Factory—BROCKVILLE.

Factory at Brockville. Agents in All Important Centers.

PRICES

Touring Car - \$1,225  
Roadster - - \$1,205  
Sedan - - - \$1,825

These prices all f.o.b. Brockville.  
(Briscoe pays the tax).



# SHORTHORN CATTLE

Write the Secretary for Free Publications

are market toppers from baby beef stage to maturity, grow quickly, fatten rapidly, have high dressing percentage and abundant milking qualities.

DOMINION SHORTHORN BREEDERS' ASSOCIATION 12  
W.A. DRYDEN, Pres., Brooklin, Ont. G. E. DAY, Sec., Box 286, Guelph, Ont.

**WILLOW BANK STOCK FARM**

SHORTHORN CATTLE and LEICESTER SHEEP. HERD ESTABLISHED 1855—FLOCK 1848. The great show and breeding bull, Browndale =80112=, by Avondale, heads the herd. Extra choice bulls and heifers to offer. Also a particularly good lot of Leicester rams, mostly from Imp. ewes. **JAMES DOUGLAS CALEDONIA, ONTARIO**

**SHORTHORNS, SHROPSHIRE**

Four richly-bred Lavinia females for sale. Grand lot of bull calves sired by Lochiel (Imp.) for next fall's business. Also nice bunch of Shropshire lambs, sired by Miller ram. Come and see them. **Wm. D. Dyer, R. No. 3, Oshawa, Ont. 2 1/2 miles from Brooklin, G.T.R.; 4 miles from Brooklin, C.N.R., or Myrtle, C.P.R.**

**CREEKSIDE SCOTCH SHORTHORNS**

Herd headed by Gay Monarch 79611; dam, Sally 8th imp., and sire, the great Gold Sultan 75411. My present offering of young bulls includes several 7 to 14 months' youngsters, all thick, mellow well-grown fellows—reds and roans—and priced right. Can also supply females in most any numbers. **Geo. Ferguson, —Elora Station, G.P.R., G.T.R.—Salem, Ont.**

**NICHOLSON'S SHORTHORNS**

We have about a dozen young bulls (ages 8 months and upwards), sired by our herd headers, Best Boy = 85552 = and Browndale Winner = 106217 = . Write or come and see. **R. and S. Nicholson, Parkhill, Ontario**

**FLETCHER'S SHORTHORNS**

Our herd of Scotch Shorthorns represents Orange Blossoms, Kilblean Beauties, Matchless, Mysias, Missies, Clementinas, etc., and is headed by the Watt-Stamford bull, Victor Stamford =95959=, a Toronto winner. Present offering—one young bull and several heifers and cows. **GEO. D. FLETCHER, ERIN, R. R. 1, ONT. Erin Station, C. P. R., L.D. Phone**

**Elm View Stock Farm**—Scotch Shorthorns and Oxford Down Sheep—Present offering: Two-year-old stock bull, Early Prince 107659, straight-bred Rose Bud family, sired by Roan Prince 80859; 25 yearling and 2-year-old ewes; 10 1-year-old rams—a choice lot. Orders taken for ram and ewe lambs for later delivery; all bred from best foundations obtainable. Hold back nothing. Prices reasonable. Visit or write. **B. A. McKINNON, Hillsburg, Ont.**

**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.**

**Robert Miller, Stouffville, Ontario**

still has a few Shorthorn bulls, fit for service, and some females that are as good as can be found for the man that wants to start right in Scotch Shorthorns. They will be sold for a low price, considering the quality, and the freight will be paid. Write for anything in Shorthorns. One hour from Toronto.

**IMPORTED SCOTCH SHORTHORNS**

Our present offering includes 100 imported females and 12 young imported bulls, representing the most desirable lines of breeding. If interested come and see them. Burlington Jct., G.T.R., is only half mile from farm. **J. A. & H. M. PETTIT, FREEMAN, ONTARIO**

**SHORTHORN BULLS** Will. A. Dryden  
Brooklin, Ontario Co.  
Myrtle, C.P.R., Brooklin, G.T.R.  
Brooklin, C.N.R.

of my own breeding, around a year old; best families and good colors, are for sale. Also a few young, imported bulls.

## Scratches and Stocking



—Are prevalent in cold weather irregular work and overfeed induces both. A system tonic and blood purifier, such as

**FLEMING'S TONIC HEAVE REMEDY**

will prevent these troubles and when developed, with Fleming's Veterinary Healing Oil will quickly cure them. Per box, \$1.

Fuller information in Fleming's Vest Pocket Veterinary Adviser Write us for a Free Copy

**FLEMING BROS., Chemists**  
75 Church St., Toronto

MESSRS. A. J. HICKMAN & CO. (Late Hickman & Scruby) Court Lodge, Egerton, Kent, England, Exporters of

**PEDIGREED LIVE STOCK**

of all descriptions. Speciality 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.

**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.**

**ABERDEEN-ANGUS**

MEADOWVALE FARM, Forest, Ont.  
**ALONZO MATTHEWS H. FRALIGH**  
Manager Proprietor

BEAVER HILL

**Aberdeen-Angus**

MALES AND FEMALES  
**ALEX McKINNEY, R. R. No. 1, ERIN, ONT.**

**Balmedie Aberdeen-Angus**

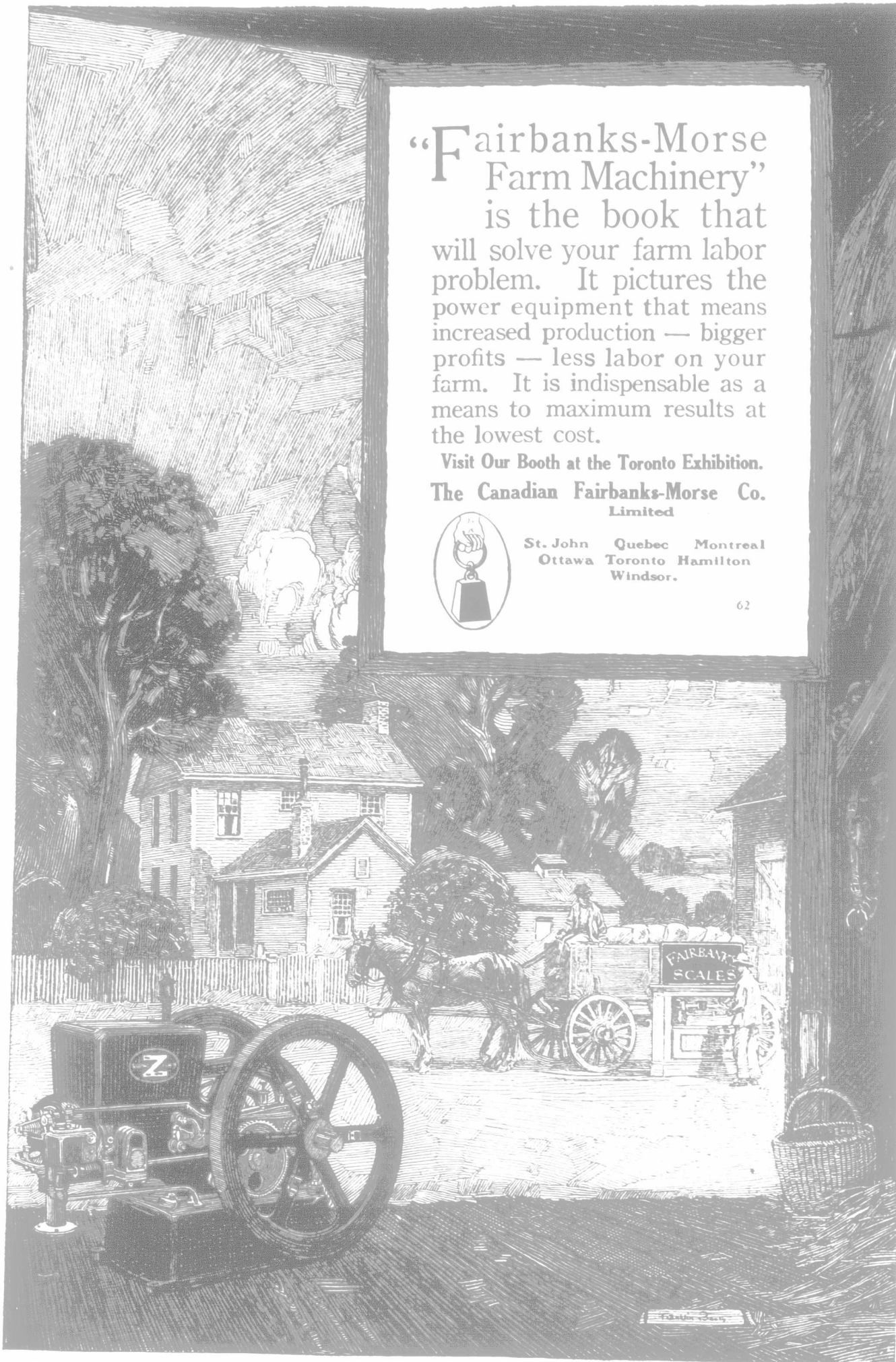
Get high-class Angus bull and breed the champion steers. I have show-ring quality bulls from 10 to 24 months of age; also choice 1 and 3-year-old heifers. **T. B. BROADFOOT, FERGUSON, ONT.**

**'MAPLE LEAF FARM'**

SHORTHORNS SHROPSHIRE  
CLYDESDALES BERKSHIRES

John Baker, R.No.1, Hampton, Ont. Bell Phone Solina, C.N.R., Bowmanville, G.T.R. and C.P.R.

**Brownlee Shorthorns.** Offers a choice lot of young bulls, ranging in ages up to nine months, and sired by the Nonpareil bull, Royal Saxon. See these before buying elsewhere. Could also spare a few females. **Douglas Brown, Bright, Ont., R. R. 3, Ayr Station, C. P. R.**



**“Fairbanks-Morse Farm Machinery”** is the book that will solve your farm labor problem. It pictures the power equipment that means increased production — bigger profits — less labor on your farm. It is indispensable as a means to maximum results at the lowest cost.

Visit Our Booth at the Toronto Exhibition.  
**The Canadian Fairbanks-Morse Co. Limited**



St. John Quebec Montreal  
 Ottawa Toronto Hamilton  
 Windsor.

62

cases a few glances are all that is required. But those who have fed their minds on cheap literature think no reading good but that which appeals to their sensuality.

A taste for this poor quality of literature can be corrected, and a taste for good wholesome literature cultivated. This can best be done by reading the biographies of good and useful men and women. Biography makes the easiest and most interesting reading. It quickens interest, inspires, and stimulates the imagination. Books of a different character may be read, and soon the desire and taste for the best books will grow.

Keep from children undesirable literature. Teach them the value of good books and how to use them. Read to them from them, and have them grow up with a natural desire and fondness for the best writers. This will aid them in the choice of good companions, and save them from many evils.

It is advisable to give children their own books, and a small bookcase in which they can keep them. This will teach them to handle their books with care, and to put them away when they have finished with them.

It is lamentable that so few children, and so few homes have books of quality. They have other things, even luxuries which are of lesser value. The greatest good which parents can do their children is that which is most often neglected. They fail to provide food for their little minds. School alone will not develop in the children a taste for reading, and a thirst for knowledge. School work is hard routine work, and grows monotonous, and children often seek and require rest from it. They should then have a few books of their own which they can look at, and read, that will rest and give them pleasure. The mind needs rest and recreation as well as the body.

Let me name a few of these books and I have finished. There are many old favorites for the boys and girls. Give them good picture books. For the past two years the publishers of the Ladies' Home Journal have furnished their readers with excellent paintings by the best artists. These have been cut from the journals by mothers and bound. They make a very fine picture book for children. Encourage the growing mind in whatever direction it may lie. If it shows a taste for medicine, law, divinity, agriculture, develop that taste. A boy or girl appreciates a book that they have paid for by their own work. Mother Goose Stories. This is a collection of rhymes. Most children will revel in Andersen's Fairy Tales, and what child is there who will not devour "Robinson Crusoe," and will not attempt the adventures described in Henty's books? "Esop's Fables" will fascinate the children. Woods' "Natural History" and "Wild Flowers" will acquaint the young with Nature and with God. Tennyson says:

"Flower in the crannied wall,  
 I pluck you out of the crannies;  
 I hold you here, root and all, in my hand,  
 Little flower, but if I could understand  
 What you are, root and all, and all in all,  
 I should know what God and man is."

"Heroes." This is a collection of short biographies, Lamb's "Tales from Shakespeare" will give the youth a brief outline of Shakespeare's plays. "Greek Fairy Tales," by Kingsley, will find the way to a child's mind and heart. Hurlbut's "Story of the Bible," consisting of biographical sketches from Genesis to Revelations, and for the best of its kind will acquaint the young with Bible characters, and lastly, the "Book of Knowledge," the best known work to-day for children. It is a whole library in itself, and should be in every home.

Let parents provide good reading material for their children, and they will never regret it.—A. E. McLAREN.

**Murphy Stopped.**

An officer on board a warship was drilling his men.

"I want every man to lie on his back, put his legs in the air, and move them as if he were riding a bicycle," he explained. "Now commence."

After a short effort one of the men stopped.

"Why have you stopped, Murphy?" asked the officer.

"If ye please, sir," was the answer, "O'm coasting!"

**Mardella Shorthorns**

Herd headed by **The Duke**, the great, massive, 4 year-old sire, whose dam has 13,599 lbs. of milk and 474 lbs. of butter-fat in the R.O.P. test. I have at present two exceptionally good young bulls ready for service, and others younger, as well as females all ages. Some are full of Scotch breeding, and all are priced to sell. Write or call.

Thos. Graham, R.R. No. 3, Port Perry, Ont.

**Evergreen Hill R.O.P. Shorthorns**

Herd headed by the R. O. P. bull, **St. Clare**. Nothing for sale at present.

S. W. Jackson, R. R. No. 4, Woodstock, Ont.

**GLENFOYLE SHORTHORNS**

College Duke 4th in service—a high record son of Rothschild and Taylor's noted stock. Am offering young cows and heifers, bred to this great bull. Have a few bulls of breeding age on hand. Stewart M. Graham, Lindsay, Ontario

**Lochabar Stock Farm**

is offering two right good Scotch Shorthorn bulls, 12 and 18 months; a roan and a red; also some females. D. A. Graham, R. R. 4, Parkhill, Ont.

**Shorthorns and Shropshires**—We still have a few extra well covered shearing rams. Also a choice lot of ram and ewe lambs. Prices right. We can supply young bulls or heifers, both of which are from high record dams. P. CHRISTIE & SON, Port Perry, Ont.

**Lake Marie Farm Shorthorns**

Herd Sire—**Golden Hope**, an Orange Blossom by the great Archer's Hope. We have several young bulls by him and four other 8 months calves by the R. O. P. sire **St. Clare**. All are priced to sell. We are also pricing a few fresh Dutch Belted cows and heifers. This breed although not well known in Canada are extra heavy milkers. Correspondence solicited.

**LAKE MARIE FARMS, KING, ONT.**

SIR HENRY PELLATT, Owner

THOS. McVITTIE, Manager.

**SHORTHORNS LANDED HOME**

My new importation of 60 head will be at home to visitors June 29th, and includes representatives of the most popular families of the breed. There are 12 yearling bulls, 7 cows with calves at foot, 24 heifers in calf, of such noted strains as Princess Royal, Golden Drop, Broadhocks, Augusta, Miss Ramsden, Wimple, etc. Make your selection early. Geo. Isaac, (All Railroads, Bell Phone) Cobourg, Ont.

**SPRUCE GLEN FARM**

Herd headed by Nonpareil Ramsden = 101081 = and Royal Red Blood = 77521 =. At present we have nothing to sell but we have some very good ones coming on. James McPherson & Sons, Dundalk, Ontario.

**MAPLE HALL SHORTHORNS**

Present offering, 7 yearling bulls; One Cruickshank Duchess of Gloster. Five Cruickshank Butterflies. One Shepherd Rosemary. All pure Scotch, and extra good; also a few young cows with calves, and yearling heifers. D. BIRRELL & SON, CLAREMONT, ONTARIO

**1854 Maple Lodge Stock Farm 1918**

Shorthorns and Leicester Sheep; 4 shearing rams and a few lambs on offer. CHARLOTTE SMITH, (Lucan Crossing one Mile) CLANDEYBOYE, R. R. 1, Ont.

# DUNLOP TIRES

## Make a Comparison

Assume nothing in a tire that you cannot see.

It is easy to measure "Traction's" big corrugations, or "Special's" big "buttons," with any competitive anti-skid.

**Dunlop Tires go Further and go Better.**

"SPECIAL" - "TRACTION"

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

Runs by Motor or Engine

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



**Maxwell**  
Power Bench Washer

—has proved itself a wonderful friend to others. Let it help you. It will even do the wringing! 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**

### Herdsman Wanted

I am open to engage an experienced herdsman to handle my well-known Holstein herd. I want a man experienced in R. O. M. work, to develop a most promising lot of young cows and heifers. We have five 30-lb. cows now and want five more next winter.

First-class house and pleasant surroundings, near Toronto. Apply by letter first.

**R. W. E. BURNABY - JEFFERSON, ONT.**

### Manor Farm Holstein-Friesians

If it's a herd sire you want, write me. I have sons of both my senior and junior sires, King Segis Pontiac Posch and King Korndyke Sadie Keyes. All are from good record dams.

Choice bull calves at present to offer—average for two nearest dams, up to 34.71 lbs. butter in seven days. Correspondence solicited, visitors welcome.

**Gordon S. Gooderham** Stations: Clarkson and Oakville Farm on Toronto and Hamilton Highway **Clarkson, Ont.**

#### My present offering of HOLSTEIN BULLS

8 months and younger from Sir Gelsche Walker, whose 7 nearest dams average 30 lbs. butter in 7 days, and officially tested cows. Write for prices and full particulars.

**Thos. L. Leslie, Alluvialdale Farm, Norval Station, Ont.**

### DUMFRIES FARM HOLSTEINS

Cows for sale, bred to Plus Evergreen, son of Evergreen March.

**S. G. & ERLE KITCHEN** Bell 'phone. **ST. GEORGE, ONTARIO**

### Cloverlea Dairy Farm Holsteins

Present offering consists of three choice young bulls ready for service. Will be priced right for quick sale. For price and particulars apply to **GRIESBACH BROS., COLLINGWOOD, ONTARIO.**

### Riverside Holsteins

We still have some good bulls on hand, including two half-brothers of Toitilla of Riverside, former Canadian R.O.P. Champion. Write or phone your wants to—**J. W. Richardson, Caledonia, Ont.**

#### SILVER STREAM HOLSTEINS

Special offering—four well-bred young bulls fit for service, sired by King Lyons Colantha whose 6 nearest dams average 30.10 lbs. of butter in 7 days and from daughters of King Lyons Hengerveld whose five nearest dams average 31.31 lbs. butter in 7 days. For fuller particulars and prices write at once. Priced to sell. **J. MOGK & SON, R. R. 1, TAVISTOCK, ONTARIO.**

### United States Defines Non-Productive Occupations.

The loafers and merely workers of the North American continent have fallen upon evil days. Both in Canada and the United States, the law has now set its face severely against them. On July 1, the United States Federal Order as drawn up by Provost Marshal Enoch Crowder, went in effect. All men of draft age, that is between the ages of eighteen and fifty, have now to be engaged in some productive employment or get into the army. This Federal Order is being reinforced by anti-loafing laws, enacted by State Legislature.

The Provost Marshal has defined productive and non-productive occupations and there is no escape for those who cannot be classed among the productive workers if they are of draft age. Non-productive occupations in the United States are defined as follows:

First, persons engaged in the serving of food and drink or either in public places, including hotels and social clubs.

Second, passenger elevator operators, attendants, door and footmen, carriage openers and other attendants in clubs, hotels, stores, opera houses, office buildings and bath houses.

Third, persons, including ushers and other attendants engaged and occupied in connection with games, sports and amusements, except actual performers in legitimate concerts, operas and theatrical performers.

Fourth, persons employed in domestic service.

Fifth, sales clerks and other clerks employed in stores and other mercantile establishments.

If a man of draft age registered in due course and waiting his selection for the draft be not employed in productive occupation, or if he be idle partially or completely, he must hold himself on immediate call for the army. The regulation is applicable to idle registrants, to gamblers of all descriptions and employees of race tracks and bucket shops, to fortune tellers, clairvoyants, palmists and people of such vocation. If the Board of Appeal so judge, idlers may have their deferred classification withdrawn and their names will be reported to the Adjutant General of the State for military service. The only excuses for idleness and non-productive employment on the part of a man of military age are set down as sickness, reasonable vacation, lack of reasonable opportunity for employment, temporary absences from regular employment not to exceed one week, unless such are habitual and frequent or domestic circumstances involving hardship to dependents if a change of employment were ordered, or where such change would necessitate night work on the part of women under unsuitable conditions.

In the State of New York, the sheriffs, state police, district attorneys, magistrates, other officers of the law, and the State Industrial Commission, under the state anti-loafing legislation, are combined to enforce the Federal Order and assign men where necessary to jobs of a productive character. It is estimated that 1,000,000 will change their employment as the result of this order of General Enoch Crowder. It is pointed out, however, that no man should give up his present employment, even though of the non-productive class, until he has either procured work at an essential industry or such work has been procured for him, as it is recognized that a man employed at non-essential work is better than a man not employed at all.

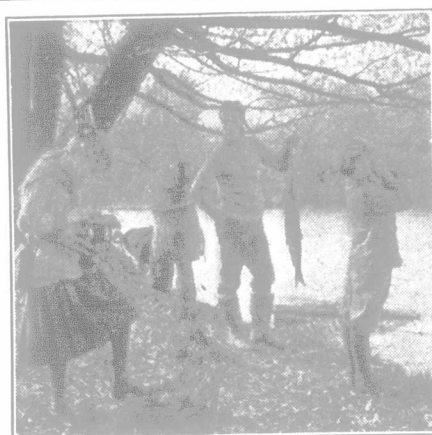
Canada's anti-loafing law has been in operation since early in April and every male person over sixteen and under sixty years of age, unless a bona fide student, or physically unfit, or reasonably unable to find employment, must be engaged in some useful occupation.

In Canada, the most essential industry at the present time is agriculture. Food production is a necessity of the summer of 1918 and the saving of the harvest is the necessity of the present moment.

#### A Complete Sentence.

In one of the many navy schools a young instructor was attempting to teach English to a gruff old sailor. "What is a complete sentence?" he said.

"Solitary confinement, bread and water," was the grim reply.



Let the children

## KODAK

The fun of the farm is still more fun with a Kodak—not only for the youngsters but for you.

With an Autographic Kodak or Brownie, each picture is permanently identified—the date and title are written on each negative at the time of exposure.

Autographic Kodaks—  
\$8.50 up

**CANADIAN KODAK CO.**  
Limited  
TORONTO, CANADA

### CANADA

MILITARY, INDUSTRIAL, AGRICULTURAL and EDUCATIONAL, gathered together in a few acres at the

**CENTRAL CANADA**

## Exhibition

OTTAWA

Sept. 7th to 16th, 1918

Increased Prizes for Live Stock, Farm and War Garden Products—Military Features—Government Exhibition of War Trophies—Aerial Feats—Dominion and Provincial Government Exhibits—Auto Show—Dog Show—Poultry Show—Better Baby Show—Pure Food Show—Horse Racing—Better and Bigger Midway. "Big Time" Vaudeville Acts from the New York Hippodrome, in a first-class programme.

Magnificent Mammoth Fireworks Display with Spectacular presentation of the Battle of the Somme, with Tanks in action.

Special old-time Mardi Gras Festival on the closing night, Saturday, Sept. 16th—Countless other attractions.

See Local Agent for Railway Rates.

**STEWART McCLENNAGHAN,**  
President

**JOHN W. BRANT, Treasurer**  
**J. K. PAISLEY, Manager and Secretary**

## DEAFNESS

ITS CAUSES AND TREATMENT  
Write for Free Booklet and particulars of the free trial offer of the Mears Ear Phone.

**THE MEARS COMPANY of CANADA**  
Dept. A., 194a PEEL STREET, MONTREAL



## What Will You Do For Help?

**F**ARM help is scarce, but this condition can be relieved to a marked degree by using machines that accomplish more work in a given time with less man power.

Why should the farmer cling to horses—a slow, expensive means of power—when every other business is adopting the truck and thereby reducing the cost of hauling, speeding up deliveries, and saving for human needs the food that the horses would otherwise consume?

The motor driven truck can work constantly at maximum load under the burning summer sun, or in the coldest weather. Unlike the horse it needs no rests while working, it eats only while in actual use, and when the day's work is done it requires very little attention, and leaves you free for other "Chores" about the place. Then, it can be housed in one-quarter the space of the horses, wagon and harness it replaces.

It is a mistaken idea that a truck is useful only for driving upon paved roads. The Ford can be driven all over the farm, and used for hauling grain, potatoes, fruit, roots, fertilizer, wood, stock, milk or any other product. The speed it travels, the time it saves, and its low upkeep cost appeal very strongly to all users of the Ford Truck. If you need help, order your Ford One Ton Truck today.

*All prices subject to war tax charges, except trucks and chassis*

**Ford**

THE UNIVERSAL CAR

One-Ton Truck \$750

Runabout . . . 575

Touring . . . 595

Coupe . . . 770

Sedan . . . 970

Chassis . . . 535

F. O. B. Ford, Ont.

**Ford Motor Company of Canada,  
Limited**

**Ford - - Ontario**

### Putting the Sun to Work.

Civilization may best be regarded as the utilization of energy for the benefit of humanity. The primitive man had command of no other course of energy than his own muscles. Consequently he could not accomplish much. His first advance was made when he drafted the energy of the lower animals into his service; when he mounted the horse and hitched his wagon to an ox. But so long as man was dependent upon the labor of human or animal slaves he was himself enslaved. He entered upon his era of emancipation when he began to employ mechanical energies, first the wind and the waterfalls, later coal and oil. All these sources of energy are derived, remotely or recently, from the sun, which is the real motive power of the railroad train and automobile. It was only when man learned to hitch his wagon to a star that he became free. These three stages of civilization might be illustrated by three pictures; the first of a gang of slaves dragging a great stone for the building of the pyramid of Cheops, the second of a half dozen teams of oxen or horses straining to pull a heavy load, and, last, a modern power house, clean, cool and quiet, where the engineer sits reading a paper and occasionally glances at a dial and turns a switch which controls the current for a hundred cars. At the exit gate of the Garden of Eden a sentence of perpetual labor was passed upon mankind, but modern science points out a way of relief from the primal curse.

The labor problem will eventually be solved by the complete abolition of labor in the sense of physical exertion. Visit one of our great steel plants where more work is turned out in a week than the ancient world could perform in a century, and you will see only a few men scattered about the building and not many of these are straining their muscles. It will not be long, too, before man strips the harness from the horse for the last time and with a grateful slap on the flank turns him loose in the pasture of a zoological garden. If you look out of your window on a wintry day you can see the conflict of the passing and coming stages of civilizations. A toiling team of horses is trying to drag a coal cart through the slush, but, though the driver lashes them furiously, they only slip and flounder, while a stream of motor cars and trucks whizz by with impatient toots. The horses may as well give up. They are out of the race. Art again has vanquished nature. Man in the machine is superman, a veritable *deus ex machina*.

The machines by which man has been enabled to climb to heights of wealth and comfort hitherto unattainable are mostly run by fossil fuel. If man was able to make use directly of the radiant energy of the sun a dozen square miles of Arizona desert would provide all the motive power needed by the United States. But as it is he is obliged to get this energy indirectly by drawing upon the stores of solidified sunshine concealed in the earth. The carbon and the hydrocarbons, the coal and the oil, resulting from the accumulation and condensation of millenia of vegetable growth, are brought again to light and reunited to the oxygen of the air, thus regenerating the heat that formed them. But this supply is limited. The world is now living on its capital. The amazing acceleration of civilization during the last century, the increase of population and wealth, the expansion of industry and commerce, the development of new countries, the improvement of living conditions, and the advancement of the arts and sciences are all due to the fact that the present generation has inherited a fortune accumulated during millions of years and is spending it lavishly with no thought for the morrow. The coal bins of England and France will begin to give out within two hundred years. Those of Germany may last four or five times as long, while the United States and China have still greater reserves to draw upon. But the oil supply is much more limited and unevenly distributed. The United States is favored above all other countries in this respect, but our navy department prophesies that American petroleum will last only twenty-seven

### FEEDS

Linseed Oil Cake Meal, Corn Oil Cake Meal, Gluten Feed Meal, Bran, Shorts, Feeding Corn Meal.

Also a full line of the reliable Good Luck Brands of Poultry Feeds.

Write or 'phone for prices.

**CRAMPSEY & KELLY**  
Dovercourt Road, Toronto, Ontario

### HET LOO PIETERTJE

THE \$12,750 HEIFER

Sold at the great Milwaukee Sale, was only one of the many daughters we have of our senior sire Pontiac Korndyke of Het Loo. We also have sons—brothers to this world's champion heifer; and for the next few weeks, these, along with several other young bulls of serviceable age, are priced exceptionally low. Let us hear from you if interested—at once.  
W. L. Shaw, Hayercroft Farm Farm on Yonge St., Toronto & York Radial, 1 1/2 hours from Toronto. New Market, Ont.

### Hospital for Insane, Hamilton

We offer bulls only for sale, but they are from some of the choicest cows to be seen in any herd, and bulls equal to the best.

—Apply to Superintendent

### Holstein Bulls

Ready for service and younger. Cows and heifers bred to ORMSBY JANE BURKE, whose two nearest dams average 38.82 lbs. of butter in 7 days. The three nearest sires' dams and his dam's records average 35.69 lbs. for 7 days, and 112 lbs. milk for one day.

R. M. HOLTBY, R. R. 4, PORT PERRY, ONT.

Please mention this paper

#### PIONEER FARM HOLSTEIN HERD

—the herd that produces champions—offers a very handsome, ready-for-service son of Canary Hartog. His dam a high-testing sister of Calamity Snow Mechthilde 2nd, the new Canadian champion three yr.-old in R.O.P. Also bull calves from champions, and from dams' sisters and daughters of champions. Don't take time to write—come at once and see them for yourself.

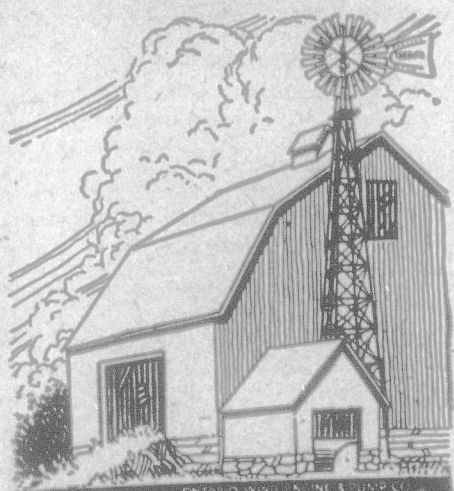
WALBURN RIVERS & SONS, R. R. 5, Ingersoll, Ont. Phone 343L, Ingersoll Independent Line.

#### EVERGREEN STOCK FARM . . . Registered Holsteins

Just now we are offering one choice yearling bull, ready for heavy service. The records of his five nearest dams average over 31 lbs. butter in 7 days, and over 100 lbs. milk in 1 day. We have also some high-record bull calves, including one whose dam and sire's dam have records that average 37.66 lbs. butter in 7 days and 127 lbs. of milk in 1 day. A. E. HULET, Norwich, Ont. Bell Phone 48-3



Work.  
 regarded as  
 the benefit  
 the man had  
 of energy  
 consequently  
 h. His first  
 drafted the  
 into his  
 the horse and  
 But so long  
 the labor  
 was himself  
 his era of  
 to employ  
 wind and  
 oil. All  
 derived,  
 the sun,  
 wer of the  
 le. It was  
 hich his  
 became free.  
 tion might  
 ures; the  
 dragging a  
 of the pyra-  
 of a half  
 rses strain-  
 nd, last, a  
 cool and  
 s reading  
 ances at a  
 ch controls  
 rs. At the  
 den a sen-  
 s passed  
 ence points  
 rmal curse.  
 eventually  
 bolition of  
 l exertion.  
 ants where  
 week than  
 form in a  
 a few men  
 and not  
 ir muscles.  
 man strips  
 or the last  
 the flank  
 of a zoo-  
 of your  
 u can see  
 nd coming  
 ling team  
 coal cart  
 the driver  
 y slip and  
 motor cars  
 impatient  
 ll give up.  
 again has  
 e machine  
 x machina.  
 man has  
 s of wealth  
 inable are  
 man was  
 e radiant  
 uare miles  
 de all the  
 e United  
 ged to get  
 wing upon  
 concealed  
 the hydro-  
 resulting  
 ndensation  
 growth, are  
 ighted to the  
 rating the  
 his supply  
 ving on its  
 eration of  
 ntury, the  
 ealth, the  
 ommerce,  
 tries, the  
 s, and the  
 iences are  
 sent gen-  
 une accu-  
 years and  
 o thought  
 s of Eng-  
 give out  
 Those of  
 times as  
 nd China  
 raw upon.  
 re limited  
 e United  
 her coun-  
 navy de-  
 American  
 nty-seven



**TORONTO**

**Windmills—Save Labor**  
 TORONTO Windmills have brought windmills back into favor—and rightly, too. The power is produced absolutely free, and no farmer can afford to neglect labor saving power at this time when farm help is so scarce. Toronto Windmills assure power in the lightest breeze, requires practically no attention or repairs—there is a minimum of noise and wear and seldom does a Toronto need fresh oil. Our book tells the story. Have you asked for a copy yet?  
 Address—141R

**ONTARIO WIND ENGINE & PUMP CO., LIMITED**

Atlantic Ave., Toronto.  
 12 St. Antoine St., Montreal.  
 Winnipeg Calgary Regina



**Protect Your Cattle and Horses from this Profit-eating Pest**

Don't let flies rob you of your profits. Few people realize the annual loss from shrinkage of milk and flesh caused by flies and other insect pests tormenting cattle.

**NO-FLY-NEAR**

is the sure, safe, cheap and humane solution of this problem, easily applied with spray. Write for free circular giving full particulars.

Price: 1 gal. \$1.25; 5 gals. \$5.50

**KENNETH McDONALD & SONS Limited - OTTAWA, Ont.**

**A Real Oil Engine**

**Not an Experiment**

Uses no Gasoline, not even to start with. Starts easily in the coldest weather on the fuel it runs on, Coal Oil or Fuel Oil, and only uses half the amount required by other so-called Oil Engines. The saving in fuel alone will pay for this engine in a few months. The

**Hoag Oil Engine**

has no electric devices whatever, the burning of the oil is obtained by mechanical means alone, and the usual time and trouble, forever fixing electrical ignition, is entirely done away with, making this engine the Farmers' Friend. Get circulars and price of size you are interested in.

**HENRY P. HOAG & CO.**

Brantford Ontario.

**DAIRY SUPPLIES**

**BUTTERMAKERS' WRAPPERS.**—Name and address printed—Best Parchment—In Ontario—Ream (480 sheets) \$2, 2 reams \$3.25, other provinces extra postage 25 cts.—Cash with order—Large quantities special rates. Farmers' Printery, Beaverton, Ont.

**Choice Offering in Ayrshires**

**AT SPECIAL PRICES.** Several young bulls of serviceable ages. All from R.O.P. sires and dams. Come and see them.

**JOHN A. MORRISON, Mount Elgin, Ontario**

**Glencairn Ayrshires**

Herd established 40 years. Producing ability from 8,600 to 11,022 lbs. If that sort of production appeals to you, we have heifers all ages and young bulls for sale. Thos. J. McCormick, Rockton, Ont., Copetown Station, G. T. R.

**City View Ayrshires**

Established in 1900. One serviceable bull from Record Dam testing 4.64% fat; some choice young stock. James Begg & Son, R.R. 1, St. Thomas

years if the consumption increases at the present rate.

Wealth is produced by the expenditure of energy, by the work of men, beasts or engines, by the oxidation of food or fuel. The vast increase in wealth in recent times is due solely to the utilization of external forms of energy, for man's internal energy, his own muscular power, has not increased and he is no more inclined to use it to the utmost than he used to be.

In 1776 two revolutions occurred in English history. The American colonies declared their independence and James Watt set up his first steam engine to run the bellows of Wilkinson's iron-works. From a financial viewpoint one event offset the other. By utilizing the energy of her coal beds Great Britain was able to bear with ease not only the burden of the billion dollar debt that the American war had placed upon her but the three and a half billion dollars that the Napoleonic wars had added to it. It has enabled her to spend \$30,000,000 a day on the present war.

The Age of Steam lasted just a century, for in 1875 its supplanter was invented. In that year Dr. Otto put his gas engine on the market.

The modern historian devotes more attention to the Industrial Revolution due to the invention of the steam engine than he does to the American Revolution, which was merely a division of administration. The revolution effected by the invention of the internal combustion engine we do not need to be told about, for we are living in the midst of it. We can all remember the day when we first saw the horseless carriage come puffing down the street and that other day, perhaps ten years later, when we first saw the biplane rise buzzing in the air.

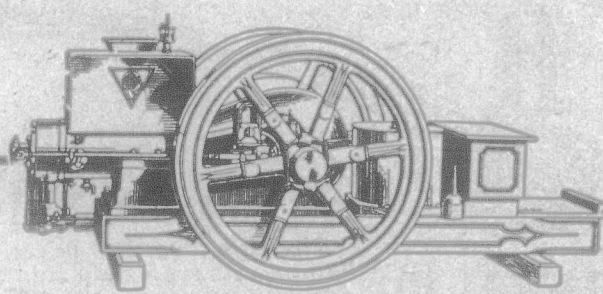
We have heard how the battle of the Marne was won by the mobilization of the motor cabs of Paris for sudden shifting of troops to stop the German invasion. We read every day how many ships have been sunk by the Diesel-driven submarine. We have watched the rise of a new industry and a new amusement. We have seen the revival of the country inn and the improvement of country roads. Every shop, however small, can now afford its own engine. Every man—and many a woman—becomes an engineer. This means independence for the individual.

The gas engine was speedily adopted and improved in England, for gas is an English invention and she has plenty of coal to make it from. But when it came to petroleum as a fuel, England was at a disadvantage, for she had no oil at home and comparatively little in her colonies. It would seem that Nature was in her most capricious mood when she distributed the pools of petroleum, for she gave this, the most valuable of all fuels for shipping, to the countries that had least shipping. The leading producers of petroleum before the war were the United States, Russia, Mexico, Rumania, Dutch East Indies and Galicia. The leading nations in transoceanic shipping are Great Britain, Germany, Norway and France. The countries that produced nearly ninety-nine per cent. of the petroleum possessed only about ten per cent. of the vessels most in need of it.

Some of the fiercest fighting of the war has been over the oil fields of Galicia, Rumania and Mesopotamia, and Germany in dictating her first peace treaty stipulates that Russia shall surrender Batum, the outlet of the Baku oil fields; that formerly produced half the world's supply.

The introduction of the automobile into England was hindered not only by English conservatism but by the law. Up to 1896 English law prohibited any self-propelled vehicle from running on the highways unless a man walked in front of it waving a red flag. This precaution certainly kept the speed down to the limits of public safety, but did not encourage motoring as a pastime. Consequently it was in France and the United States that the automobile industry was first developed.

The introduction of the internal combustion engine for motor cars and motor boats and stationary power brought a demand for gasoline, which formerly had been a waste product. Suddenly the laws that had been passed in every State prohibiting the sale of kerosene of too low a flashing point became a dead letter, for there was no temptation to violate them. Instead of trying to work off some of the surplus gasoline in the kerosene the oil man devoted his energies to getting as



**ALPHA GAS ENGINES**  
 faithful as a work-horse

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

It's always reliable; always ready.

Why?

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

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

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

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

**JUST ASK ANY ALPHA USER**

Alpha Gas Engines are made in 12 sizes, 1 1/2 to 28 H. P., and in stationary, semi-portable or portable style, with hopper or tank-cooled cylinder.

Write today for our gas engine book

**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

**Ontario Veterinary College**

110 University Avenue, Toronto, Canada

Under the control of the Department of Agriculture of Ontario.

Affiliated with the University of Toronto.

**College Reopens Tuesday, October 1st, 1918**

CALENDAR SENT ON APPLICATION

E. A. A. GRANGE, V. S., M.Sc., Principal

**BRAMPTON JERSEYS**

We bred and owned the dam, and imported the sire of the champion R.O.P. butter cow of Canada. We own the champion four-year-old R.O.P. butter cow of Canada. To make room for 1918 importation, expected to arrive in May, we are making special offerings of females and bulls, all ages.

**B. H. BULL & SON** BRAMPTON, ONTARIO

**THE EDGELEY CHAMPION HERD OF JERSEYS**

Write us about your next herd sire. We now have sons of our present herd sire, Edgeley's Bright Prince, who is a son of Canada's champion butter cow, Sunbeam of Edgeley. Pay us a visit. Sunbeam of Edgeley is not the only high-record cow we have. We are pleased to show our herd at all times

**JAMES BAGG & SONS** (Woodbridge, C.P.R., Concord, G.T.R.) EDGELEY, ONTARIO

**I HAVE JERSEY COWS and BULLS**

FOR SALE

Six cows at \$200.00 each; bulls from \$50.00 to \$100 each. T. HETHERINGTON, c.o. 481 from Island Blood sires. Strictly guaranteed, as represented. Aymer Street, PETERBORO, ONT.

**THE CANADA'S MOST BEAUTIFUL JERSEY HERD**

Imported Champion Rower at its head.

**WOODVIEW FARM** This bull, with his get, won first prize on the island of Jersey, 1914, second in 1916, and again first in 1917. Present offering—A few yearling heifers in calf to our great young bull, Woodview Bright Prince, (7785), and bred from imported sires and dams. We show our work cows and work our show cows

**JERSEYS**

**LONDON, ONTARIO** Jno. Pringle, Prop.

**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.

**RAVENSDALE AYRSHIRES**

A few splendid 12-months-old bulls, out of R.O.P. and Imp. high-testing dams. January test averaged 4.06%; also younger bulls and heifers. I have three registered Clydesdales for sale, eight months old. Write for prices or come and see stock.

**W. F. KAY, PHILIPSBURG, QUEBEC** 50 miles south of Montreal. St. Armand Station, G.T.R.

**GLENHURST AYRSHIRES—ESTABLISHED 50 YEARS**

For a half-century Glenhurst Ayrshires have been noted for their depth and size, good teats and smoothness of conformation. Our famous Flos family has produced dozens of 60 and 65-lb.-a-day cows, many on twice-a-day milking. We have young bulls up to twelve months, and females all ages. If you are looking for a combination of size, type and production—plus high butter-fat—write me or visit the farm. **JAS. BENNING, Summerstown, G.T.R.; Williamstown, G.T.R., Williamstown, Ont.**



### The Dependable Champion For McLaughlin Cars

The extra long shell places the spark down into the cylinder instead of in a pocket in the cylinder head as does the ordinary plug.

All new Fords, Overlands, Maxwells and Studebakers are factory equipped with

**Champion "Minute" Spark Plug Cleaner**

Cleans a set of plugs perfectly in a few minutes without taking them apart or even getting your hands dirty. All you have to do is half fill the tube with gasoline, screw in the plug and shake for a minute. Sells everywhere for \$1.00

**Champion Dependable Spark Plugs**

No matter what car you own there is a Champion Plug that will make your motor produce the greatest amount of energy for each drop of gasoline used.

The patented asbestos-lined copper gaskets on the shoulders of Champion porcelains insure dependability and long life at any speed.

Ask any dealer for Spark Plugs with "Champion" on the porcelains—it guarantees "Absolute satisfaction to the user or free repair or replacement will be made".

**Champion Spark Plug Co., of Canada, Limited Windsor, Ontario**

Champion Plug For McLaughlin Cars Price, \$1.00

much gasoline as he could out of the heavier fractions of petroleum by various processes of "cracking."

But the invention by Dr. Rudolf Diesel of a new form of engine using crude petroleum instead of gasoline makes distillation unnecessary. A vessel equipped with Diesel engines can go four times as far on the same fuel as one using a coal burning steam engine. It was the Diesel engine that made the big U-boats possible, and recently the Germans have adapted this power to big airplanes.

But all these new engines depend upon the oil wells for their fuel, and these are being rapidly exhausted. It would seem that man, having learned at last how to utilize this incomparable source of energy, might have to give it up in a few years, that his new toys, the automobile, the motor boat, the aeroplane and the submarine, would soon be taken from him and he would have to go back to slow-coach days of coal and steam. But perhaps not. It is possible to make synthetic petroleum by the distillation of wood, and the Diesel engine can be run on any of the vegetable oils.—The Independent.

### Forest Fires.

There was a time in the memory of living men when the inhabitants of some of our Canadian cities took pride in having their city wrapped in a pall of smoke at certain seasons of the year, because, they said it indicated activity in lumbering. To-day cities and provinces are just beginning to take pride in the absence of forest fires. The trees may be cut down and marketed and a new crop started without any fires developing. This is shown in a bulletin just issued by the Forestry Branch of the Department of the Interior entitled, "Forest Fires in Canada 1914-15-16." This is the first successful attempt to get systematic statistics as to the losses suffered by Canada through forest fires. It shows the danger seasons and the causes of fires, and shows also how fires may be so combatted that the loss in the area equipped and patrolled will be almost negligible. Diagrams illustrate the causes of fire, the extent of our losses, and the character of the timber burned. The publication of these statistics will tend to arouse Canadians to the evil of helping our national enemies by allowing fires to destroy wealth which is required to prosecute the war. The Bulletin may be had free on application to the Director of Forestry, Ottawa.

### Questions and Answers. Veterinary.

#### Fatality in Pigs.

Sow farrowed 11 pigs. In a few days one took diarrhoea and died. When 3 weeks old three swelled in their joints and became crippled. Two of these died. When 4 weeks old the dam became sick and there are swollen purple blotches on her. She was fed on chopped oats, a little bran and alfalfa grass. J. C.

Ans.—The diarrhoea and the swollen joints with crippling indicate the presence of a germ in the premises in which the litter was born and raised. The sow may have also become infected and the present condition caused in that way. It will be well to change both sow and living young to fresh quarters and allow free run on grass daily, and thoroughly disinfect the present premises before introducing the pigs again. V.

#### Lump on Leg.

1. Horse that I want to show this fall has a lump on his hind leg. The lump is on the inside of the leg just below the joint. It is about 1/2 inch in thickness and 1 1/2 inches long. It is as hard as bone and does not involve the joint.

2. Would this be considered a blemish in the show ring? E. B.

Ans.—1. This is probably the result of a blow or severe bruise which caused a thickening of the periosteum (the fibrous covering of the bone). It is very hard to reduce. It may be reduced in time by rubbing with smart friction once daily with a liniment made of 4 drams each of iodine and iodide of potassium and 4 ozs. each of alcohol and glycerine, but it is not probable that you can materially reduce it in time for the fall fairs.

2. Yes. V.

## WOOL

Farmers who ship their wool direct to us get better prices than farmers who sell to the general store.

**ASK ANY FARMER!** who has sold his wool both ways, and note what he says—or, better still, write us for our prices; they will show you how much you lose by selling to the General Store.

We pay the highest prices of any firm in the country and are the largest wool dealers in Canada. Payment is remitted the same day wool is received. Ship us your wool to-day—you will be more than pleased if you do, and are assured of a square deal from us. 2

**H. V. ANDREWS**  
13 CHURCH ST., TORONTO

## NORTHERN ONTARIO

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

Thousands of farmers have responded to the call of this fertile country, and are being made comfortable and rich. Here, right at the door of Old Ontario, a home awaits you. For full particulars as to terms, regulations and settlers' rates, write to:

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

## Southdowns and Shropshires

We have an unusually choice lot of shearing rams of both breeds to offer as flock headers and for show purposes. Inspection and correspondence invited.

**LARKIN FARMS (Please mention Farmer's Advocate) QUEENSTON, ONT.**

## OXFORD DOWN SHEEP

ONE OF THE OLDEST ESTABLISHED FIRMS IN AMERICA

Although we have sold our farm at Arkell we are still in the sheep business, stronger than ever, having secured other land expressly for sheep.

**PRESENT OFFERING:—100 yearling rams and 50 yearling ewes. Orders taken for ram and ewe lambs for later delivery. All bred from our own importations. Prices reasonable. Communicate to—**

**Henry Arkell & Son, (Phone at present under name of T. Reg. Arkell) 70 Beatty Ave., Toronto, Ont**

**Lakeview Yorkshires** If you want a brood sow or a stock boar of the greatest strain of the breed, (Cinderella), bred from prizewinners for generations back, write me.

**John Duck, Port Credit, Ont.**

**PROSPECT HILL BERKSHIRES**

Young stock, either sex, for sale, from our imported sows and boars; also some from our show herd, headed by our stock boar, Ringleader. Terms and prices right. **John Weir & Son, Paris, Ont., R.R. 1**

**ELMHURST LARGE ENGLISH BERKSHIRES**

From our recent importation of sows, together with the stock boar, Suddon Torredor, we can supply select breeding stock, all ages. Satisfaction and safe delivery guaranteed.

**H. M. VANDERLIP, Breeder and Importer, R. R. 1, BRANTFORD, ONTARIO**  
Langford Station on Brantford and Hamilton Radial

**DUROC JERSEYS**

Our herd won all champion prizes at Toronto and London, 1916 and 1917. Pairs not akin. Young stock, all ages for sale. Visitors welcome. For further particulars write:

**CULBERT MALOTT, No. 3, Wheatley, Ont.**

A choice lot of

**Poland China and Chester White**

swine, bred from winning stock. Pairs not akin. Prices easy. **Geo. G. Gould, R.R. 4, Essex, Ont.**

## BERKSHIRES

My Berkshires for many years have won the leading prizes at Toronto, London and Guelph. Highcleres and Sallys, the best strain of the breed, both sexes, any age

**ADAM THOMPSON, R. R. No. 1, STRATFORD, ONT. Shakespeare Station, G.T.R.**

**Featherston's Yorkshires—The Pine Grove Herd**

I have the choicest lot of young sows of breeding age that were ever on the farm. A few are already bred. Also have 10 young litters. Prices reasonable.

**J. K. FEATHERSTON, STREETSVILLE, ONT.**

**CHESTER WHITES**

Now offering an imported litter, sired by Schoolboy 17, junior champion Michigan, Ohio, and Ill. Dam sired by the Grand Champion of Missouri, Ohio and Michigan State fairs.

**John G. Annesser - - - Tilbury, Ont.**

## ENGLISH LARGE BLACK PIGS

We have some promising young stock from imported dam and sire of both sexes for sale. Large Blacks are greatly approved in England and will be a coming popular breed in Canada, and good for crossing. We also offer some young bulls from milking Shorthorns, imported stock.

**LYNNORE STOCK FARM F. WALLACE COCKSHUTT, BRANTFORD, ONT.**

**Shropshires and Clydesdales**

Besides my regular offering of ram and ewe shearlings, I have the three-year Clydesdale stallion, Cairnbrogie Heir 18299. Write quick, don't wait

**W. H. PUGH, Myrtle Station, R. R., Ontario**

**Cloverdale Shropshires and Berkshires—40** shearing rams, 70 shearing ewes; an exceptionally choice lot, true to type and well grown, nearly all sired by the show ram, Nock 16 imp. In Berkshires, the usual strong offering, including sows just bred. **C. J. LANG, BURKETON, ONT.**

**Newcastle Herd of Tamworths and Shorthorns** Boars ready for service. Some bred and ready to breed; 2 splendid sows carrying their 2nd and 3rd litters. Boars and sows not akin ready to wean. Mostly descendants of Colwill's Choice, 3-year champion at Toronto Industrial, and Imp. Cholder-ton Golden Secret. A few nice Shorthorn heifers in calf, deep-milking strain. Young cows with calves at foot. Long-distance phone.

**A. A. COLWILL, Proprietor, R.R. No. 2, Newcastle, Ont**

## TAMWORTHS

Young sows bred for Sept. farrow and a nice lot of young boars for sale. Write:

**John W. Todd, R. R. No. 1, Corinth, Ontario**

**Morrison Tamworths and Shorthorns—** Bred from the prizewinning herds of England. Tamworths, both sexes; boars from 2 to 12 months. Shorthorn bulls, from 5 to 10 months old, reds and roans—dandies.

**CHAS. CURRIE, Morrison, Ontario**

I have a choice offering of

**Sows, 3 to 5 months old** a few boars 3 months old and a good year-old hog. Priced to sell.

**G. W. Miners R. R. No. 3, Exeter, Ont.**

When writing please mention "Advocate"



# Wanted! Thousands of Farm Laborers for Harvesting in Western Canada

"Going Trip West" \$12 to Winnipeg | "Return Trip East" \$18 from Winnipeg

GOING DATES	TERRITORY
August 20 and 29	From stations in Ontario West of Smith's Falls to and including Toronto on Lake Ontario Shore Line and Havelock-Peterboro' Line. From stations between Kingston and Renfrew Junction, inclusive. From stations on Toronto-Sudbury direct line. From stations on Sault Ste. Marie branch.
August 22 and 29	From stations on Main Line, Beaucage to Franz, inclusive. From stations Bethany Junction to Port McNicoll and Burketon-Bobcaygeon. From stations in Ontario West and South of Toronto to and including Hamilton and Windsor, Ont. From stations on Owen Sound, Walkerton, Teeswater, Wingham, Elora, Listowel, Goderich, St. Mary's, Port Burwell and St. Thomas branches. From stations Toronto and North to Bolton, inclusive.

### SPECIAL THROUGH TRAINS FROM TORONTO TO WINNIPEG

Full particulars from Canadian Pacific Ticket Agents. W. B. HOWARD, District Passenger Agent, Toronto

## GRAND TRUNK RAILWAY SYSTEM

### Harvest Help Excursions

\$12.00 to Winnipeg  
Plus 1/2c. per mile beyond

AUGUST 20th and 29th

From all stations between Lyn, Ont., and Toronto; Weston, Meaford and Palgrave, inclusive, also from stations north of Toronto to and including Huntsville.

AUGUST 22nd and 29th

From Toronto and all stations west and south thereof in Ontario.

For further particulars apply to any Grand Trunk Ticket Agent or C. E. HORNING, District Passenger Agent, Toronto.

**STORM WINDOWS & DOORS**

SAVE FUEL. KEEP COLD WINDS OUT

We supply Storm Windows glazed complete in sizes to fit your openings. Safe delivery guaranteed. Write to-day for price list, which shows cost at a glance. We cannot accept orders after cold weather sets in. Act now and be prepared.  
Factory Distributors, Box 61, Hamilton, Ontario

### Cream Wanted

We supply cans. We pay express charges. We remit daily and guarantee highest market prices. For prompt service ship your cream to us.  
**Mutual Dairy & Creamery**  
743 King St. W., Toronto, Ont.

**HELP SAVE WESTERN CROP**

**\$12.00 TO WINNIPEG**

From all stations, Sudbury, Milnet, Ont., south and east in Ontario and Quebec.

Plus half a cent per mile beyond.  
Returning, half a cent per mile to Winnipeg, plus \$18.00

Comfortable Trains and \*Through Service; Special Accommodation for Women, Lunch service at moderate prices, and a Scenic Route when you travel C. N. R.

Through tickets by all lines. For further particulars see your nearest C.N.R. Agent, or write General Passenger Dept., 58 King St. E., Toronto, Ont.  
Ask for "Harvesters' Work and Wages" leaflet. 1236

**CANADIAN NORTHERN RAILWAY**



### MAIL CONTRACT

SEALED TENDERS, addressed to the Postmaster General, will be received at Ottawa until noon, on Friday, the 13th of September, 1918, for the conveyance of His Majesty's Mails, on a proposed Contract for four years, six times per week, on the Petersburg No. 1 Rural Route (New Dundee and Petersburg) from the Postmaster General's pleasure.

Printed notices containing further information as to conditions of proposed Contract may be seen and blank forms of Tender may be obtained at the Post Offices of Petersburg and New Dundee, and at the office of the Post Office Inspector, London.

CHAS. E. H. FISHER,  
Post Office Inspector  
Post Office Inspector's Office, London,  
August 2nd, 1918

### Grow Registered Seed

of the following pedigreed varieties developed at the Michigan Agricultural College and Inspected, Approved and Registered by the Michigan Crop Improvement Association.

#### RED ROCK WHEAT

A pure, winter hardy, excellent milling high yielding wheat.

#### MICHIGAN WINTER BARLEY

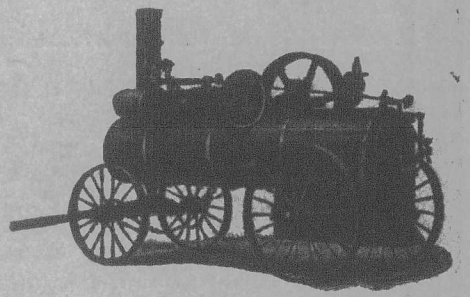
The best northern grown winter barley.

#### ROSEN RYE

The rye that has nearly doubled Michigan's acre yields and is giving exceptionally good results in many other States. Remember rye cross fertilizes so get pure seed from farmers who have produced it under inspection.

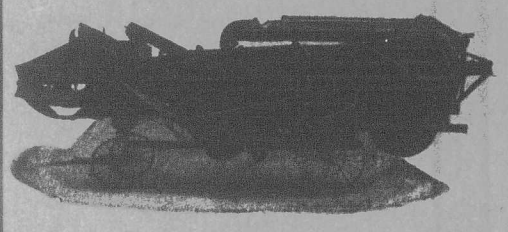
For list of those having it for sale, write the Secretary of the Michigan Crop Improvement Association  
J. W. Nicolson, East Lansing, Michigan.

### Rebuilt Portable and Traction Engines



A number of good rebuilt engines from 14 H.P. up, suitable for Threshers' and Farmers' own use.

### SEPARATORS



New and rebuilt Separators, all sizes from the individual Farmer's Thresher to the largest size.

WRITE FOR FURTHER PARTICULARS

The Robt Bell Engine & Thresher Co., Ltd., Searforth Ont.

### THE MARTIN DITCHER AND GRADER

DIGS YOUR DITCHES GRADES YOUR ROADS

EASILY QUICKLY CHEAPLY

REVERSIBLE ADJUSTABLE

DOES THE WORK OF 50 MEN SEND FOR FREE BOOKLET

THE PRESTON CAR & COACH CO LIMITED 97 DOVER ST. PRESTON CANADA

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

# For best results with any Tractor in any soil use the Cockshutt Tractor Plow



**W**HEN considering the purchase of a Tractor, remember that it is the plow that turns the furrow. The best Tractor will do inferior work with a poor plow. Do not experiment—insist upon getting the plow that successful farmers everywhere have found most satisfactory in every possible soil condition—right in design, material and workmanship. Then you get the results you are looking for.

*Read This Letter From a Prominent Farmer.  
Your Experience Can Be the Same.*

"It affords me the utmost pleasure to recommend your two-furrow Light Tractor Plow to anyone requiring a plow of this kind.

"I am using the Fordson Tractor and Cockshutt Plow, and am more than satisfied with the outfit. I plowed about sixty acres of stubble, and did a first-class job. The plow never gave me any bother in any way, and I find it most easily handled. I am now breaking new land, and the outfit is going right along. We are breaking from four to five acres per day.

"I have always been a believer in Cockshutt Plows, and am certainly not disappointed in your Light Tractor Plow. Anyone intending purchasing need have no hesitation in getting a Cockshutt. There is a great deal of interest taken in the outfit in this district, and without fail I highly recommend the Cockshutt Plow."

Yours very truly,  
Semans, June 6th, 1918. R. MACKAY

## Cockshutt Tractor Plows

Automatic power lift arrangement raises and lowers bottoms instantly. Operator of tractor controls this feature by the pull of a cord. Bottoms raise high and level when out of ground. Lever for changing depth of work, is placed convenient to operator. Hitch is instantly adjustable to suit any make of tractor.

Many years of successful plow building and intimate knowledge of field conditions in every part of Canada enable us to build plows that give the kind of service you need in these strenuous times.

---

See our nearest agent, or write us for descriptive booklet showing equipment for power farming.

---

**COCKSHUTT**  
PLOW CO LIMITED  
of Brantford

Cockshutt Plow Co.  
Limited  
Brantford, Ont.

Sold in Eastern Ontario,  
Quebec and Maritime  
Provinces by

The Frost & Wood Co., Ltd.  
SMITH'S FALLS  
Montreal St. John