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THE FARMER'S ADVOCATE

AND HOME MAGAZINE

PERSEVERE AND SUCCEED

FOUNDED 1875

Director General 50¢ per copy 25¢ per year


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VOL. LIII.

LONDON, ONTARIO, JANUARY 31, 1918.

No. 1323




**The Frost
"Tight Lock"**

**Unlike
Any Other**

Right at the beginning, please remember that FROST fence is unlike any other woven fence. FROST fence is exclusive in design. Its lock is different. Its wire is different. Its galvanizing is different. The weaving of the fence is different. It's the combination of all these that makes

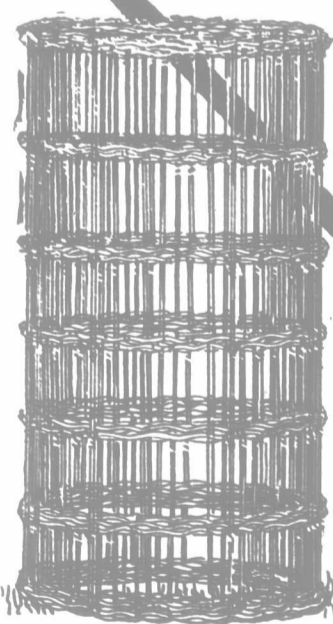
Frost Fence First



**The Frost
"Waved"
Laterals**

The FROST lock is unique in construction. It doesn't look like any other fence lock—and most fence locks are similar as peas in a pod. The FROST lock will stand strains that will loosen and often pull other locks to pieces. Look at it yourself and see how much more substantial and secure the FROST lock is. Then look at that special FROST "wave" in the laterals. This long and deep wave gives a wonderful degree of spring and reserve power to FROST fence. It puts real backbone in the fence. The stays on the FROST fence are straight and stiff and the spacing is accurate. Our special looms weave FROST fence more slowly and consequently the fence looks neater and better in the rolls, and stretches up straight and true when putting it up. It is a fence the farmer is proud to show to his neighbors. By making FROST fence complete in our own mills we are able to produce a fence that will outlast all others. We put the quality in the wire, in the galvanizing and in the weaving that puts FROST fence in a different class as compared with the ordinary woven fences made of common commercial wire. You can see the difference by comparing FROST fence with others. You can prove it to the hilt by seeing FROST fences that have been defying wear and tear on Canadian farms for years. There must be some FROST fences in your locality, for we have dealers in almost every part of the wide Dominion. If you don't know the name of a nearby one, write us.

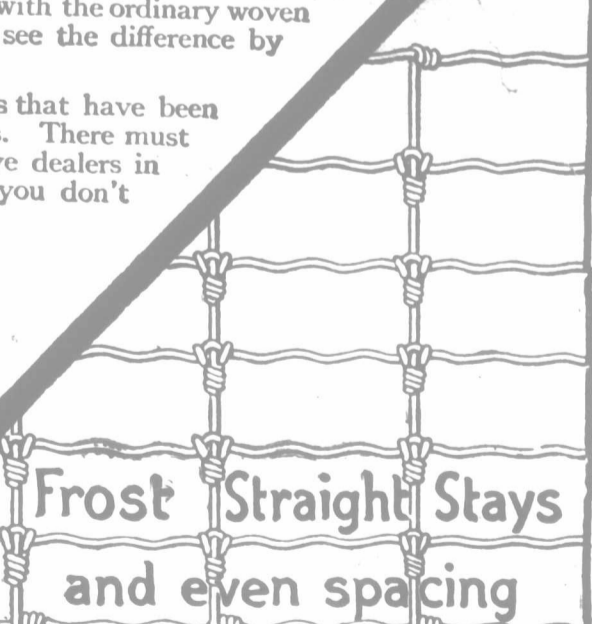
A style for every purpose.



**Frost
Neat
Straight
Rolls**

**Frost Steel and Wire
Company, Limited**

**Hamilton
Canada**



**Frost Straight Stays
and even spacing**

104

WILL SILO FILLING TIME FIND YOU READY?

SILO FILLING time will soon be here—and the Canadian Farmer is depending upon the corn crop this year as never before. It is your duty, and it will mean more money in your pocket, to use every effort, to get ALL the FEEDING VALUE out of every stalk of corn.

The most important thing is to silo your corn crop when it possesses the **GREATEST FOOD VALUE**. If you get a Gilson Silo Filler **NOW**—before we are sold out—you will fill your own silo. This means that you will silo your own corn when it is just right for silage. Be independent of the cutter gang. You do not need big power to operate the "Gilson." Your own farm engine—4 h.p. or larger—will do the work.

WRITE FOR FREE SILO FILLER BOOK TO-DAY.

It tells the Gilson Story from start to finish—points out the advantages of design, and describes the all-metal construction in such a way that you will understand **WHY** our machines cut and elevate *more* silage with *less* power than **ANY OTHER** Blower Cutter. This is a matter of dollars and cents to you. A Gilson Silo Filler will, in all probability, pay for itself the first season. **BEWARE OF IMITATIONS AND INFRINGEMENTS.**

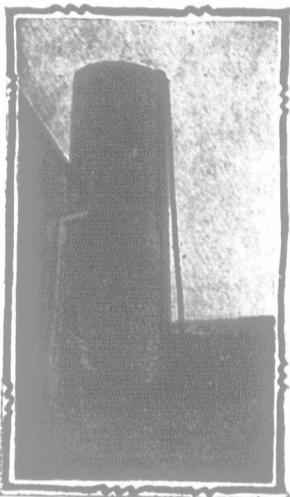
GILSON MFG. CO., Limited

389 York St., GUELPH, Ont.

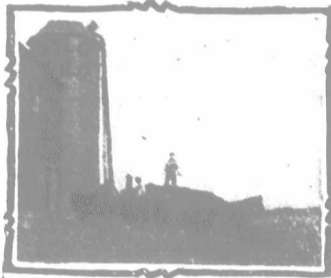
You need this **SILO FILLER**



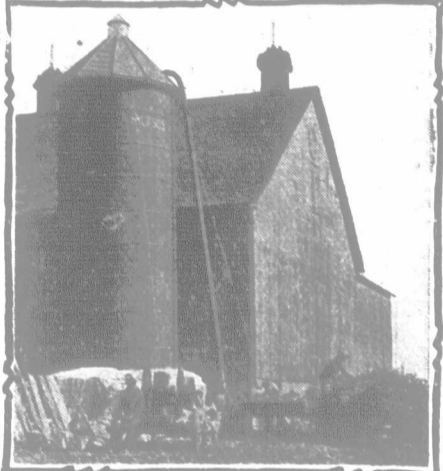
It is as much a part of your Farm Equipment as your Binder or Plow.



"My Silo is 40' high, writes FRANK BOLTON, Guelph, Ont., but my 8 h.p. engine which I purchased from you nine years ago operates my 13' ensilage cutter splendidly, sending corn over the top in a steady stream. This outfit is the admiration of all who see it."



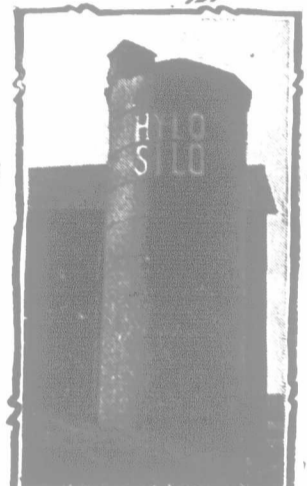
JOHN H. MURRAY, Sea View Farm, Cap La Ronde, C.B., N.S., writes: "Enclosed find picture of my 10' Gilson Silo Filler, 6 h.p. Gilson Engine and 3' Gilson Hylo Silo. I filled my silo with oats, peas and vetch, and it is coming out fine and not a bit spoiled. My outfit does splendid work and I am very well pleased with it."



FRED HURTER'S farm at Kitchener, Ont., showing his 8 h.p. Gilson Engine and 13' Gilson ensilage cutter filling his 30' Gilson Hylo Silo.



JACOB N. HART, Ridgeville, Ont., writes, "The enclosed picture shows our 15' Silo Filler and 12 h.p. Gilson Engine hard at work filling our silo. This outfit works beautifully and is as much a part of every farm as a binder or mower."



M. I. ADOLPH, of Gowanstown, Ont., declares that his silo filling outfit "is a source of real satisfaction and profit. I would not want to be without my 10' Gilson Silo Filler, 8 h.p. Gilson Engine and 12x30' Gilson Hylo Silo. I have used it for three seasons, and have had practically no trouble—it was always ready when wanted."

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. Made of Guaranteed Long Leaf Yellow Pine. Built to last a life-time. Stands rigid when empty.

Write for prices and catalogue. AGENTS WANTED.

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"Goes Like Sixty" **This Engine Will Cost You Nothing**

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

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

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Tap Every Tree

MAPLE syrup and sugar is a food—a necessity. Make preparations now to save this valuable crop and double or treble the production. Every pound of sugar, every gallon of syrup helps food conservation, and the market gives a price unheard-of before the war.

With a **GRIMM CHAMPION OUTFIT**

you can make more syrup with less help and in less time and at less cost than any other way. Put your maple bush in working order and get in touch with us on the question of outfit.

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—is a business machine designed for long sound mechanical life. It is the most powerful, most reliable, most economical tractor ever made.

Write for a free catalogue and price list.

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The Wonderful—Light-Running Gilson Thresher

"Goes like Sixty"

Saves Time—Money—Labor. Is independent of the wind. Frees your farm of weeds. Does your threshing when you please, with a 12-h.p. engine and the Wonderful Light-Running Gilson Thresher. Finished with or without blower. Send for full particulars.

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DIGS YOUR DITCHES GRADES YOUR ROADS

EASILY QUICKLY CHEAPLY

REVERSIBLE ADJUSTABLE

PAYS ITSELF IN ONE DAY

DOES THE WORK OF 50 MEN

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THE PRESTON CAR & COACH CO. LTD.
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CENTRAL NURSERIES

For reliable Apple, Pear, Peach, Cherry, Peach and Orange Trees, Shrubs, Roses, Azalea Vines, Berry Plants, Evergreens, Hedges, etc.—good ones only. We ship direct to customers. Our trees are extra fine. Write us for prices on your list for early Spring planting. 35¢ per tree at it. No agents. A. G. HULL & Son, St. Catharines, Ont.

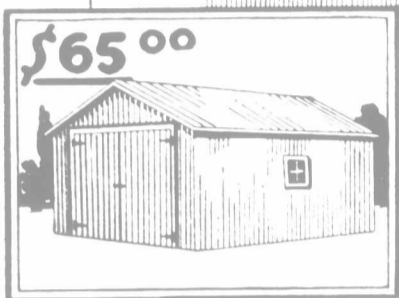
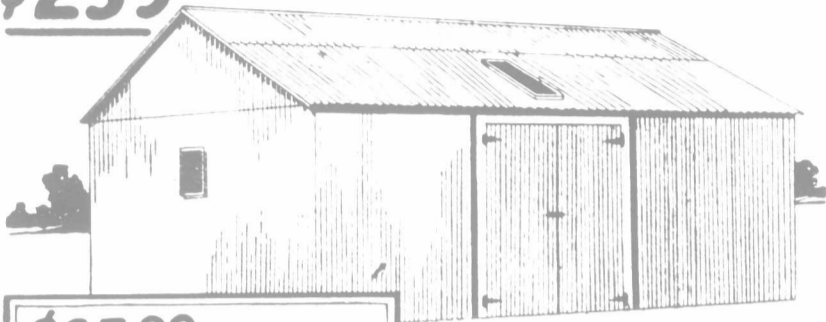
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RIDOUT & MAYBEE Crown Life Insurance Co. TORONTO.

Buildings cost the farmer LESS than in 1914

\$259.00



\$65.00

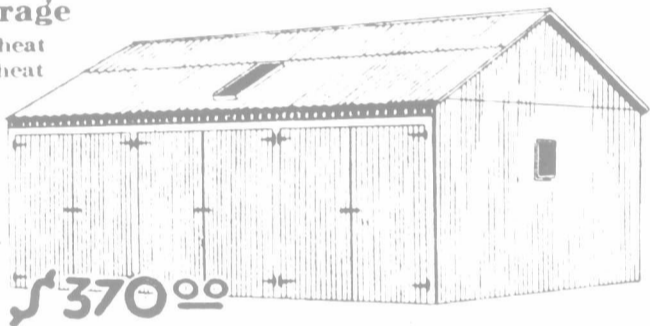
Cost in 1911—224 Bushels Wheat
Cost To-day—117 Bushels Wheat

A Through-Drive Building, metal clad, with two end windows and roof light. Double doors, front and back hung on heavy hinges. Price includes all materials, the frame members cut to fit, the trusses assembled, windows and doors made complete and all the hardware. Size 20 feet x 24 feet, height 10 feet to the eaves. Many sizes and styles can be supplied.

Farmer's Garage

1914—55 Bush. Wheat
1918—30 Bush. Wheat

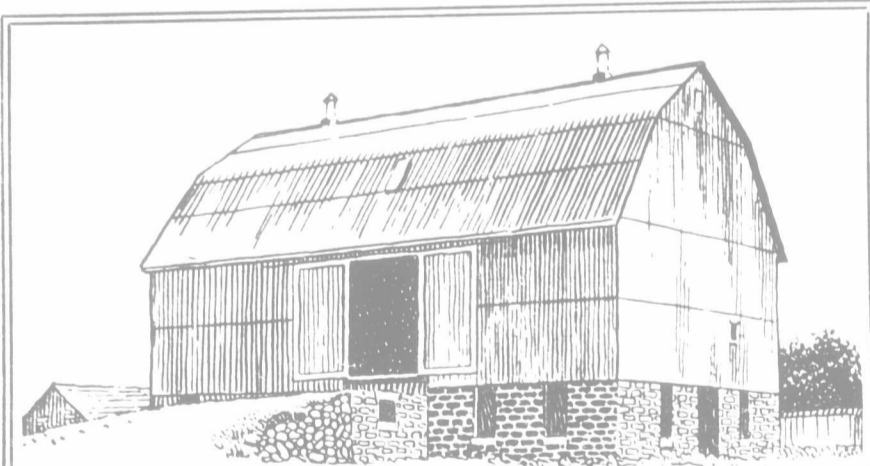
10 feet wide x 16 feet long Height, 8 feet to the eaves. Price includes all materials for a sturdy, workmanlike, frame building. The double doors are made and fitted, the windows glazed, all lumber and frame cut ready to nail together. High grade composition roof. Any style and size of garage can be supplied.



\$370.00

1914—330 Bushels Wheat
1918—167 Bushels Wheat

Implement Building with three double doors along the front. Two end windows and roof light. Doors are ready made. Windows glazed and mounted in regular sheet of galvanized iron ready to nail into place. Price includes all materials and hardware. Size 20 feet x 36 feet. Prices of other sizes on application.



100-Ton Barn, \$1,766

The Steel Truss Barn is now well known because it is the sturdiest, most convenient barn ever designed. It has greater capacity and is a great saver of time and trouble. It is erected without the big gangs of help that the old style barn required.

Plans of the barn and advice on arrangement will be sent free of charge.

We still have large quantities of well made material and machinery at favorable prices. These can be purchased in advance or on credit. We have the largest stock of building materials and machinery in the world. We can supply you with anything you need at the lowest price.

For more information, write to the nearest branch office of The Metal Shingle & Siding Company, Limited, or to the head office, 100-102, St. George Street, Montreal, P. Q.

IN the Spring of 1914 you could have drawn in 180 bushels of wheat and paid it down for the metal-clad building here listed at \$259.00.

To-day the price is about 118 bushels of wheat.

Four years ago it would have cost 336 bushels of potatoes.

To-day something like 170 bushels will buy it.

See how this applies to buildings of various types:

	Drive Shed.	Garage.	Impt. Bldg.
Sale Price	\$259.00	\$65.00	\$370.00
Cost in wheat, 1914	224 bush.	55 bush.	330 bush.
Cost in wheat, 1918	117 bush.	30 bush.	167 bush.
Cost in potatoes, 1914	336 bush.	80 bush.	490 bush.
Cost in potatoes, 1918	170 bush.	43 bush.	247 bush.

Figure the cost of any building in the same way—in terms of the produce you must raise to pay for it. For, that is what it ACTUALLY Costs a Farmer to Build. You will find the farm better able to pay for improvements than ever before. It is true, materials cost more—Governments need building materials just as they require what farmers have to sell. But the rise in the price of farm products has been even greater—in many cases you now get twice, and in some cases three times, as much as before the war.

Again, it is no secret that the demand for building material will be heavy for several years to come. Prices will be higher rather than lower. So, compared with past or future—right NOW is the best time to invest in improved equipment for your farm. Sound business judgment urges you to go ahead with your building plans at once. There was never a time when an investment in farm improvements would bring in such great returns in

cash. Use the experience and services of this big organization of farm-building experts. The help of our trained staff will be given free of all cost in planning exactly the building you want—modern, up-to-date buildings that save time and labor, that prevent loss or damage to seed, crops, machinery, that help increase production and conserve profits.

Whatever building you have in hand, our methods will save you worry, time, material and labor-cost. We have large supplies of building material under contract at favorable prices. We can quote the lowest obtainable prices to farmers on all kinds of buildings in the early months of 1918. We can supply labor on foundation and cement work.

Write to-day for our newly printed catalogue, "Farm Building Supplies." At the same time tell us something about the buildings you have in mind. Learn the advantage of having farm-building experts help you with their advice and plans.

The Metal Shingle & Siding Company, Limited

Preston, Ont., and Toronto

Write Nearest Branch

Factories: Montreal, Toronto, Winnipeg, Saskatoon, Calgary.



Please send, free of all obligation, your latest catalogue of farm buildings and supplies.

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with less
less cost
or maple
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on Life, 100
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AVERY TRACTORS AT PROVINCIAL PLOWING MATCH, BRANTFORD, ONT.

Avery Kerosene Tractor

The Tractor That Burns ALL the Kerosene

A WONDERFUL INVENTION

AVERY GASIFIER—TURNS KEROSENE INTO GAS

We have discovered the way to burn kerosene more successfully than it has ever been done before in a tractor. Avery Tractors burn ALL of the kerosene instead of wasting part of it on account of it not being fully vaporized. Avery Tractors burn kerosene so successfully that we are able to use the lubricating oil over and over again instead of using it only once and then wasting it. Avery Tractors don't just run on kerosene—they burn ALL of the kerosene.

Get all the facts. Learn why the Avery will best suit your requirements
There is a size Avery Tractor to fit every size farm.

BUILT IN SIX SIZES: **\$575.⁰⁰** UP
5-10 TO 40-80 H.-P.

<p>AVERY 5-10 AND 2-FURROW PLOW R. A. Lister & Co., Limited, Toronto. Dear Sirs.—For use in any way you wish. I feel that I should tell you that I have been using the 5/10 Tractor I purchased from you last spring, and have found it to be one of the most useful machines on my farm. I have plowed, harrowed, disked, cultivated, threshed and cut wood, and in each and every job it has worked to my entire satisfaction. I was at the Tractor Demonstration on R. J. Fleming's farm, near Whitby, the 1st, 2nd and 3rd of this month, looking at all kinds working, but saw none that I would care to exchange the one I have for. Yours very truly, W. R. MEMBERY. Irondequoit Villa, Adolphustown, Ont., Nov. 11th, 1916.</p>	<p>Write for address of nearest user.</p>	<p>R. A. Lister & Co., Toronto, Ont. R. R. No. 2, Goderich, Dec. 3rd, 1917. Gentlemen.—I am sending you, under separate cover, a photo showing an "Avery" 5/10 Tractor pulling a McCormack 7-ft. binder, cutting full width in heavy tangled grain. As you know, I purchased the tractor from The Avery Company during the winter of 1916, and up to the present time have not spent one cent for repairs or adjustments of any kind. I do some custom work and use it winter and summer. It has never failed to start, and has always finished the job. I will say that it would be impossible for any piece of machinery to give any better satisfaction. Trusting that the photo reaches you safely, I am, Yours truly, K. E. NAFTEL. Bainsville, July 10th, 1917. R. A. Lister & Co., Limited, Toronto. Dear Sirs.—The Avery 8/16 Tractor which I bought of you last April has given entire satisfaction. It can draw one 10-ft. double disc and two sec. 11-ft. harrow over loose ground all day and every day on one gallon of kerosene per hour. Can draw with ease three 12-inch bottoms in heavy clay, first breaking—in fact, pulls anything anywhere, anytime. The special features of the Avery Tractor, such as oiling and cooling, should appeal to any prospective customer, in addition to its light weight and ease in handling. In fact, it is 100 per cent. efficient and the last word in tractor power. I am, your satisfied customer, J. K. CONDIE.</p>
<p>R. A. Lister & Co., Limited, Toronto. Theford, July 6th, 1917. Dear Sirs.—This is to certify that the 8/16 Avery Tractor that I purchased from your agent, A. Campbell, Theford, has given me perfect satisfaction, both plowing and in the belt. My farm is very hilly—lots of the grades are 20 per cent.—but the tractor had ample power, and the land was very wet at the time of plowing. I can highly recommend this tractor to intending buyers. T. R. BUCKINGHAM.</p>		

Catalogues and Testimonials on Application to:

R. A. LISTER & CO., LIMITED, TORONTO

The Farmer's Advocate and Home Magazine

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LIII.

LONDON, ONTARIO, JANUARY 31, 1918.

1323

EDITORIAL

Canada can do without circuses and side shows until after the war.

Good seed is a big initial step toward heavy crops. Secure supplies early.

It is to be hoped that a "steady" summer follows the present "steady" winter.

A spring stallion show might be made a benefit to Canada's horse industry this year.

Get ready to attend the Live-Stock meetings to be held in Toronto next week. Keep in touch with your own business.

Plan to control weeds with as little work as possible. Some methods of keeping down a few of the most destructive are published in this issue.

Campaigners for increased production this year must not fail to get the farmer's view point first. The rest of the road will be much smoother then.

Canada's big live-stock exhibitions have been of untold value to the industry, and should be strengthened in every way possible in these times of stress.

Canada has hundreds of thousands of staunch maple trees. Why not turn them to good account this spring by making more syrup and sugar when other sugar is so scarce?

If the war goes on long enough it will become absolutely necessary to close non-essential industry and place the entire resources of the nation at the disposal of the state.

Someone has proposed that the Government take over all the farms in Canada and pay farmers a fair wage as foremen, and fair interest on their investment. How many figures would it take to express the national debt in ten years' time?

A man looking for a farm to purchase recently remarked in this office that he would not consider one without a wood-lot. The coal shortage may lead to better care of the wooded corner of the farm. Cattle and trees do not do well in the same field.

The man who joins a co-operative movement through pure selfishness does not usually develop into a tower of strength in the movement. The cause is the thing and once backed up with this spirit will return the profits to the industry, and ultimately the individual will reap the benefit.

It is unfortunate that too often the various classes of society are estimated by some freak, or, at any rate, altogether non-representative individuals of each class. It is just as unreasonable to call all farmers hogs and incapable, because someone of their number has shown evidence of meriting these names, as it is to brand all city people parasites.

There are thousands of farm-bred and farm-trained men in our cities who would make satisfactory farm help if placed on the land. We have the land in this country and we have the men. All that is needed is courage to take the step that has already been taken in other branches of the service. If food is more necessary than luxurious living, steps should be taken to produce it with the largest measure of fairness to all concerned.

Forget Self in Organizing Effort.

At a recent meeting of representative stock breeders, one of the speakers brought out a point that is worthy of emphasis. The discussion was running along the line of the necessity for Dominion-wide organization of stock breeders and those vitally interested in the business with a view to strengthening the industry as a whole, and thus ultimately working much good not only to the live-stock industry but to agriculture and so to all Canada. It was pointed out that the real need was of men big enough to put aside personal selfishness and throw their weight into an organization for the good of the industry, forgetting for the time being the few paltry dollars it would cost to finance such an organization and the few they hoped to make by joining. The man who joins a co-operative or other movement with the sole purpose of making immediately a few extra dollars for himself and with no bigger and broader viewpoint of the work in hand is usually too small to be of any great strength to the organization. There has been too much selfishness indicated in many farm organization movements of the past. Too many have joined not to help others but only to get all out of it they could for themselves, forgetting that the strength of any organized effort lies in the measure to which the individuals composing the movement forget self and work for the good of the whole. Some farm organizations of the past, and we are not sure that some do not linger still, have been weakened by the selfishness of little men who joined not to pay in and strengthen the hands of those who represent the calling, but to get as much as possible out after paying in the smallest possible pittance. Organization, whether it be of live-stock breeders, fruit growers, wheat producers, dairymen or any other branch or branches of the farming business, is a success only when big men take hold and work for the good of the cause of organized agriculture first, and, in working, do not forget that other people are human and have some rights. Organization should build up something on its own account and should not attempt to rely wholly on pulling down something some other industry has, through organization, builded well for themselves. We are pleased to know that the stockmen see the problem in the right light. Strong organization means, in the end, a strong stock-breeding industry, but in the beginning money, time and effort are necessary to build up anything which is to grow big and carry weight in the country. It is necessary to put all selfishness aside and co-operate and organize, believing firmly in the principle, and then in the end all will be well. A big live-stock industry well organized will be good for all Canada. That is the proper spirit.

A Dominion Dairy Council.

Dairy conventions are held in the various Provinces of the Dominion each year, and the Canadian Creamerymen's Association recently held a convention in Ontario. Besides these there are a large number of producers' and makers' associations which hold meetings in the various parts of the Dominion. At each of these meetings subjects of importance to the dairy industry of Canada as a whole are brought up and discussed from the viewpoints of the various districts. Most of these conventions or annual meetings are more or less local and, of course, their recommendations have a more or less local bearing. Dairying is, on the other hand, a great national industry. There are over two and one-half million dairy cows in this country. The total value of Canada's dairy products was \$66,470,953 in 1900, \$109,340,024 in 1910, and over \$200,000,000 in 1916. An increase of well on to 100 per cent. from 1900 to 1910, and this followed by another 100 per cent. advance from 1910 to 1916 shows the growing strength of dairying. Since 1900 production per cow has increased 40 per cent, but with growth and prosperity there are problems. The bigger the business the more attention

necessary to stop leaks and to build to greater heights. Possibilities for increased output are many. Canada's milk production is small even for the area devoted to dairy and mixed farming. The average yield of milk per cow is still low and there is room for more heavy producers. The poor cow must go. The home demand for dairy products has increased rapidly, and the export market will take increasing quantities. True, the war has hit dairying harder than some other branches of farming. Feed and labor are scarce and high, and both are necessary in large quantities to push dairying to the limit. Prices of dairy products have not, in all cases, advanced in keeping with the increased price of other products and feed. Prices have been fixed for cheese, for instance, which have not encouraged cheese production. The dairy farmer is having his troubles. So is the manufacturer of dairy products. Problems must be faced and the people must be taught to understand the real food value of milk and its products as compared with other foods. Once the people understand fully the value of milk and other dairy products they will be willing to buy at a fair price. By "fair" we mean leaving a reasonable profit to the producer. Substitutes for some dairy products are now on the Canadian market and are likely to stay. Over in the United States a National Dairy Council has been formed to look after the interests of dairymen. In Canada the time would seem ripe for a Dominion Dairy Council. It has been mentioned by some prominent dairymen, and formed from delegates from the various local dairy bodies would surely make a strong central organization in which the various problems could be threshed out and a united effort made for bigger and better dairying as a national industry of sufficient importance to command the attention of not only the legislative powers that be but of the rank and file of the consuming public. Such a council should be formed immediately.

At the Mercy of the Farmer?

The Ottawa correspondent of a leading Toronto daily recently quoted what he termed "a Government official" as follows:

"The point is this, that this country is at the mercy of the farmer. To-day the farmer is getting rich. While that is not a matter for which he may be blamed, it is a serious matter for other workers. Taking all kinds of foodstuffs together it is the farmer who is drawing the big part of the profit on food. The very life of the nation is in his hands. If food is scarce, he gets high rates. If it is plentiful, he may hoard it or even let it waste rather than accept low rates."

The official quoted is reported, with others, to favor public ownership and operation of farms. It is no trouble to see that he knows nothing whatever about agriculture and so, no doubt, would be in line for a distinguished place on the Board of Management if all Canadian farms were to be taken over by the Government. No, Mr. Official, farmers as a class are not getting rich, are not drawing undeserved profits on food, and are not hoarding or wasting to raise prices. With the rest of Canada's economic system remaining as it is no Government, however efficient, could take over the farms of Canada, even with prices as high as they now are, and make them pay the low rate of 5 per cent. interest on their value and a fair wage to the farm foremen and laborers necessary. Fortunately the men who constitute our Government and the great majority of the officials employed recognize the valuable work the men on the land are doing, and are too sane and fair-minded to accuse farmers as a class of being lazy, indolent, wasteful, or get-rich-quick profiteers. The facts are too plain. If farming has been and is such a bonanza as some people paint it, why are those people and thousands of others not on the land? There is no monopoly. The land is available. Recent investigations of farm returns in one of the best Townships in a good County of Old Ontario reveal the fact that in

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.

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the best year the farmers of the district ever had their labor income was, in one-third of the cases, scarcely a hired laborer's wage, and in all cases not high enough to attract capital to farming as an investment. This is the best year; what of the bad years or the average?

But, after all, there is something besides money in farming. There is satisfaction, which is more worth while. The farmer is a producer not a parasite. He deals with living things. He works close to nature. Crops and live stock grow and flourish under his skillful management. If he loves the land he has the best job on earth, for his profits cannot be measured in dollars and cents. Health and happiness are the only things which matter. These come with fresh air and freedom of the open fields and the satisfaction derived therefrom. Yes, as an old friend of ours has said: "I have seen many rich and famous men, but never one made happy by riches or by fame. It's character that counts; and character grows strong and clean and sturdy on the land. The farm is the place to raise a family."

Fair profits for all will keep a reasonable percentage on the farms, for people in the country must live and are entitled to as good a living as any under the sun. We have no use for the "hog," no matter what his business is, and maintain that farming, while it harbors a few, is just as free from this undesirable as is any other business.

An investigation carried on by the Dairy and Cold Storage Branch of the Dominion Department of Agriculture revealed the fact that out of 5,620 sires at the head of dairy herds listed, forty-seven per cent. were grades and one-third of the remaining pure-breds of a very inferior order. There is room for more high-class, pure-blooded sires in all classes and breeds of stock. The sire is half the herd when a good one, and all of it when a bad individual.

If this is an "old-fashioned" winter, most people would welcome a return to the latest style.

Government Management of Railways.

EDITOR "THE FARMER'S ADVOCATE":

With your permission I wish to add a few considerations to the subject of the editorial in "The Farmer's Advocate" of Jan 10th, entitled "The Railway Situation in Canada", by the way the most concise and lucid statement I have yet seen. To take over control of the roads not now under government management is, in brief, the proposal discussed. Your readers will, I believe, concede the reasonableness of the contention that for the government to assume and operate the non-paying systems while the one paying ten per cent. dividends and laying by "to the good" large sums, remained the preserve of its stockholders and those in control, would be an absurdity and an injustice to the country. The C. P. R. is so prosperous not altogether by the acknowledged capability of its management but also because of its more favorable position due to benefactions in location and to the immense and valuable land grants, cash subsidies, etc., conferred upon the project by the country. It is rather late in the day to assume that the public must keep off the grass now as we were, in effect, lately advised by the distinguished baron at the head of this particular enterprise. What the state can do in war time it may find it necessary to do at other times and it is not likely that after Great Britain and the United States boldly assuming control of the railways that, in any event, things will quietly revert to their old status quo. And, if the state can will the conscription of men for military service in the common cause, it can summon the service of men for the country in other capacities and it can conscript the lesser things as well, such as the enterprises which men have brought into being. It was counted a rather liberal move that the country should pledge the Victory Loan subscribers $5\frac{1}{2}$ per cent. interest upon their money, which they would help to pay themselves, and the country is concluding that it shall have some voice, at least as to the accumulations in excess of the ten per cent. allowed under its agreement with the company upon amounts actually invested in the C. P. R. Increasing the freight rates will not be reconciled with these swollen dividends. The cry of confiscation and robbery may be raised. But steady! The country has invested many millions in the road which with rates levied on the principle of all the traffic and travel will bear, have made those earnings and dividends possible. Furthermore, the person who bought a Victory Bond knows how many dollars it cost but how many people have any idea how many actual dollars of the holder's are in the "hundred-dollar" share of railway stock or how much of it is something else? If a portion of it is composed of an elusive, free fluid H 2 O. then to pay dividends upon it through levies past and present upon me is just as improper as the other. Under a more polished name it is quite as much robbery as when one patron of the cheese factory where proceeds are pooled on the weight system, dumps a pail of water in his milk can and increases his check at the expense of his neighbor. Turn plain daylight on these expert finances and let us have a square deal all round. And remember the country has a big vested interest in this road as well as the shareholders or the company. Lord Shaughnessy, sincerely enough from his position, assumes a laissez faire stand, assuring the people that there is no need to send out an S. O. S. call for government control or ownership. This the public will interpret as a notice that entrenched interests will "hold what they have", and strenuously resist advances.

In the next place, the public is warned of the danger of getting the railroads into politics. The C. P. R. and others were born in the midst of politics and in some form or other will be in politics until the end of the chapter. That project was—scarcely floated before—the "Pacific Scandal", put the government of the day out of power. In brief, the charge was that the government corruptly granted to Sir Hugh Allan and associates the charter for building the road in consideration of a large sum supplied for election purposes. The record from that time on, speaking generally, has not been creditable to Canada nor have private railway corporations anything to boast of in that regard compared with government ownership. It was so in the United States where the great railway construction period ushered in an orgie of brazen corruption ranging from the wholesale distribution of passes to larger bribes in order to the securing of franchises and subsidies. Finding that the railways had not brought all the expected advantage the public finally revolted against the waste of their resources and the high-handed exactions in railway management. Mr. S. O. Dunn of "The Railway Age Gazette," who opposes public ownership, records that about the seventies, the era of public regulation set in. By means of legislation and the Interstate Commerce Commission, this has been going on ever since with varying degrees of success; but it is hardly too much to say that nearly every step of progress has been resisted as interference with vested interests or as certain to be productive of inefficiency in management. Vested interests have suffered, no doubt, and so did the public fleeced with wild-cat railway schemes for the sole benefit of exploiters. On the whole, it is conceded by capable and dispassionate authority that compared with other countries and considering local conditions American railways have not been hampered to their detriment by government regulation but many unfair and harmful discriminations have been removed. Publicity has done a great deal in curing the corrupting influence of railway lobbyists. To the courage of ex-President Roosevelt and others and to the vigilance of an independent press the American public is indebted for measures of relief. In Canada,

the Federal Board of Railway Commissioners has rendered the public effectual service and with the experience gained might well, in case of nationalizing all the roads, be made an instrument in management.

It is just as well to recognize the fact that while government ownership would take the railway corporations out of politics it would, instead, introduce questions affecting the conditions and remuneration of railway labor and the service of officials unless the state safeguard itself, as it ought, by the application of a Civil Service principle. In American centres of legislation and administration, the corrupting corporation lobbyists were succeeded by the equally active professional lobby of the railway brotherhoods. In Canada and the United States government ownership cannot be carried out as it has been in Germany where the public is under an iron military hand. In America the good sense and fairness of the people must be relied upon to regard the government and the railway not as masters but as intelligent agents entrusted to carry on public business with honesty and efficiency. If railway labor, communities, shippers or the travelling public all insist upon their pound of flesh or more and play for it politically, then without a civil service or other regulator, new disorders would inevitably be bred. A fair spread must be maintained between earnings and out-go if roads are not to fall into dis-repair and stagnation. Our public postal service has proved efficient and the Hydro Electric is proving so. The immediate spur of the public is behind them and it will likewise supply a driving force in securing efficient railway service.

It must be admitted that the meddling M. P. would be a real menace to government management of railways. For the good of all concerned he should be relieved of the petty duty of peddling government railway patronage. Railroading is a business requiring a high order of knowledge and experience for which success in the game of local politics is no proper preparatory school. But in a democracy like Canada it is a safeguard to know that flagrant injustice as abuses may be corrected by parliament as well as ventilated by the press. Government and people using the experience already acquired in public ownership of railways should further prepare for its fuller inception, particularly in relation to the personnel that is to direct the actual management in which those who have demonstrated their actual capacity and character shall have recognition and opportunity.

Middlesex Co., Ont.

ALPHA.

A Good Name Can be Acquired.

BY ALLAN MCDIARMID.

One evening a few weeks ago, I was coming out from Montreal on the westbound train, which was pretty well filled with business-men and dealers in different lines of trade. Among the bunch was a cattle-buyer, or drover as we call them. He had apparently been drinking a little and was in just the right condition of mind to be sociable with his fellow-passengers. It didn't take him long to get acquainted with the man who shared his seat and to inform him that his name was Monroe and that his business was the buying and selling of live stock. "I tell you", he said, "the poor man is up against it this winter. The price you have to pay for anything you eat is awful. I had my dinner at a restaurant in the city today and what do you think they charged me for one egg? Fifteen cents. Yes sir, fifteen cents, and everything else in proportion. Meat is out of sight altogether, but what can you expect when we have to pay the farmers the prices that they are asking today. In the car that I sent into the city this week there was a couple of cows that should have died of old age long ago. I bought them for the canning factory but at that I don't think I'd have taken them if I'd got a right look at them first. The stable they were in was dark and the farmer I bought them from said he had been feeding them well, so I took a chance. I got one hundred and thirty-four dollars for the two of them, but if prices hadn't taken the jump they did lately I'd have lost money on them. These farmers are a hard lot. I always said that if you wanted to get a dirty deal go to the farmer for it. I remember one time buying some butter at one of the stores in our town. It turned out to be first-class and when it was done the wife said to me, 'You'd better see if you can get some more of that butter, or some made by the same person, whoever it was. So I went to the store and asked if I could get any more of the same that they had given me the last time. They told me no. It was Mr. So-and-So sold them that, and he was supplying private customers and hardly ever sold to the stores. 'Well what the mischief', thinks I, made him sell to the store that time?' So I made it my business to find out. And I finally did, by way of their hired man. It seems that a rat had fallen into the pail of cream just when it was ready to churn. It was dead when they fished it out but they churned the cream and sold the butter to the store-keeper. And that was what I had bought. I used to like butter all right, but I haven't eaten an ounce from that day to this. No sir, farmers WON'T throw out the cream. You can put your last dollar on that."

After waiting a minute for this to sink in he went on: "Talking about these things reminds me of something that happened near home when I was a young chap. One of our neighbors was having a raising-bee putting up a new frame barn. They had goose for dinner and after we had all satisfied our appetites and were sitting around outside taking a smoke, one of the men said to the farmer's son, a boy about ten years old: 'Say Bobby, what was the matter with you at dinner that you didn't take any of that goose?' 'Ugh!' said Bobby, 'D'ye think I'd eat any of that darned old goose. It was dead for

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a week under the floor of the other barn before we found it."

Just here the spirit moved my friend the drover to suggest to his companion that they go back to the smoking-car, so I heard no more of his experience among the farmers.

Whether we deserve it or not we farmers have a pretty shady reputation among the people of the towns and cities. As far back as I can remember I have heard stories about the close-fisted and crooked farmer. They say where there is much smoke there must be some fire, so I suppose there must be some ground for these accusations. In fact, I have had some first-hand information given to me along this line in past days. I remember when I was a boy drawing stove-wood into a nearby town and being told by another farmer to give good measure but to pile the wood so that there would be plenty of holes in it. "So that you could throw a dog through it", as he expressed it. The idea was that by giving good measure you would satisfy your customer and he wouldn't be so apt to notice the loose piling. Another scheme for getting something for nothing that I have heard of was to throw a pail of water on a freshly-removed cowhide and let it freeze slightly before rolling it up. And I have also heard of some men who made a habit of shoveling snow into their oats before they hauled them to market. So I don't know that we can altogether blame those that are charging us up with dishonesty.

These practices are not general. We all know that. But when a few have been proved guilty it has a way of involving the rest. The tendency is to judge a class by the individuals in that class with which you are acquainted.

As a general thing farmers are square and honest in their dealings with their fellowmen. I have found that out by experience. Apart altogether from the moral side of the question they know that it doesn't pay to put through a crooked deal. They understand that the most short-sighted kind of business policy is that which tries to get the better of another man in a deal. In the long run it is only as we give that we get. Only as we help others to be prosperous that we become prosperous ourselves. The mean and dishonest man sometimes accumulates wealth but he never develops a decent character and without that he's as poor as any beggar. As I said, the average farmer of to-day knows all this and he isn't trading off the things of real value for the shadow. As we have seen, he has, among some people, a reputation to live down, but that it will be done we feel sure. A good name can be acquired as well as a bad one.

Nature's Diary.

A. B. KLUGH, M. A.

Canada From Ocean to Ocean—V

When we pass south of the line drawn from Grimsby to Sarnia we notice plants and animals which are not found elsewhere in Canada. This line does not, of course, constitute a hard and fast boundary, with an entirely different fauna and flora to the north and south of it. As a matter of fact as we journey south from the middle of Central Ontario we begin to encounter new species, and this is particularly true if we examine the river-valleys, since river-valleys always form northward extensions of southern faunas and floras. Thus in the Grand River valley a little south of Galt we find some trees and other plants which are characteristic of a more southern flora than that of the surrounding country. But this line marks off a portion of Canada in which these southern species occur in sufficient numbers to give a distinct tone to the whole flora and fauna.

The trees which are characteristic of this zone are the Black Walnut, Chestnut, Yellow Oak, Chestnut Oak, Hackberry, Button-wood, White-heart Hickory, Sassafras, Pawpaw, Tulip Tree, Kentucky Coffee Tree and Honey Locust.

Characteristic herbaceous plants of this region are the Florida Milkweed, Swamp Rose Mallow, Wild Indigo, Golden Seal, Wild Potato Vine, Ironweed, Yellow Nelumbo and Prickly Pear Cactus. The last mentioned is the only cactus which occurs in eastern Canada and it is restricted to the extreme southern part of this region. The Swamp Rose Mallow is a tall and handsome plant, somewhat resembling a Hollyhock, which grows in marshes. The Yellow Nelumbo is a water-lily which has its leaves raised high out of the water and bears pale yellow flowers. The tubers of this species are mealy and edible and the seeds also are edible.

Among the reptiles characteristic of the region under consideration are the Hog-nosed Snake, Blue-tailed Lizzard, Musk Turtle, Speckled Tortoise, and Wood Tortoise.

The Hog-nosed Snake is of pretty general distribution in this area, and is well known, having several common names, such as Blowing Adder, Blowing Viper and Puff-adder. These names are entirely erroneous since it is neither a viper nor an adder, but they are applied to it because of the generally accepted idea that it is venomous. As a matter of fact it is entirely harmless, but is a great bluffer. If suddenly approached it flattens the head and neck and hisses violently, thus making itself appear extremely dangerous. If this bluff does not disconcert the intruder it proceeds to die. That is it throws itself upon its back gives some convulsive wriggles and lies motionless. It may then be picked up and hung on a fence or over a limb without showing any evidence of life. But if it is placed on the ground on its abdomen it has to die all over again, as its idea seems to be that a dead snake must be on its

back, and this is the one weak link in its otherwise perfect simulation of death. It is a pity that the harmlessness of this snake is not more generally known as it is a beneficial species consuming large numbers of rats and mice.

The Blue-tailed Lizzard or Blue-tailed Skink as it is sometimes called is the only lizzard found in eastern Canada, the other little animals which are usually termed being in reality salamanders. There are several birds which are found in Canada only in this region—the King Rail, Bob-white, Cardinal, Carolina Wren, Dickcissel, Orchard Oriole, Grasshopper Sparrow, Cerulean Warbler, Yellow-breasted Chat, and Blue-gray Gnat-catcher.

The Bob-white, frequently called Quail, is in Ontario so near its extreme northern limit that the winters often prove disastrous to it, and as a result of this it is not able to stand even moderate hunting as well as it can further south. Too much shooting has unfortunately rendered it extinct in some localities which it formerly inhabited.

The Cardinal, that well-beloved and brilliant songster of the Middle and Southern States, is a summer resident in some portions of this territory and seems to be gradually extending its range, and the same is true of the Carolina Wren.

The Grasshopper Sparrow, closely allied to the common Savanna Sparrow, is so-called from the insect-like quality of its weak song.

The Dickcissel is a handsome bird common in the Central States and which occurs in limited numbers in the southern part of this area.

The Yellow-breasted Chat, the largest species of the Warbler Family, breeds on Point Pelee. This bird is almost another Mockingbird for variety of notes and calls.

The Blue-gray Gnatcatcher is a little bird only four and a half inches in length and as it keeps to the tops of the taller trees it is easily overlooked and may possibly be commoner in Southwestern Ontario than is usually supposed.

In addition to the above-mentioned birds there are one or two species, which are commoner in the middle states, such as the Mockingbird and Chuck-will's-widow, of which one or two specimens have been seen in the southern portion of the area under consideration.

(To be continued.)

THE HORSE.

Wounds.

While it is usually wise to secure professional attention in cases of serious wounds, it is well that all owners of horses, or those in charge of them, should have an intelligent idea of the proper treatment of accidents of this nature. In many cases where important blood vessels are severed fatal hemorrhage would result before aid could be got, unless means were taken to prevent it, and in other cases it may not be possible to secure the services of a veterinarian, and treatment must of necessity depend upon the skill procurable; hence we believe it wise to consider rather minutely the different kinds of wounds, and the necessary or advisable manner of treatment. A wound may be defined as a solution of continuity of living tissue, induced by some mechanical means. Wounds are classified under the following heads: Incised, Punctured, Contused, Lacerated, Gunshot, and Poisoned.

Incised Wounds.—An incised wound is one made by a sharp-cutting instrument. The textures are divided evenly and smoothly; there is no tearing or bruising of the parts, hence, on account of the blood vessels being cut instead of torn the bleeding is usually much greater than in wounds of a different nature. If the wound be made parallel to the course of the muscular fibres of the part, there will be little gaping of the edges so long as the parts are kept in apposition; but if the incision be across the direction of the muscular fibres, or transverse to the axis of a limb, the lips of the wound will be drawn apart in proportion to the tension of the muscles, the deep-seated tissues often dividing further than the superficial owing to the retraction of the muscular tissue; and a cavity is sometimes formed in which blood and pus will collect and retard healing.

Treatment.—The treatment of incised wounds may be said to be somewhat simple, but some important points must be observed, viz, first, to arrest bleeding; second, to remove all foreign bodies and cleanse the wound thoroughly; third, to effect and maintain co-adaptation; to guard against excessive inflammation and prevent infection. Bleeding, whether from an artery or a vein, unless slight, must be arrested promptly. If from an artery the blood will be of a bright red color and escape in jets; if from a vein the color will be a dark red and the stream will be constant. Arterial hemorrhage is the most serious. If the vessel be small and only partially severed the blood will escape more or less freely in jets, as stated, and in many cases if the artery be completely severed with a knife the ends contract and bleeding ceases. The coats of an artery are composed largely of elastic tissue, the fibres of which curl up when severed, hence when a vessel is torn, lacerated, or cut with a dull instrument which makes a more or less fimbriated edge, the fibres curl inwards and thereby close the opening and check the flow of blood. This is the reason why bleeding is more profuse from incised wounds than from others. When the vessel is small, even though cut with a sharp instrument, the contractile power of its coats is sufficient to close the orifice, but if the artery be one of considerable size this cannot take place as the force of the stream of blood

is sufficient to overcome the contractile efforts of the vessel, hence bleeding will continue and may become serious, even though the vessel be completely severed. In such cases the end of the severed artery from which blood is escaping should be searched for, drawn out with a pair of forceps and tied by a ligature. Carbolized silk or catgut makes the best ligature, but when these cannot be secured, a clean string or thread can be used. In many cases it is necessary to enlarge the wound in order to secure the end of the artery, and occasionally a wound is in such a position that it is dangerous or inexpedient, hence the hemorrhage must be checked by other means. If the wound be in a limb, or where the vessel runs close to a bone, and there is little muscular tissue external to it, bleeding can be checked by pressure applied to it between the wound and the heart if it be an artery, and between the wound and the extremity if it be a vein, by buckling a strap or applying a bandage tightly around the limb. This will of course check the circulation in all vessels enclosed in the tourniquet, hence the pressure must be left on only such time as is necessary to dress the wound properly, or until skilled assistance arrives. When such assistance cannot be secured, the tourniquet will check the bleeding until wound is cleansed and stitched, after which a pad can be placed over the stitches and a bandage applied moderately tight, to exert considerable pressure upon the pad without materially interfering with other vessels, and in a few hours a clot will have formed in the end of the severed vessel and there will seldom be danger of a recurrence of hemorrhage. When the severed vessel is deep seated in muscular tissue and cannot be taken up and ligatured, the wound must be plugged firmly with batting or other clean material, which is first rendered antiseptic by being saturated in a solution of one of the coal-tar antiseptics or carbolic acid, then packed firmly into the wound and maintained there by bandages or sutures. It should be left thus for eight to ten hours and the animal kept quiet as possible in the meantime, when, in most cases, a clot will have formed and the packing can be removed and the wound dressed. Venous bleeding is usually more easily controlled than arterial. If the vessel be small bleeding will usually stop spontaneously if the wound be exposed to the cold air, but if the vessels be large it is necessary to proceed as in arterial bleeding. Veins more superficially situated than arteries, they are usually more easily taken up and ligatured than arteries. We expect to discuss the further treatment of incised wounds in a future issue.

WHIP.

A Stallion's Best Assets.

Constitution and temperament are undoubtedly very important assets in the composition of a stallion or brood mare, and hence animals which are weakly, shy feeders, or bad tempered should be dealt with cautiously. If one of these failings becomes introduced into a strain it is difficult to get it out, and the value of the young stock will be considerably reduced.

The amateur may be reminded that it sometimes happens that a horse's stock of one sex are far superior to the other, and therefore if in the case of a colt-breeding sire there comes an indifferent filly foal, it does not follow that the owner should be disappointed with the horse.

It is well not to attach too much importance to mere looks, but to study back blood or breeding. It is well for a breeder when he takes a fancy to an untried stallion to make some inquiries as to whether the animal in question has a brother at the stud that has done well. This would be more with a view to test the abilities of the latter horse than the former one, as two full brothers may produce a totally different class of stock, the result, no doubt, of the get of one of them possessing a tendency to throw back to some undesirable ancestor. —Live Stock Journal.

LIVE STOCK.

Economizing on Cereals in Beef and Bacon Production.

At the Experimental Union, recently held in Guelph, Prof. G. E. Day gave expression to some facts in regard to live-stock feeding that should be seriously considered. If we must economize on cereals what shall we feed to cattle and hogs? This is answered in a general way by Prof. Day in his paper which follows:

Finishing Beef Cattle.

In normal times it is counted good business to give our beef cattle a good degree of finish before sending them to market. The higher price obtained for well-finished cattle has usually been profitable to the feeder.

At the present time, however, we are facing decidedly abnormal conditions. Statistics indicate that the world is facing a heavy shortage of wheat. If these statistics are correct it looks as though it might be necessary to use grains, heretofore employed almost exclusively for the feeding of animals, to help out the supply of wheat. As a matter of fact, investigations are in progress to determine the extent to which wheat flour may be adulterated with the flour of other cereals and still retain its palatability for human consumption.

If it becomes necessary, therefore, to utilize the coarser cereals for human food it must mean a shortening up of concentrates for fattening animals, and the question arises whether under present prospects we should not make a special effort to use the smallest possible amount of concentrates, and utilize, to the

fullest extent, bulky fodders in the fattening of our cattle.

Some years ago the Ontario Agricultural College secured a gain in weight of 2,180 lbs., in the case of fattening steers, from the use of 2,187 lbs. of ground barley and 729 lbs. bran. This is very little more than one pound of concentrates used for each pound of gain in weight, the balance of the ration being made up of hay, corn silage and roots, in the proportion of 1, 2 and 3, respectively. The steers used in this experiment were cheap, common cattle, and the gains they made were not large, being approximately 1½ lbs. per steer per day for a period of 165 days. The cattle were not well finished when marketed, and dressed a little less than 57 per cent. of their live weight, but the beef from these cattle was much superior to a great deal of the beef we are forced to consume in these days, and, as has been pointed out, it was produced with the use of a very small quantity of material which was fit for human consumption.

One thing is certain, we cannot produce the maximum amount of highly finished beef and, at the same time, produce the maximum amount of cereals for human consumption. It would seem, therefore, the part of wisdom to economize on the use of cereal grains in the feeding of beef cattle, and to utilize to the fullest extent bulky fodders, even though we have to be content with smaller gains in weight and a poorer quality of beef. As previously stated, these are abnormal times, and methods which would have been severely condemned a few years ago may be the very best and safest methods we can follow at the present time. Our great effort must be to get human food from our bulky fodders by converting it into meat, with a minimum reduction of cereals for human use.

An objection in the mind of many may be the fact that in the College experiment roots were used very liberally, whereas on many farms roots are not largely grown owing to the labor involved. This is a perfectly legitimate objection, but judging from experience silage can be made to take the place of roots to a very large extent at least. In addition to this, the hay fed the College steers was mixed timothy and clover, and contained too much timothy to be really satisfactory for cattle feeding. With a good quality of clover hay, or, better still, alfalfa hay, and a liberal allowance of silage, there is every reason to believe that results quite equal to the College results can be obtained. The experiment emphasizes the great importance of clover, alfalfa and silage on the farms of this Province.

Bacon Production.

At the present time a strong plea is being made for increased bacon production. There are several reasons why hogs are especially important in times like these, and the following may be noted:

1. Hogs multiply rapidly, and mature quickly, so that they offer the quickest means of increasing the world's supply of meat.

2. Hogs produce more meat from a given amount of food than any other domestic animal.

3. Hogs give a greater weight of dressed carcass in comparison to live weight than any other animal.

4. The carcass of the hog contains more edible meat in proportion to bone than that of any other animal.

5. Pork and bacon contain a large proportion of edible fat, which is vitally needed in the rations of soldiers.

6. Bacon is perhaps the most compact form in which meat can be shipped.

It will be seen, therefore, that the hog is bound to play a very important part in rationing our armies and those of our allies.

A point which counts against the hog in the eyes of the farmer is the fact that in order to finish it, it must be fed considerable quantities of concentrated feed, and when concentrates are high in price, as they are at present, the farmer is inclined to cut down on his hog production. Everything considered, therefore, it would seem that the present is an opportune time to study very carefully the possibilities of reducing the amount of concentrates in the ration of the hog and still provide a fattening ration.

Roots are a somewhat expensive crop to handle, but the advisability of growing even a small patch of mangels or sugar beets for winter hog feeding is well worthy of consideration. Experience has demonstrated that roots can be used in such a way as to lessen very greatly the amount of meal necessary to fatten hogs. A plan which has been used successfully, both at the College and on farms throughout the Province, is to pulp the roots, moisten the pulped roots with hot water and mix them with about an equal bulk of dry meal. The moistened roots moisten the meal and cause it to adhere to the roots, and the whole constitutes a palatable and satisfactory ration for winter feeding. Sugar beets are preferred by pigs to mangels, but mangels are more easily grown and pigs take them quite readily. Turnips are not quite so palatable to pigs, but they can be taught to eat them if accustomed to them from the start. When practicable, boiling turnips makes them quite

palatable and enables one to greatly reduce the consumption of meal. Boiled potatoes have a higher value than roots, and where cheap fuel is available small potatoes should never be allowed to go to waste. Breeding sows can be maintained throughout the winter with a very light meal ration if they are supplied with roots and some fine quality alfalfa hay or red clover hay, alfalfa being the best. The hay may be fed dry in a rack similar to a sheep rack and is very much relished by pigs, even young pigs will take considerable hay of this kind, but they should not be expected to depend upon it to the same extent as older pigs.

For summer feeding, pasture crops seem to offer the most convenient means of reducing the meal ration. Alfalfa makes an ideal pasture when available, but red clover, especially young red clover, is greatly relished by pigs and can be utilized in reducing the meal ration.

A thickly seeded mixture of grains such as oats and barley, or oats, wheat and barley, together with about 8 lbs. red clover per acre makes a capital pasture quite early in the season. If it is not desired to pasture the mixture early in the season it can be cut for hay, and the clover will then come along and form an ideal pasture for any class of pigs. Rape may also be used as a later pasture crop, and, by changing the pigs from one field to another, crops such as rape and clover may be pastured and repastured several times.

Another plan which has been tried in some places, and which is worthy of consideration, is to plant a few acres of corn which will mature in the district in which we live. In this district, and in similar northern localities, a very early maturing variety would need to be used. A crop such as this, however, will supply a large amount of feed for hogs, and the corn may be husked and fed to the hogs and the stalks may be utilized by feeding to cattle, or hogs may be turned in to harvest the crop for themselves. If it is intended to pasture the corn, it is a good plan to sow rape between the rows at the last cultivation. A combination of rape and corn such as this will fatten hogs fairly satisfactorily, and in any half favorable season an acre of such pasture should carry ten to twelve hogs at least thirty days. Pigs weighing 100 lbs. and upwards are best suited for pasturing.

Any ingenious farmer will be able, in all probability, to devise other means of economizing on the meal ration, and the present suggestions are thrown out as merely representative of steps which may be taken to keep down the cost of production.

Important Factors in the Production and Sale of Wool.

Sheep raisers, at the present time, are producing something that is in much demand for war purposes, and consequently has a high market value. The price paid for wool depends on its grade and quality, which in turn are governed by the care of the sheep upon which the wool is growing. When the clip of a whole flock would go to market at less than 20 cents per pound there was some excuse for cases of indifference, but under present circumstances, when the difference in value between two grades may amount to as much as the price of a pound of wool in seasons past, one would naturally expect farmers to give the sheep and wool every possible care. Wool is now growing; next spring it will be shorn and in the summer it will be graded and go to the mills. It matters not whether the clip is graded by some co-operative organization, by the dealers, or by the manufacturers. This work must be done by someone and the value of the clip will depend on the care the sheep receive this winter and coming spring. Some may say that they sell their wool for so much per pound and the buyer can do what he likes with it. This is all very well but the buyer "plays safe" or goes bankrupt. He must strike a price that will let him out with a fair margin which often means that the best wool is bought cheaply and the poorer grades are well sold. Again, the value of the poorer qualities may become the maximum price paid for good and bad alike, a splendid thing for the indifferent shepherds but discouraging to the careful one. Wool, like everything else, should be paid for according to grade and everyone should strive to produce the best.

Feeling that special attention should be given this matter throughout the winter and spring we have compiled in one article, the ideas of several authorities on the production of good wool, its care and the grading of same.

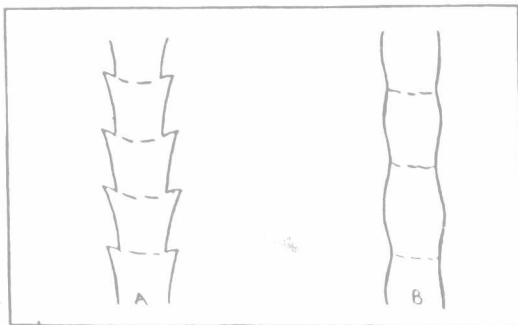
How to Produce More and Better Wool.

BY A. A. MACMILLAN, MACDONALD COLLEGE.

Breeds differ in their respective abilities to produce an average weight of fleece, and flocks vary in their inherent capacity to produce more or less wool than the average of the breed. Breeding and selection are two important factors that determine in a large measure what the ultimate weight of a fleece will be when shorn, but aside from these there are other agencies which may increase or decrease the production of the maximum weight of wool. Feeding, exercise, housing, equipment and management are the most important of these.

Few farmers realize that the weight of wool from a poorly wintered flock is not as large as the weight of wool from the same flock would be if properly cared for. Experiments show that with proper feeding and management the weight of the fleece may be increased by one pound and that with growing stock even better results may be obtained. Good care not only increases the weight of the fleece, but it improves the quality of the fibre, thus raising the market value of each pound of

Wool and Hair Fibres.



A, wool fibre; B, hair fibre.

wool produced, and with dollar wool in sight flock owners cannot afford to overlook factors that increase weight and improve quality.

Feeding is one of the big factors affecting wool growth and quality. Sheep require a ration that will supply all body requirements and at the same time provide sufficient material for wool growth. Wool growth requires that considerable quantities of protein be supplied and on this account rations for sheep should never be too low in protein. Timothy hay, on account of its high fibre and low protein content, is a poor feed for sheep. Clover and alfalfa hay supply almost a balanced ration for sheep, especially if a succulent feed in the form of roots or silage is added. When clover and alfalfa are not available the protein content should be made up by adding a feed that is rich in protein.

Exercise is important in that it ensures good health. It stimulates the appetite and improves circulation. Feeds are better utilized and their digestible constituents are distributed to better advantage throughout the body. Sheep are naturally active animals and close confinement or lack of exercise at once affects their general health, and unless the flock is maintained in good health the growth of wool is less vigorous.

Buildings for sheep may be too warm, damp or drafty, all of which should be avoided. Warm buildings cause the sheep to perspire unduly, a condition which affects wool properties. Damp or drafty buildings are likely to cause disease in the flock. Sheep should be housed in cool, dry, well-ventilated buildings, and where properly housed wool properties which are affected by physical conditions are retained.

Proper equipment has much to do with wool quality and weight of fleece. Any equipment which does not ensure a clean fleece is decidedly inferior. Carelessness

in feeding may also result in depreciation of fleece. Seedy and chaffy wool is usually the result of poor equipment or carelessness in feeding. Seeds and chaff in the fleece absorb the wool grease and often obstruct the secretion towards the outside of the fibres. Where absorption and obstruction take place the weight of fleece is not only reduced but the wool fibres become dry, harsh and brittle. Such wool can be considered nothing more or less than rejection wool, and is much less valuable than wool which retains its natural yoke together with the other handling qualities which ensure strength of fibre. The practice of throwing feed from a loft, or of carrying forkfuls of hay through the yard with the sheep about is sure to result in the introduction of more or less chaff into the fleece. Sheep should always be penned off while feed is being thrown out or placed in the racks, or better still if chutes can be built direct from the loft to the racks, greater convenience is provided. The racks should be tight boarded at the top so that chaff and seeds do not drop out over the neck, shoulders and backs of sheep while feeding. Racks that are built with the slats wide enough apart to allow the sheep to put their heads through usually result in dirty necks and shoulders, and in the spring a loss of wool results from rubbing on the sides of the slats.

The care of the fleece must not stop until it is offered for sale. Excellent fleeces have even spoiled in a few minutes because the flock gained access to an old orchard, garden or yard in which there were a number of burdock plants still standing. Failure to tag the flock before turning to pasture in the spring is often another cause of some loss. Failure to dip in the fall will reduce the wool crop from a flock badly infected with ticks. Lack of cleanliness in shearing often adds to the percentage of rejection wool. Shearing too soon after a rain will result in damp or moldy wool, while carelessness in putting up the fleece detracts from its general appearance and tends to reduce its market value. Loss has also been sustained from improper storage previous to sale. Wool should be stored in a cool, dry building. Damp cellars and hot airy buildings should be avoided.

With present prices, flock owners should not forget that consideration of the factors mentioned may result in a gain of one to two dollars per fleece, while neglect of one or all of them may result in a monetary loss of practically fifty per cent. Every pound of wool is needed at the present time so that greater production should be kept in mind as wool is going to be one of the deciding factors in the big issues at stake.

Grading and Selling in Alberta.

BY E. L. RICHARDSON.

We have now had a few years' experience in collecting wool from a considerable number of breeders throughout the Province of Alberta, for the purpose of having same officially graded by experts from the Dominion Live Stock Branch and sold co-operatively. There has

been a wool ser been eff statede In this formatio the deta has rece practica to reme Unfo persist i binder i that pap able at receiving for the familar of bnde these pie manufac damage have be selling o deal abs to do thi as reject being 18 our total I wis sheepee They w clipping lot of w another lessly, b the two two gra be kept of wool dampnes ditions v if any c water w his wool the amo weight i to be a part of p in the b satisfact

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been a general improvement in the condition of the wool sent to us. I think considerable improvement has been effected through the fact that we issue a detailed statement showing the weight and grading of each lot. In this way each seller not only has the detailed information regarding his own lot, but has for comparison the detailed statement of every other lot sold, and if he has received less money than his neighbor for wool from practically the same kind of sheep, he naturally endeavors to remedy the difficulty for the next year.

Unfortunately we still have breeders who will persist in the slovenly method of tying their fleeces with binder twine. We have given publicity to the fact that paper fleece twine for the tying of fleeces is available at our office, but I presume each year we shall be receiving wool from new breeders who have to pay for the lesson of using binder twine. Those who are familiar with this way of tying know that the pieces of binder twine get mixed through the wool, and that these pieces will not take the dye when the wool is being manufactured into clothing, and therefore very seriously damage an article of clothing which would otherwise have been first class. It is essential, if co-operative selling of wool is to be a permanent success, that we must deal absolutely fairly with the purchasers, and in order to do this, wool which is tied with binder twine is classed as rejects, which this year brought 42 cents a pound, being 18 cents a pound less than the average price for our total clip.

I wish it were possible for a larger number of our sheepmen to witness the actual grading of the wool. They would learn that the exercise of special care in clipping and tying fleeces would probably result in one lot of wool being placed in a higher grade, as against another lot of wool of the same quality, but put up carelessly, being placed in the lower grade, especially where the two lots are close to the dividing line between the two grades. It is also essential that the wool should be kept dry. Occasionally we receive a consignment of wool which is quite damp. It may be that this dampness was unavoidable, owing to weather conditions when shearing, or lack of accommodation, but if any contributor has the idea that a few pounds of water will result in bringing him a larger cheque for his wool, he is sadly mistaken, as the experts estimate the amount of shrinkage when the wool is dry, and this weight is deducted from his total. It is satisfactory to be able to state that there is a genuine desire on the part of practically all of the sheepmen to send their wool in the best condition possible, to enable us to make a satisfactory sale.

Experiences in Ontario.

BY R. W. WADE.

The quality of the wool received at Guelph last spring was of an exceedingly high order. The graders and various experts who examined the wool stated that the fibre was uniformly strong.

Very few of the shippers forwarded us wool that contained too much moisture, showing that the wool had been clipped in a dry condition and had been kept in a satisfactory manner between clipping and shipping.

Unfortunately a number of very fine fleeces had to be placed in a lower grade or to be classed as rejects, owing to the fact that in some cases the fleeces contained a considerable amount of chaff, and in other cases, the sheep had been allowed to run in fields containing burs.

A large proportion of the shippers took sufficient care in tying up their fleeces so that they could be taken from the shipping sacks entire. This did not hold true in every case, as some shippers merely tied the fleece one way around and with the necessary amount of handling i. e. in being taken from the shipping sack, to the grading table, then from the grading table to the grading baskets, then from the grading baskets to the bins, and then from the bins to the final shipping sacks, such fleeces that were not well tied became very much torn apart, and would not either show as well before the buyer or prove satisfactory when delivered for the purpose of sorting.

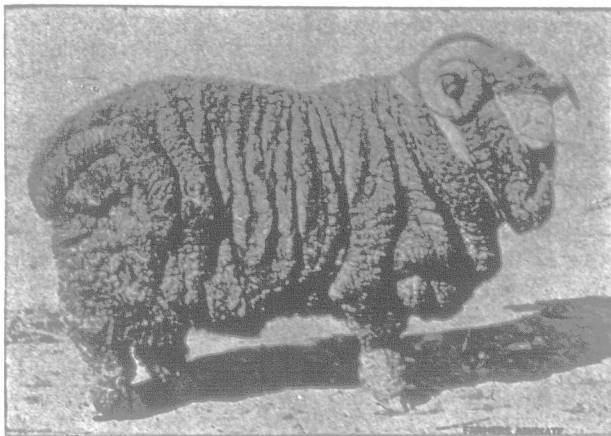
The Grading Operation.

BY T. REG. ARKELL AND J. K. KING.

Grading represents the classification of wool in the fleece and should be done before the wool enters the mill. It consists of the separation of the entire fleeces into lots of similar character with relation to condition, quality and staple or length. Grading must not be

confused with sorting, which is performed in the factory before scouring and comprises the breaking up of the fleece itself into unit parts. These operations are rendered necessary, owing not only to variations in character of fleeces produced from sheep within the same flock of similar breeding, but variations as well in length and quality within the fleece itself. For instance, a shorter wool will be found on the belly than on the thighs and the latter will be much coarser. These two sorts are used for different classes of manufacture.

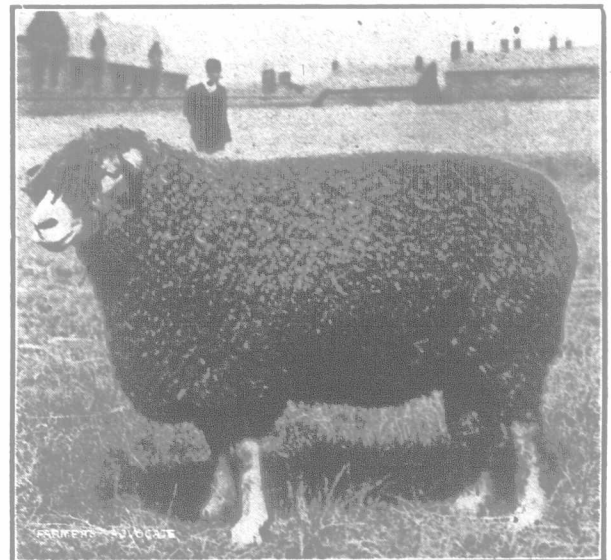
Discussion of the classification of Canadian wool will involve an explanation of the following features:—



A Pure Merino Ram.

Grease or Unwashed.—Wool shorn from the sheep in the natural condition. The fleece should be offered for sale in this fashion only. The grade can be distinguished more readily and the manufacturer can sort it to suit his needs. The higher price which the washed or tubwashed product brings, as has been proven experimentally, is more than offset by the cost of labor and loss in weight. Besides, this operation can be performed much more effectively by scouring in the factory.

Washed.—Wool washed with soap and water upon the sheep's back. Washing removes only the foreign



A Producer of Coarse and Lustre Grades.

material or dirt and creates a shrinkage in weight from 15 per cent. to 22 per cent. on the average.

Unmerchantable.—Wool poorly washed or not shorn for some time after washing.

Tubwashed.—Wool scoured by hand with soap and water frequently containing a weak solution of caustic alkali, after it has been removed from the sheep. This represents a most objectionable practice. In tubwashing the various qualities of the fleece are so badly mixed as absolutely to prevent sorting. It represents an attempt to fulfil the same purpose as scouring, but the process is not as effective. Before the wool can be

used in manufacture it must be resoured, and, although the original loss in weight ranges from 30 per cent. to 50 per cent., an additional decrease of an average of 15 per cent. occurs in the mill.

Co-operative associations will not accept tubwashed wool for sale.

Scoured or Reject.—Wool containing an excessive quantity of seeds, burs, straw, hay or hemp.

Cotted Reject or Cots.—Wool matted together. Cotting is created by ill-health and is due to lack of sufficient yolk or grease in the wool, which ordinarily keeps the fibres from sticking together. Since the wool is already felted to some degree, it cannot be used effectively in manufacture.

Black or Grey Reject.—Wool containing numerous black, brown or grey fibres. The color prohibits its use for light colored fabrics.

Tags, Dung Locks or Stained Pieces.—Short locks covered or stained with manure. These are generally of no high commercial value and must be given special treatment in scouring.

Pulied or Skin.—Wool removed from the pelts of slaughtered sheep by a mechanical or chemical agency.

Staple or Length.—Fleeces are separated very generally according to staple, into two lengths, combing and clothing. Two inches is ordinarily the dividing point. Combing is the long wool, intended for worsted purposes. Clothing is too short for the ordinary combs and must be carded entirely, mostly into woollen goods. Canadian Domestic wool, as may be recognized from a study of the charts, represents in the main combing lengths.

Quality.—Domestic wool is divided into five classes according to quality or fineness of diameter of the fibre. Of these the Medium and Coarse represent the basic grades and comprise the bulk of the wool of this class raised in Canada. In some districts a finer wool than the distinctive Medium is produced, which may be included in a higher class known as the Fine Medium, and considerable wool exists, coarser than the Medium, but not sufficiently so to be called a Coarse, which is graded effectively as a Low Medium. The Lustre class includes only the bright wool of glossy appearance, shorn usually from highly-bred Cotswold, Lincoln or Leicester sheep.

Coarse and Lustre are expressly long-fibred wools. Clothing lengths are representative mostly of the Fine Medium and Medium qualities.

Range wools, being of a Merino foundation, possess a decidedly finer quality than the Domestic and incidentally are of higher shrinkage. They can be divided into four classes: Fine, Fine Medium, Medium and Low. The Fine is not represented in Domestic grades whatever. It is wool from the pure Merino. In reverse fashion Lustre does not appear in Range types, but is exclusively Domestic.

It is difficult to correlate the types of wool produced by the different breeds with the foregoing grades, for the reason that within each breed there is always a wide range and great variety of qualities. Grading is performed entirely irrespective of breed type, and Shropshire or Hampshire wool may be included in the same grade with Oxford or Suffolk. Fleeces of several hundred sheep of one of the Down breeds, which are the most variable, may fill every category except Fine and Lustre. The wool of the Cotswold, Lincoln and Leicester is the most constant in quality and is never classed as other than Lustre or Coarse.

Appreciated Overseas.

EDITOR "THE FARMER'S ADVOCATE":

I received word from my son who is in England, wounded, that he would like to continue to subscribe for "The Farmer's Advocate", I am therefore, sending cheque for the subscription for next year.

Wentworth Co., Ont.

W. B. GANTLY.

A Masterpiece.

EDITOR "THE FARMER'S ADVOCATE":

Your Christmas Number was a Masterpiece, well worth a year's subscription itself. I am sending one new name.

Elgin Co., Ont.

D. J. CAMPBELL.



Wool Being Graded by a Co-operative Organization.

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THE FARM.

The Rule of the Rich.

EDITOR "THE FARMER'S ADVOCATE":

There seems to be a feeling on the part of some people that just because a man is rich he is not qualified to rule. There is also an attempt made by some writers to stir up discontent among the people in this country by unjust comparison between the lots of the rich and the poor. In the January 3rd issue of your magazine there appeared an article entitled, "The Justice of it all", dealing with the difficulties of the poor, and advocating drastic measures for evening up the situation.

The writer describes briefly what he calls the fight for freedom from earliest times down to the present. By his fight for freedom we gather that he means the age-long fight for supremacy in position, riches and the chance to direct the work of others. Coming to the present day he illustrates a point by supposing two men before a military tribunal, one rich the other poor, both of whom have been denied exemption. He pictures them going "over the top" together, and assumes that if both are killed "by the same shell" (we can't see just what difference the manner of passing out would make), that God would give them equal treatment. Then he pictures what would happen on their return in case that they were both only badly wounded and not killed. He pictures the rich man's son in a sort of earthly paradise, and the poor man's son in an earthly hell. He didn't say anything about the greater sacrifice made by the rich man's son in meeting the rigors of trench life which, of course, would be proportionately much harder for him to endure on account of his former life having been spent, as the writer is very careful to point out, in the lap of luxury. There is a great deal of commiseration of the poor, and gilding of the picture of the rich which is as untrue as it is unnecessary. Those of us who have lived among the poor, and among the rich, know that all poor people are not miserable, faithless wretches, and that all rich men don't live lives of ease and comfort. There is possibly a greater understanding among the poor, of what faith in God means, they are frequently called upon to put it to the test, and they derive strength and comfort from this knowledge that money couldn't buy. This is not saying that there are no rich men blessed with the same kind of faith. Those who are, are doubly rich. After all the ten commandments are enough, and we are inclined to look suspiciously on any man's theories who would add to them. "Thou shalt not covet", is a good commandment for us all to learn. There is one good thing about the commandments, they are absolute, and not conditional. A man cannot excuse himself for breaking one of them because he has worked himself up to believe it is solely in his neighbor's interest, and that it would be benefitting mankind for him to do so. This world can only be made happier and better by bringing it more closely in touch with the Infinite. No scheme of taxation, be it of land or profits can ever do away with the disparity in earthly possessions which we call wealth. Opportunity is a great thing, but opportunity is not confined to the rich. We have known of poor men who have risen to heights in the scale of wealth which entitle them to be called millionaires. These men are good business men and have the faculty of making money. That they have been able to keep it, and the respect of their fellowmen shows that they are fit men to be entrusted with the affairs of those who are not so fortunate in respect to money.

It is a law of this world that "the poor shall never cease out of the land", but there is a responsibility on the shoulders of the rich in obeying the commandment, "Thou shalt open thine hand wide unto thy brother, to thy poor, and to thy needy in thy land." As yet we have seen no commandment to force the rich to disgorge money or possessions which they may have. If the wealth of this Dominion could, by a miracle be evenly distributed at midnight to-night, then before this magazine is printed we believe there would be a reversion to the same state of affairs as exists to-day, some would be wealthy and others poor. A man who proposes force to enable us to carry on the war is asking us to establish in the world of finance, the very enemy we are trying by this war to dislodge from its grip upon international relations. The writer speaks of the government of Canada as having taken the lives of the men it is sending to the front. This seems to us like a pernicious misrepresentation. It takes for granted that the country was averse to the passing of the Military Service Act, but this is not the case since it was upheld by a large majority. Canada gives her sons to fight for freedom. It pre-supposes also that every man going to the front will be killed. This also cannot be considered as approaching the truth. The rich man's son is conscripted with the poor man's, there is no difference there, and the vote which enforced the Military Service Act was the poor man's vote. No one will say that there are enough rich men in Canada to swing an election anyway they want it by the power of their votes. We have heard no complaint from among the rich because the poorer people voted to sustain conscription. Let us honor those sons of the rich, and there were many of them, who volunteered in the early days of the war, went into the trenches, and over the top for the last time, side by side with their poorer brothers not thinking themselves any better, but taking what came to them as true Canadians. We make no plea for profiteering, but we do protest against spreading the impression that the rich men are the only ones who are making money out of this war. We know of boys and young men who before the war were satisfied with a

dollar seventy-five per day to two dollars for doing the kind of work they were accustomed to, who have gone to cities and towns, and have received from three and a half to four dollars per day for work they had just "picked up". Canada will be great, prosperous, successful, peaceful and contented according to the measure of Divine guidance she asks for, and receives in all her relations, individual and national, and this applies as much to the rich as to the poor; as much to those legislated for, as to the legislators themselves.

In the article referred to there is the favorite example of the rich man whose income of \$100,000.00 it is proposed to seize, and portion out. He is to be allowed \$10,000.00 a year to live on and \$90,000.00 is to be directed to other uses ostensibly to help the poor. We are led to believe that this rich man is in the habit of spending his entire income to live on whereas with financiers, money is their stock in trade, and they need reserves in proportion to their business turnover, to make good losses and to advance industrial projects, from which returns are prospective rather than certain, and have to be waited for. Here is an example which to our minds is just as much or as little worth considering. There is a job to be done by the township which is going to cost a goodly sum of money. Taxes are high now, and how is this extra expenditure to be taken care of. We will take the case of Farmer Jones who has a fine herd of pure-bred cattle, a herd of pure-bred swine, and a flock of pure-bred sheep. He keeps six hired men, and there is a hired girl to help in the house. We will take thirty of his cows and young stock, and half his pigs and sheep and he will have to hump himself to get through his work in the day looking after what is left without any hired help. He will be better off then than Farmer Bones who never could get together more than a few head of poor-grade cattle, a razorback sow, and no sheep. He never had a hired man and some people say his wife does most of the work in the barn as well as all of it in the house. We will sell Farmer Jones' cattle, sheep and pigs that we have taken, and with the proceeds we will meet this special expenditure in the township. It will be a great benefit to poor Farmer Bones. He has such a hard time poor fellow, and though he would never have thought of such a scheme himself it is good to have somebody to think for him in cases like this. Don't you see the Justice of it all? Our ideas on this subject are opposed to those outlined in the article we have referred to, and we have tried to state views with as much consideration for the value of discussion as we found in that article. We recognize the fact that argument comes more naturally to those of us with strong convictions, but that is no reason why we shouldn't try to discuss subjects occasionally.

Huron Co., Ont.

DERMOT McEVoy.

The Fuel Scarcity and the Farm Wood-lot.

EDITOR "THE FARMER'S ADVOCATE":

The fuel scarcity of this year has enhanced the price of fire wood to such a level that even the growing trees are being sold off because of their value as revenue producers. Markham and Pickering Townships in York and Ontario Counties are now nearly prairie townships; few farms, even homesteads that have been in the same family since this country was opened up, have any woodland left. The effort has been to cash in all timber that was left standing at the present high price. Is this good business? Does 100 acres of clear plowed land produce any greater revenue than when a few acres of woodland are left? Men of sound judgment maintain that an acre of hardwood bush will grow, on an average, two cords of body wood per annum. Now this amount of fuel right on the farm is worth, for the owner's use, as much as its heating value in coal, which is at least ten dollars clear of the cost of cutting. But this is the smallest consideration. The trees have a value beyond this. Take last summer's storms with their deluge of rain and high winds; had there been a few acres of bush on every farm this part would have produced at least twice as many oaks as were harvested. Because my neighbor was fond of trees and windbreaks, there was one field of oaks sheltered from the storm which was worth at least twice as many acres of that exposed to the gale. Also, because of a small piece of growing maple bush another field was protected and yielded twice what the next exposed field produced. There is no sentiment needed to realize the value of trees for fuel, or as factors to break the sweep of the wind. Still there is little effort as yet being made to maintain a piece of bush on every farm. Would it not be a good idea to exempt woodlots from local and municipal taxation? Something must be done to save the trees. They make a harbor for insectivorous birds; they break the storm; they make, when handled in a workman-like manner, a steady and certain source of fuel, which pays their way; they make for appearance of the whole locality, helping all who see them to be better Canadians.

York Co., Ont.

H. STUART CLARRY.

To Fill Tile Drain.

EDITOR "THE FARMER'S ADVOCATE":

In regard to filling tile drains after tiling machine, in Essex we find the quickest and easiest way is to use a square stick of timber about 12 feet long, put a team of horses on each end, let one team walk ahead of the other so as to have a good cut, something the same as a road scraper, a team on each side of the drain. The sooner it is done the easier it is to do, as rains make it tough. It will have to be filled by hand close to fences.

Essex Co., Ont.

J. P. P.

To Increase Production in Canada.

EDITOR "THE FARMER'S ADVOCATE":

In his article on how to increase production in Canada Mr. Allan McDiarmid makes the suggestion that the Government should undertake to break a few thousand acres of raw prairie lands in Western Canada with the idle tractors lying around Saskatchewan farms.

Now, I agree with Mr. McDiarmid that there should be more land put under cultivation in order to meet the enormous demand for foodstuffs, but I think the method suggested by him is not very feasible, and would be a failure as far as increased production was concerned. For the most part, the tractors which are idle in Saskatchewan are either too badly worn out for traction purposes or are entirely unsuitable for plowing, too large and requiring anywhere from four to six men to keep in operation, and it would be impossible to secure the man power for these at the present time, and if it were possible they would be a poor proposition.

It is not a question of why not put idle tractors to work on new lands, but why not the Government help the farmers by removing some of the handicaps which now burden the Western farmer and which hinder production considerably.

In the first place, the shortage of man power is the most serious situation in Western Canada to-day, a great many young men have been taken for military purposes and very little effort has been made to replace them. Our boys get a dollar ten a day, and foreigners—Austrians and Germans—are allowed to demand five and six dollars per day so that they only find it necessary to work half the time and hang around the towns the other half, when if they were held down to a reasonable wage they would be compelled to work for a longer term, and they always leave a farmer or demand increased wages at a time when they are most needed on the farms. I know several farmers in Saskatchewan who were unable to get their summer-fallowing done and were compelled to let their horses stand idle because these foreigners did not feel in a working mood at that particular time of year. They had made a stake in seeding when farmers were compelled to pay then unheard-of wages in order to get in the crop, and they had enough to keep them without work until harvest, when they again repeated the same thing. If the Government would regulate wages or conscript foreign labor in such a way that Western farmers would be assured of help there would be no question but that production would be greatly increased.

Now because large, idle tractors lying around Saskatchewan farms have proved unsatisfactory for breaking and plowing, it does not follow that the small, one-man tractor is not a success. By the use of it production in Saskatchewan and Western Canada can be greatly increased. We are told over and over again by the Government that the success of the Allies depends on increased production of foodstuffs. Then why handicap production by a duty of 27½ per cent. on small tractors or a duty of 42½ per cent. on repairs for tractors?

Saskatchewan hasn't the man power or horse-power to increase production as it could be increased under more favorable conditions. The small tractor is what is needed, and the American prices for these machines are almost one-third lower than the Canadian prices, the duty being mostly responsible for the difference. Part of this customs duty is in the form of a war tax. What advantage is it to a government to get a little revenue from that source while at the same time handicapping production to an extent difficult to estimate. If the Government would remove the duty on small tractors at once I believe there are thousands of Western farmers who would import these machines and have them on the ground ready for work in the spring, and production in 1918 would be greatly increased.

The failure to control the farm labor in the West and the maintenance of this duty in the present crisis is not only a reflection on legislation but a positive danger to the well being of the nation. The Government should act, and the action should not long be delayed.

Middlesex Co., Ont.

J. W. FREEBORN.

Rural School Trustees.

EDITOR "THE FARMER'S ADVOCATE":

In looking over your issue of January 3rd, in the questions and answer column I noticed a question in regard to appointing a secretary-treasurer on the school board. It made me realize that it was not in our section alone that there was trouble in getting a secretary-treasurer as well as a trustee. I think the time is near at hand when trustees will have to get some recompense for time spent on school affairs, as well as almost all work of that nature. In an ordinary year there may not be very much to attend to, but in case of any extras done around a school, a man's time ought to be worth something at least now when every day or hour means so much to a farmer. Men who have acted for years as trustees are now resigning. They have no time to spare and often a man in a much poorer position to act is put in his place. I have known men who actually offered to pay a fine rather than accept trusteeship, and who would have been far ahead to have done so. In most cases a man is at liberty to accept or refuse a position but in this case you have to accept or pay a fine providing you have not acted for a term of years. If dissatisfaction arises in the section you have to take your stand one way or the other often ending in hard feelings between neighbors.

Suppose you do the best you can under the circumstances, perhaps, by spending more time you

might have done better you are likely to get a combing down from the section, or, at least, from some of the ratepayers, on annual meeting day. Almost every section can boast of a few who will act as spokesmen if they get any ground to speak upon. The public school inspector comes along and orders something new; the ratepayers all feel that what is there is good enough so you are at logger-heads with one or the other. I have served my term and like a great many more I never realized the responsibility that was on a trustee until I had a trial of it. This is the rural school I allude to but I suppose trustees are trustees wherever they are.
Bruce Co., Ont. AN EX-TRUSTEE.

Co-operative Experiments in Weed Eradication.

BY J. E. HOWITT.

The experimental work in weed eradication commenced in 1912 and has been conducted now for six successive years. The object of this work is to have carried on by men on their own farms, experiments in the eradication of weeds, the results of which will furnish data from which definite information may be obtained regarding the best methods of controlling the various troublesome weeds of the Province. Before the results of these experiments began to accumulate there was little or no definite knowledge concerning the eradication of weeds.

When this work was started it was thought wise to confine our attention at first to four of our common troublesome weeds, and as the experiments progressed to add more bad weeds from year to year until exact information had been obtained about the eradication of most of the worst weeds of Ontario. Six experiments in all were outlined for the first year (1912), namely, "The Use of Rape in the Destruction of Perennial Sow Thistle;" "A System of Intensive Cropping for the Eradication of Perennial Sow Thistle;" "The Use of Rape in the Destruction of Twitch Grass;" "A Method of Cultivation and Cropping for the Extermination of Twitch Grass;" "A Method of Cultivation and Cropping for the Eradication of Bladder Campion;" "Spraying with Iron Sulphate to Destroy Mustard in Cereal Crops." In 1917 ten experiments in all were conducted, namely, "The Use of Rape in the Destruction of Perennial Sow Thistle;" "A System of Intensive Cropping and Cultivating, using Winter Rye followed by Turnips, Rape or Buckwheat, for Eradicating Perennial Sow Thistle;" "The Use of Rape in the Destruction of Twitch Grass;" "A Method of Cultivation for the Destruction of Twitch Grass;" "Method of Cultivation for the Eradication of Bladder Campion or Cow Bell;" "Spraying With Iron Sulphate to Destroy Mustard in Cereal Crops;" "A Method of Cultivation for the Destruction of Ox-eye Daisy;" "A Method of Cultivation and Cropping for the Suppression of Field Bindweed or Wild Morning Glory;" "A Method of Cultivation and Cropping for the Eradication of Wild

Oats;" "A Method of Cultivation for the Destruction of Chess."

Each spring leaflets are sent out to numerous farmers of the Province, inviting all who have any of the troublesome weeds in our list of experiments to co-operate with us in this work and try the experiments outlined for the particular weed which is giving them trouble. Application forms for the experiments accompany the leaflets. To those who fill in these and return them, detailed directions for the carrying out of the experiment selected are sent, and in the fall they are supplied with blank forms on which to report the results of their experiment.

In the past six years (1912-1917) over sixty farmers have co-operated in this work. Experiments No. 1, "The Use of Rape in the Destruction of Perennial Sow Thistle;" No. 3, "The Use of Rape in the Destruction of Twitch Grass;" No. 5, "Method of Cultivation for the Eradication of Bladder Campion or Cow Bell," and No. 6, "Spraying with Iron Sulphate to Destroy Mustard in Cereal Crops," have been conducted for six successive years, and the results may be briefly summarized as follows:

The results of these six years' experiments show clearly that the following methods can be successfully employed on the farms of Ontario for the control of perennial sow thistle, twitch grass, bladder campion and wild mustard.

The Use of Rape in the Destruction of Perennial Sow Thistle and Twitch Grass.—Cultivate the field until about the middle of June, running over it frequently with the cultivator so as to keep the tops down and thus weaken the "roots." Then apply manure at the rate of about 20 tons per acre (12 good loads). Cultivate the manure in thoroughly, and with a double-mould board plow slightly ridge up the land, making the ridges about 26 inches apart. On the ridges sow pasture rape at the rate of 1½ lbs. per acre. It is important that the right amount of rape should be sown, for if too little is sown the stand will not be thick enough to smother the weeds, and if on the other hand too much is sown the plants will be too crowded and not grow vigorously enough to keep ahead of the thistle or twitch grass. Sow the rape when the land is sufficiently moist to insure quick germination of the seed. If the rape is slow in starting the sow thistle or twitch grass may get a start in the row and thus necessitate hand cultivation there. Cultivate the rape every week or ten days until it occupies all the ground and makes further cultivation impossible. If when the rape is cut or pastured any sow thistle or twitch grass remains, the field should be ridged up the last thing in the fall and put in with a hoed crop the following year. This should not be necessary if a good stand of rape is secured.

A Method of Cultivation for the Eradication of Bladder Campion or Cow Bell.—Badly-infested fields should be plowed deeply and then thoroughly cultivated and cross-cultivated with a broad-shared cultivator in order to break up and weaken the underground root stocks. This cultivation should be given frequently enough to prevent the plants making any

growth above ground until it is time to put in a hoed crop, which must be kept thoroughly clean in order to be effective. A well-cared-for crop of corn has been found to give excellent results. Special attention must be given to hoeing out any patches of Bladder Campion which may appear in the corn crop, and which are not destroyed by cultivation. If in the fall there is any bladder campion in the field, it will be necessary to plow fairly deeply and cultivate thoroughly and the following spring repeat the frequent cultivation until it is time to put in a hoed crop. This second hoed crop should not be necessary under ordinary conditions. One spring's thorough cultivation, followed by a well-cared-for hoed crop should destroy practically all the bladder campion.

Spraying With Iron Sulphate to Destroy Mustard in Cereal Crops.—Iron sulphate or copper can be successfully used to destroy mustard in standing grain without any injury to the crop.

A 20 per cent. solution should be applied. This can be prepared by dissolving 80 lbs. of iron sulphate in 40 gallons of water. Iron sulphate is dissolved quite readily in cold water. The solution should be strained through a cheesecloth, as it is put into the spray pump tank. This will remove dirt and small particles that are apt to clog the nozzles.

Apply on a calm, clear day just as soon as the first few plants in the fields show flowers. IT IS VERY IMPORTANT TO SPRAY EARLY. If the plants are left too long the treatment is not nearly so effective. If a heavy rain comes within 24 hours after the solution is applied, it will be necessary to spray again.

An ordinary hand pump barrel sprayer, such as is employed to spray fruit trees may be used, or a potato sprayer can be rigged up to do the work. Many of the up-to-date potato sprayers have a special broadcast attachment for spraying weeds. These are excellent for large areas, as they cover a wide strip at each round. Care must be taken to see that every mustard plant is covered with the solution in the form of fine spray. Iron sulphate may be obtained at any hardware store.

These experiments will be conducted this year (1918). The weeds to be experimented with are perennial sow thistle, twitch grass, bladder campion or cow bell, wild mustard, ox-eye daisy, field bindweed, wild oats and chess. All who have any of these weeds on their farms are invited to co-operate in this work, and by so doing profit by ridding the field of the weed experimented with and demonstrating to their own satisfaction the effectiveness of the method tried, and at the same time furnishing practical information to others.

Northern Grown Seed Potatoes.

The Ontario Department of Agriculture have published some very interesting testimonials from farmers who have had experience with Northern Grown seed potatoes. We invite readers to give the results of further experience in potato growing through these columns.

Canada's Young Farmers and Future Leaders.

Food For Thought.

Do not be afraid to say no when you mean no.

It isn't necessarily the right road because it is well beaten.

Economy lies not so much in the price paid for an article, but in the quality and service secured at a given price.

If you would become known do your work so well that the world will not get a chance to forget you. Too many young men rush through their work so as to have time for pleasure and apparently care little about the quality of their work. Such men seldom become famous.

"If at first you don't succeed try, try again". This is the spirit which dominated the men who have become world benefactors through their inventions and discoveries and it is needed to-day as much as in the past. If you are sure you are on the right track don't give up because obstacles are placed in your path. It is doing the difficult task that strengthens character and fits a person for bigger work.

Profit Competitions.

For several years young men taking the four weeks' agricultural course held in their County have had the privilege of entering Acre Profit or Feeding Hog Competitions, held under the supervision of their District Representative. The competitors are required to keep accurate account of all expenses entering into the operation and then carefully figure the yield or gain at a set price in order that the profit on the transaction might be ascertained. These competitions have been of inestimable value to many young men, as they have been the means of getting them started keeping accounts of farm operations. They have found out by practical experience just what it costs to produce so many bushels of grain, tons of corn, bushels of mangels, and what it costs to bring a hog to the 200-pound mark under existing feed prices. This has started many of them thinking and has led some to slightly change their methods of farming in order that they might be engaged in the

most profitable lines. We have known of cases where young men have kept records and have found that the expenses of growing the crop were more than the crop was worth at market price. This is discouraging indeed, but the information which they had gleaned during the season showed them where mistakes had been made and steps were taken to prevent similar mistakes being made the next year. A few years ago one young man in the competition had a fairly good field of oats. He had selected his seed carefully and had applied a fair coating of manure to the land, but when the crop was threshed it was found that when a fair sum was charged for labor, he barely broke even. His neighbor on the adjoining farm also in the competition, gave his field a little different cultivation which slightly increased the cost of production but it also materially increased the yield; at least, the cultivation was credited with causing the greater yield. This led to further experiments in cultivation being carried on the following year by both young men, in order to find out what system of cultivation was the best for their particular soil. This was not all; they tried out different varieties of grain on a small scale in order to determine the best variety for their farms, and they also kept as accurate records as they could of cost of production of all the crops on the farm. One of them stated later that he had to thank the Acre Profit Competition for leading him to adopt business principles in handling his farm. He believed he was making considerably more money now than he would have had he continued under the old method. The same is true of feeding hogs. Some competitors are able to make abnormal profits while others do not break even. Most young men look into the cause of their failure to come near the top in the competition. This enables them to avoid mistakes in the future or to adopt better methods.

It is unfortunate that more of the young men eligible to enter these competitions do not take advantage of them. We know of counties where between fifty and sixty might enter and have no reasonable excuse for not entering, but it is difficult to get the required number to permit of prizes being offered. This should not be the case. It is to every man's interest to enter these competitions and to find out what it costs him to grow his crops or feed his stock. Agricultural classes are being held in practically every county this winter. All the young men attending will be eligible to enter

competitions this coming summer and we advise every one to do so, even though they have no chance of winning the prize. The man who is afraid he might be defeated is not a good sport.

The Department of Agriculture, through its District Representatives, conducted thirty-two Acre Profit Competitions during 1917. The prize offered to the winner in each county is a two-weeks Short Course at the Ontario Agricultural College, Guelph, transportation to Guelph and return, and also board and lodging while there. Where eight or more contestants finished the competition in each county, the expenses of two men were paid to Guelph. In the grain crops the competition was conducted on a five-acre basis, but calculations were made on the basis of one acre. In estimating the cost of production, five dollars per acre was allowed for rent of land; two dollars for plowing, fifteen cents per hour for man labor and ten cents per hour for horse labor.

Some remarkably good profits were made and the following will give some idea of the yield, and cost of production in the various counties. Oats were valued at 65 cents per bushel. A. G. Tudhope, of Simcoe County, grew 80 bushels to the acre at a cost of \$15.78, thus leaving him a profit of \$36.22. The soil on which the oats were grown was of a sandy-loam nature and had been plowed out of pasture. The land has been farmed for fifty years. In Brant County, R. A. Templar was the winner. He produced 72 bushels on an acre at a cost of \$15.13. His soil was also sandy loam and the oats followed a crop of sugar beets. Both these men used the O. A. C. 72 variety. Charles Skone won first place in the Kenora district, with a yield of 67 bushels, which were grown at a cost of \$14.80. The land was clay loam and broken out of sod. In Norfolk County, E. Mott, had a 61-bushel crop which cost \$14.38 to produce it. This was on sandy loam soil which had grown alsike seed the previous year. The land had been in cultivation for seventy years. G. Timmons, of Dundas County, grew 62 bushels and 12 pounds on an acre at a cost of \$15.21. The soil was clay loam and had been in corn last year. In Victoria County, J. P. Wilson was the winner with 54 bushels at a cost of \$14.53. These oats were grown on a field that had been in oats the previous year. K. W. Sexsmith of Welland County, also grew 52 bushels to the acre, at a cost of \$14.53. His land was a clay loam

and had been in corn the previous year. Fifteen loads of manure were applied. The land had been tilled for one hundred and thirty-seven years. W. Maginn, of York County, had a yield of 46 bushels on clay loam soil, which had been in wheat. Twenty loads of manure were applied, and the cost of producing the crop was \$12.16 per acre. In Glengarry County, D. McKinnon had a yield of 47 bushels which cost him \$13.67. F. Burgua, of Lambton County, grew 35 bushels on a clay loam soil at a cost of \$12.57. It will be noticed that the cost of production varies with the yield. The heaviest crops cost the most to produce and the second lowest yield cost the least. The difference in yield, however, was considerably greater than the difference in cost of production. Thus we have the profit varying from \$36.22 to the acre down to \$10.18. A little extra work, or better seed or more fertilizer are frequently paid for many times over in the increased yield resulting.

A number of the boys grew potatoes with varying results, depending on the quality of soil, and the weather conditions through the summer. The heaviest yield of 463 bushels was produced on Manitoulin Island, by J. Hodgson. These potatoes were grown on sandy muck soil, at a cost of \$130.40; thus leaving a substantial profit with potatoes selling at 90 cents per bushel. V. Bliss of Ft. William, had the second largest crop, although it was practically 100 bushels less than the former, but it was grown at a cost of \$72.80. This soil was a sandy loam broken out of sod, with ten loads of manure applied. G. Hill of Muskoka, grew 364 bushels at a cost of \$83.05, on loam soil which had been in summer fallow. R. Dennison, of Ft. William, grew 304

bushels at a cost of \$58.15, thus giving him a larger profit than W. T. Price, of Pt. Arthur, who had 327 bushels but it cost him \$82.30 to produce them. His soil was clay loam which had been in potatoes two years in succession, the first year being broken out of the virgin soil. Thus it will be noticed that the largest yields went to the North country. Old Ontario did not produce particularly large crops last year. In Grenville County, A. Goodin had 321 bushels at a cost of \$82.90. His field had been broken out of sod and the land had been under cultivation for fifty years. F. Farrow of Middlesex, had 231 bushels to the acre on sandy loam soil which had been in wheat the previous year. He applied twenty loads of manure to the acre and the total cost of production was \$55.55. The winner in Lanark County was L. J. Duncan, who produced his crop at a cost of \$85.32. Fraser Ross, of Rainy River, had a yield of 187 bushels on a clay loam soil. His acre cost him \$63.70. D. L. Cameron, of Renfrew, had 165 bushels to the acre, and E. L. Riddell, of Norfolk County, had a yield of 126 bushels.

There were a few entries in the competition of growing corn for silage purposes. W. T. Riddell, of Grey County, grew 26 tons of fodder at a cost of \$18.85. E. Smith, of Simcoe County, had a similar yield but his cultivation, fertilizer and seed cost him \$23.01. E. Wark, of Middlesex County, grew 20 1/4 tons on land which had been under cultivation for eighty years. The expenses were \$14.91. On black clay loam, in Peterboro County, W. J. Barrie grew 18 tons to the acre, and E. Barrie, of the same County, had a yield of 15 tons on sandy loam soil. His expenses were \$12.22, which was a trifle over

\$5 less than the other competitor from his County. E. Nicholson, of Bruce County, had a yield of 14 tons at a cost of \$18.55. S. McDonald, of Lambton County, grew corn for seed, but his yield was only 26 bushels to the acre, at a cost of \$21.67.

Large yields of roots have been grown; for instance, J. Edgar, of Brant County, reports a yield of 867 bushels of turnips on clay loam soil, and J. Beeton, of Wentworth County, had a yield of 560 bushels on sandy soil. These crops were produced at between \$21 and \$23 per acre. In Durham County, C. R. Lovekin had 1403 bushels of mangels on an acre, which cost him \$32.10. J. G. Armstrong, of Bruce County, reported a yield of 531 bushels, at a cost of \$25.57. In Renfrew County, 34 bushels of wheat were grown at a cost of \$18.20 per bushel.

In these acre profit competitions the crop was supposed to be examined through the summer and the yield weighed or measured by a disinterested party. The competitors kept a time sheet of the number of hours they spent in working on this acre, and figured up the cost of production according to the schedule given above.

There were twelve competitors in the feeding hogs for profit competition in 1917. There was a considerable difference in the cost of growing and fattening these pigs. Some of the boys had exceptionally small expense, when the price of feed is considered. They must be particularly good hog feeders and their system would be of inestimable value to a large number of farmers who are feeding hogs at the present time. According to the reports sent in by the boys, the average cost of production varied from \$9.09 to \$17.12.

Automobiles, Farm Machinery and Farm Motors.

Detroit Speaks.

Second only in importance to the New York Automobile Show, in so far as Canadians are concerned, was the motor car exposition held last week in Detroit. As everyone knows, New York is the heart of the consuming market for automobiles, but the City of the Straits holds undisputed supremacy as the manufacturing centre. Quite a number of machines displayed in Detroit showed a departure from the customary stream-line body. They had what is known as straight-line construction. The idea came originally from custom body builders and has now been absorbed by a number of the medium-priced factories. This straight-line effect includes a slightly higher hood, and one that is more nearly horizontal with the cowl than ever before. The sides of the body are straighter and the tops of the panels are in many instances bevelled sharply. This innovation is so faddish that we do not look for it to attain any general popularity, but, of course, for a time it will be considered stylish if not good looking and comfortable.

The very decided trend towards winter driving on the part of a great many car owners has influenced some car manufacturers towards any and every device calculated to overcome the difficulty of the cold months. In the past two seasons we have all seen occasional cars with air heaters attached. This device has never been general but nevertheless gave satisfaction wherever used. These "stoves," as they are called, have now been standardized to a certain extent and will be found this season on a great many models. The heater

is attached to the exhaust manifold by either rigid or flexible tubing and carries warm air to the carburetor. When the carburetor is located on the opposite side of the power plant to the exhaust manifold more flexible or rigid tubing is required, but this is the only difference noticeable. The operation is still the same and the results equally satisfactory.

The Detroit Show gave evidence that the manufacturers are endeavoring as far as possible to stop the annoying rattling sounds that develop so frequently in closed bodies. The public are demanding a great many closed cars, but in some instances the comfort of these machines has been marred by the rattling of the glass work. From now on we do not think that there will be any serious trouble from this source. All difficulties have apparently been cleverly surmounted.

We are particularly pleased to notice that oil cups are replacing grease cups at different points in many of the machines exhibited. The grease cup has been a faithful friend, but the handling of it has always proved a dirty job. From now on the owner who is caring for his own car will be delighted to find that he can maintain lubrication in the spring shackles and on many other parts of his auto by using oil rather than grease. We were rather surprised to observe that engine designers are taking a great fancy to separate cylinder heads. Perhaps this is only a temporary affection on the part of the auto-motive experts, or it may be a serious effort to take into consideration the control of the carbon. Of course, we all know that carbon can be removed with greater ease from separate cylinders than from

other types. Then, too, the new type of construction eliminates valve plugs, etc. In a subsequent article we are going to go rather thoroughly into the list of new accessories. Many of them are not of much account except as profit makers for the producers, but a few possess real merit and so are worthy of consideration. We may say in passing that the Detroit Exhibition brought clearly before us a great number of mechanisms for introducing water, air and vapor into the manifold for the purpose of permitting the engine to successfully burn fuels below the standard of commercial gasoline. Many of these devices have been tried out on test cars, but not until they have come into general use will any verdict regarding their effectiveness be worth while. It is interesting to note, however, that for some years past experts have claimed that if water, steam or vapor could be evenly distributed through the intake manifold that its presence would tend to soften and break up any carbon that might have been formed or was in the process of formation.

Visitors to Detroit commented unfavorably upon the change which some makers have made in the carrying of spare tires. We are firmly convinced that a proper motor-car balance can only be maintained by attaching spare tires to the rear of a car, but nevertheless a number of new models contain tire carriers in the front fenders. We do not believe that this method of designing will find favor, because the weight of the spare tires added to the weight of the power plant is going to make the front of any machine so equipped too heavy for safety.

AUTO.

THE DAIRY.

Cheese and Butter Exhibit at Stratford.

There is usually a splendid exhibit of cheese and butter at the Western Ontario Dairymen's Convention, and this year was no exception, even though a number of the entries did not arrive, owing to the blockade on the railroads. There were sixty-five entries of large cheese, sixteen of flats and nine of stiltons. The quality was exceptionally high and a standard was set which will be hard to exceed in the future. Four cheese scored 98 points and over; one scored within a point and a half of the total. A large percentage of the entries scored over 95. There were in the neighborhood of forty-two lots of butter, but the scores were not quite so high as they have been at past dairy shows. The large cheese brought 21 3/4 cents per pound by auction; the flats, 21 1/4 cents, and the stiltons, 24 1/4 cents. The boxes of butter brought 45 cents per pound, and the prints 46 1/2 cents. The following is a list of the winners together with the scores:

CHEESE—September White: 1, C. J. Donnelly, Lambeth, 98.50; 2, J. E. Stedelbauer, Vienna, 98.00; 3, Wm. Morse, Stratford, 97.50; 4, Wm. Jamieson, Dorchester, 96.50; 5, J. W. Carter, Stratford, 96.25; 6, L. H. Schneider, Rostock, 96.00; 7, J. T. Donnelly, Sparta, 95.75; 8, A. D. Riddle, Lambeth (won on flavor), 95.50; 9, E. C. Eastman, Arkona, 95.50. September Colored Cheese: 1, C. J. Donnelly, Lambeth, 97.50; 2, Wm. Morse, Stratford, 97.00; 3, Wm. Jamieson, Dorchester, 96.75; 4, E. L. Abbott, Dorchester, 96.50; 5, W. T. Oliver, Atwood, (won on flavor), 96.25; 6, E. M. Johnston, Innerkip, 96.25; 7, J. T. Donnelly, Sparta, 96.00; 8, H. Youn, Listowel, 95.75; 9, J. W. Robinson, Stratford, 95.50.

October White Cheese: 1, C. J. Donnelly, Lambeth, 98.90; 2, J. E. Stedelbauer, Vienna, 97.50; 3, Wm. Morse, Stratford, 97.25; 4, E. M. Johnston, Innerkip, 96.00; 5,

J. T. Donnelly, Sparta, (won on flavor), (tie), 95.50; 6, H. Hammond, Moorefield, (won on flavor), (tie), 95.50; 7, H. E. Donnelly, Stratfordville, (tie), 95.50; 8, Jos. Skelton, Kintore, (tie), 95.50; 9, W. T. Oliver, Atwood, (won on flavor), \$95.00. October Colored Cheese: 1, C. J. Donnelly, Lambeth, 98.00; 2, J. T. Donnelly, Sparta, 97.00; 3, W. T. Oliver, Atwood, (tie), 96.50; 4, Jos. Skelton, Kintore, (tie), 96.50; 5, Wm. Morse, Stratford, (tie), 96.00; 6, Wm. Loughin, Thamesford, (tie), 96.00; 7, L. H. Schneider, Rostock, (won on flavor), 95.75; 8, H. Youn, Listowel, 95.75; 9, H. E. Donnelly, Stratfordville, 95.50.

Stilton Cheese: 1, C. J. Donnelly, Lambeth, 97.50; 2, H. E. Donnelly, Stratfordville, 97.00; 3, Wm. Jamieson, Dorchester, 96.50; 4, W. T. Oliver, Atwood, 96.00; 5, Jos. Skelton, Kintore, 95.75; 6, Wm. Morse, Stratford, 95.50.

Flat Cheese: 1, Wm. Jamieson, Dorchester, 97.00; 2, F. C. Eastman, Arkona, (tie), 96.50; 3, J. T. Donnelly, Sparta, (tie), 96.50; 4, C. J. Donnelly, (tie), (won on flavor), 96.00; 5, E. M. Johnston, Innerkip, (tie), (won on flavor), 96.00; 6, Jos. Skelton, Kintore, 96.00; 7, Wm. Morse, Stratford (tie), (won on flavor), 95.50; 8, H. Youn, Listowel, (tie), 95.50.

BUTTER—56-lb. Box: 1, Jno. R. Almont, Silverdale, 97.00; 2, J. M. McNamara, Stratford, 95.50; 3, R. A. Dennis, Strathroy, 94.50; 4, W. G. Medd, Woodham, 93.50; 5, H. C. Misener, Palmerston, 93.25; 6, Jas. E. Wilson, Forest, 93.00; 7, H. A. Clark, Warwick, 92.50; 8, J. W. Carter, Stratford, 92.25; 9, Whyte Packing Co., Brockville, 92.00. One-lb. Prints: 1, Jno. R. Almont, Silverdale, 95.50; 2, Whyte Packing Co., Brockville, 94.50; 3, R. A. Dennis, Strathroy, 93.50; 4, H. C. Misener, Palmerston, 93.25; 5, H. A. Clark, Warwick, 93.00; 6, J. M. McNamara, Stratford, 92.75; 7, W. G. Medd, Woodham, 92.50; 8, H. J. Neeb, Tavistock, 92.25. October 56-lb. Box Butter: 1, R. A. Dennis, Strathroy, 95.50; 2, Jas. H. Ross, Exeter, 94.75; 3, Jas. E. Wilson, Forest, 94.50; 4, W. R. Pollock, Kerwood, 94.00; 5, W. G. Jackson, Simcoe, 93.25; 6, Whyte Packing Co., Brockville, 93.00; 7, Mack Robertson, Belleville, 92.75; 8, W. G. Medd, Woodham,

92.50; 9, H. A. Clark, Warwick, 92.00. Fourteen-lb. Box September Butter: 1, W. G. Jackson, Simcoe, 93.00; 2, Jas. H. Ross, Exeter, 91.00; 3, Jas. E. Wilson, Forest, 89.00; 4, C. E. Baxter, Toronto, 88.50. Winner of Silver Cup, for highest scoring cheese, C. J. Donnelly, Lambeth. Winner of Silver Shield for highest scoring butter, Jno. R. Almont, Silverdale.

Creamerymen's Association Annual Meeting.

The second meeting of the Canadian Creamerymen's Association was held in Toronto on January 15. A large number of creamerymen were present and the meeting was favored with addresses from prominent dairymen from Nova Scotia and Manitoba, as well as from Ontario. M. Robertson, of Belleville, presided. It was more or less of an informal gathering to discuss various problems and to promote the creamery end of the dairy industry. A. McKay, of Winnipeg, who is manager of the Manitoba Creamery Company, spoke strongly against cream-buying stations, claiming that they merely added expense to the handling of cream and that they made it more difficult to secure the highest quality cream which is necessary for making high-class butter. Grading of both cream and butter was strongly advocated by Mr. McKay. Prof. Bouska, of Chicago, gave a very interesting address on "The Grain of Butter", in which he clearly showed the effect of overworking and underworking on the grain. The proper way to tell when the butter is worked, the speaker claimed, was to take the butter ladle and lift out a chunk of butter and if it shows moisture in drops it is underworked, but if the moisture is just glistening on the surface, with drops showing about the size of a pinhead, it was considered that it had been worked sufficiently. Working it further would remove more moisture and leave the butter with a dull appearance, which is not wanted by the best trade. The creamerymen present secured a good deal of practical and valuable information from the address. The speaker also advocated the pasteurization of cream, which tends to prevent un-

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W. A. McKay, Superintendent of Dairying for Nova Scotia, brought greetings from the Maritime Provinces. He strongly advocated the forming of a Dominion-wide organization for the promotion of the dairy industry. This organization might be called the Dominion Dairy Council and would represent all branches of the industry. The Council could consist of one or more representatives of the various dairy organizations, then, instead of the separate organizations presenting their claims to the powers that be, as at present, anything which was felt to be for the benefit of the industry would be backed by dairymen from Coast to Coast. In this way it was felt that the dairymen would carry more weight with the Government.

L. A. Gibson, Dairy Commissioner of Manitoba, claimed that for the amount of capital invested those engaged in the manufacture of creamery butter are the most disorganized body of men in Canada, and recommended that something be done at an early date to effect a Dominion-wide organization. The speaker claimed that the men from the West were in favor of this step being taken.

The can question was thoroughly discussed by those present. With the scarcity of material for manufacturing tin cans, the price has been soaring during the past year or two and the creamerymen were unanimous in the opinion that something should be done to eliminate in so far as possible the waste in cream cans. Having the shippers of cream buy the cans was advocated. Creamerymen now recognize that they made a mistake when they commenced supplying cans free. Owing to the difficulty of holding the cream at the farm until ready for shipment, during the hot weather, those present believed that their patrons should be encouraged to put up ice, as having a supply on hand would tend to improve the quality of the cream delivered.

George H. Barr, Chief of the Dairy Division, Ottawa, spoke on butter grading, pointing out its many advantages towards the marketing of a uniformly high grade of butter. W. Bert. Roadhouse, Deputy Minister of Agriculture, was present at the meeting and told of the support which the Government had given and were willing to give towards the grading of dairy products in Ontario.

HORTICULTURE.

Keep the garden in mind. Order seed early and be prepared.

Save some of the best turnips and mangels to set for seed in the spring. The seed supply for 1919 may be short indeed.

Don't wait till the last moment to order repairs for implements and spray equipment. Delivery is very uncertain and costly delays may occur.

Such weather as we have had is not favorable for pruning, but when a change comes growers should attempt to get something done before spring; there will be no time then. The tops of high trees should come off and the suckers should be cut out. Thorough pruning of apple trees will be impracticable in most districts owing to the shortage of labor.

Some Suggestions on Spraying.

In a recent Ontario bulletin, compiled by Prof. Lawson Caesar, some useful suggestions on spraying are presented. These represent the results of several years' investigation, and are timely now when the subject is being discussed and preparations are being made for next season's work. These suggestions are contained in the following paragraphs.

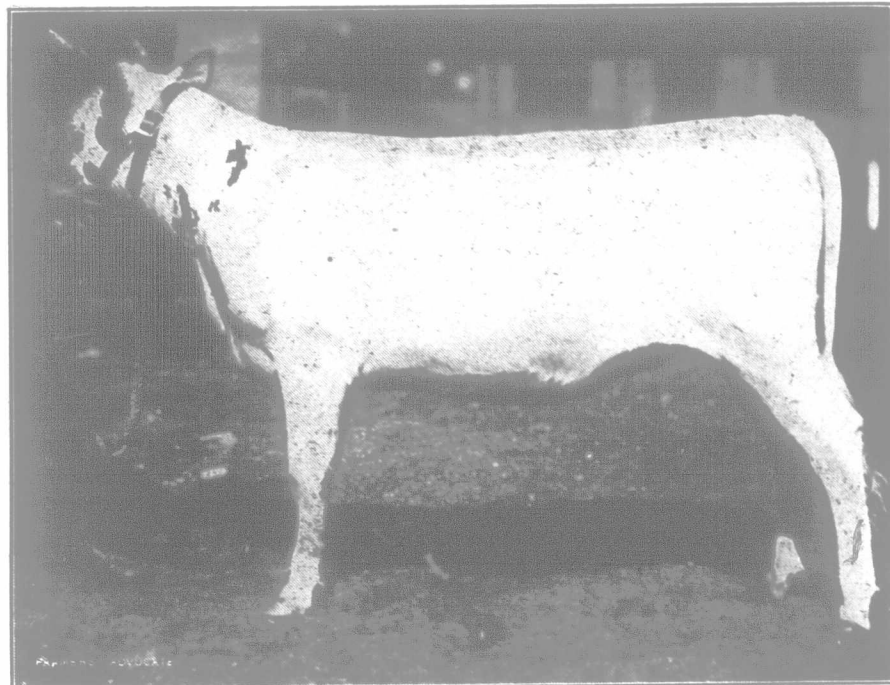
All trees should, of course, be pruned before they are sprayed, and large apple trees should be headed back to a reasonable height, care being taken in doing so to give them a symmetrical, umbrella shape. If San José scale is present, the rough, loose bark should be removed from apple trees.

Good spraying continued year after year should usually result in from ninety per cent. to ninety-nine per cent. of absolutely clean, sound fruit. Unfortunately, not many of our fruit growers are good sprayers. The following are some of the chief reasons for this: First, their outfits are not kept in good condition to do rapid, thorough work; often the pump needs repacking or the hose is too short, or the nozzles are worn out or are the wrong kind. Second, they do not study the nature of the disease or insect they have to combat, and so do not recognize the importance of promptly spraying at the special times indicated in the spray calendar. A spray applied a few days too early or too late will often mean complete failure. Moreover, the omission of one or more of the regular applications will often mean cull fruit. Third, in many cases not nearly sufficient material per tree is used, frequently only about one-third of the proper amount. It is absurd to expect the spray to keep all of an apple tree free from scab if only half of its surface is covered by the mixture, or to kill all the San José scale on a tree unless every particle of the bark is wet with the liquid. Fourth, the spray mixtures are sometimes not used at the strength recommended. Fifth, many men foolishly experiment with new mixtures instead of waiting until these have first been thoroughly tested by unprejudiced experimenters.

Before beginning to spray the machine must be put into good condition so that it will give good pressure and not leak. If two lines of hose are used, the one for

the man on the ground should be from thirty to forty feet long, the other twelve to fifteen feet. The most satisfactory nozzles at the present time are those of the angle disc type. When the plates of these become much worn they should be replaced by new ones. If two nozzles are used on a T or a V they should not be set at a wide angle of divergence, but should be made to supplement each other and thus give a dense spray that will quickly wet the part being treated. Bamboo poles with aluminum rods inside are light and satisfactory if not roughly handled. A ten-foot pole is about the right length for the man on the tower, and a six or eight-foot one for the man on the ground. To prevent the drip running down the pole, a small rubber or leather disc about three or four inches in diameter, cut out of an old shoe or rubber, is helpful. It should be placed at the top of the rod just below the nozzle. Good pressure is necessary for speed and thoroughness. It should never be less than 100 pounds. With gasoline outfits about 150 to 200 pounds is high enough. Higher than 200 is more liable to cause leaf injury. The mixture in the tank must, of course, be kept well agitated to prevent settling.

When spraying, especially in the first application, it is desirable to take advantage of the wind. A strong wind is a great help, as it carries the spray right through the tree. If the wind is weak and the trees are wide apple trees, it is necessary that the man on the ground go in underneath the tree to the far side, and shoot the spray up upon the branches and twigs or foliage and fruit, and gradually work his way back to the outside. This is the only way in the case of large trees to make sure that the inner surface of upright twigs and small branches and later of the young fruits will be thoroughly covered, for they will not be reached from the other side when the wind changes, except where the wind is very strong. It is on this inner side of young fruits that the scab nearly always first develops, hence the need of the step just indicated. In the case of San José scale great care must also be taken not to miss the tips of the branches. This is a very common fault with many sprayers.



Dainty Lass of Springbank.

Junior champion Ayrshire female at London for A. S. Turner & Sons, Ryckman's Corners, Ont.

In many instances there is too short a period to justify a person's waiting for a change of wind; hence under such circumstances the best method is to drive the team facing the wind and shoot the spray in at right angles to the row. This is a little slower, but if care is exercised is satisfactory. Moreover, by coming back and going up the other side, also against the wind, it enables a person to finish the trees the same day.

Thorough spraying requires great care and constant study. One should follow always some system with each tree, otherwise he will be missing parts here and there. Sometimes the best way is to take the tree branch by branch. At other times it is better to move the rod slowly up and down and work gradually from left to right or right to left, seeing that everything is covered as one goes. The angle on the nozzles permits the spray being directed first in one way then back in the opposite way, so that both sides of a branch or of fruits may be more easily covered. Often both sides of the branch may be covered by holding the nozzles against the wind and allowing it to drive the spray back. An apple tree capable of bearing five or six barrels of fruit will usually require from eight to ten gallons of spray, especially for the Codling Moth or for San José scale.

Apples in Storage.

The Dominion Fruit Commission forwards the following information in regard to apples in storage throughout Canada on January 15: Annapolis Valley, N.S., 130,000 barrels; Montreal, 24,000 barrels, 18,500 boxes; Ottawa, 9,000 barrels, 4,500 boxes; Toronto, 38,625 barrels, 34,900 boxes; Hamilton, 4,700 barrels, 2,750 boxes; St. John, N.B., 8,375 barrels, 850 boxes; Vancouver, 41,750 boxes; Victoria, B.C., 11,000 boxes; Victoria District (estimated), 3,000 boxes; Okanagan

Valley (estimated), 20,000 boxes; Georgian Bay District, Ont., 2,050 barrels; Simcoe, Ont., 8,970 barrels, 5,400 boxes.

POULTRY.

Egg Machines.

Noah Stouffer, a York County, Ontario, subscriber, in renewing his subscription to "The Farmer's Advocate" writes that he has a flock of twelve Indian Runner ducks which laid from March 5 to December 3, 1917, 2,426 which is an average of 202 eggs.

Results of Egg-Laying Contest in British Columbia.

An International Egg-Laying Contest has been going on for six years, at Victoria, B. C., under the auspices of the Provincial Department of Agriculture. This work is under the direction of J. R. Terry. The contest has revealed some very interesting information, not only in regard to production but to the cost of feed under different conditions. There have been forty pens, containing six birds each, in the contest each year, making a total of 240 birds. From October 6, 1916 to October 4, 1917, a total of 38,260 eggs were laid, at a cost for feed alone of \$611.05. At the prevailing price during the year the eggs had a value of \$1,310.63, which left a profit over the cost of feed of \$699.38. The average price of eggs per dozen for the year was 41 cents; the highest price received was on October 9, 1916, when they reached 60 cents, and the lowest price was on March 12, when they sold for 30 cents per dozen. The average number of eggs laid per bird was 159.8, and eggs were produced at a cost of 19.1 cents per dozen. The average cost of feed per bird was \$2.54 for the year, and the profit per bird over the cost of feed was \$2.91. The winning pen had an average of 198.8 eggs per bird. A comparison of the prices and returns for the year 1914-15 which was the fourth year of the test, and

1916-7 the sixth year, is rather interesting. In the former there were 39,757 eggs laid at a cost for feed of \$527.38, while in the sixth year of the contest the same number of birds laid 38,360 eggs at a cost of \$611.05. The average price of eggs two years ago was 32.5 cents as compared with 41 cents for the past year; in 1914-5 it cost 15.9 cents to produce a dozen eggs, as compared with 19.1 cents during the past year.

These figures convey some idea of what it costs to feed a bird for a year, and also show that a profit can be made even when feed is high priced. True, the number of eggs laid per bird was above the average, but it was by no means excessive and fell considerably short of what has been accomplished by representatives of the different breeds. As a rule, when grain is high priced eggs also retail at a fairly good price, so that the profits depend on production. If a reason-

able number of eggs can be gathered during the period that the market pays the highest price for them, there is a profit in poultry.

FARM BULLETIN.

Director of Soldier Colonization Appointed.

Lieutenant-Colonel Robert Innes, a veteran of many battles in France and Flanders has recently been appointed Director of Soldier Colonization for Ontario. Col. Innes is now in the north country studying conditions in the Kapuskasing settlement and preparing himself for the big work which will fall upon his shoulders. Col. Innes is a veteran of Vimy Ridge and other stiff battles around Lens and was invalided home after an operation. He is probably the youngest Colonel Canada has sent overseas as he is just 26 years old now. He spent two years at the Ontario Agricultural College Guelph and two at Macdonald College, Quebec, from which he graduated with the degree of B. S. A. Col. Innes should make a success of his new work.

Hanna Resigns.

The Hon. W. J. Hanna has resigned the office of Food Controller of Canada after seven months in the harness. He is succeeded by H. B. Thompson of Victoria, B. C., who has been his first assistant for the past four months. The duties of the Food Controller have now become so great that it is practically necessary for the man on the job to put all his time into the work. This Mr. Hanna felt he could not do. It should be remembered that both he and Mr. Thompson have worked for their country without remuneration.

Farmers Week at Kemptville

January 22 to 25, inclusive, was known as "Farmers' Week" at the Kemptville Agricultural School, which proved to be a success. In conjunction with this was held the Eastern Ontario Provincial Seed Fair, which is usually staged at the Ottawa Winter Fair. In addition to these the Inter-County Live Stock Judging Competition was conducted, making a very busy four days at the School. The Seed Fair and the judging demonstrations were held in the town Armories, and evening meetings were conducted in the Hall. The Kemptville Agricultural School is under the directorship of W. J. Bell, who deserves considerable credit for the success which attended the initial efforts of the young Institution to hold a Short Course in that part of Ontario.

The greater part of the first day was given over to the Inter-County Judging Competition, but in the evening two instructive addresses were heard. W. J. Squirrell, of the Ontario Agricultural College, discussed certain seed questions which are before the people of Canada at this time, referring particularly to the exhibits at the Fair. E. S. Archibald, Dominion Animal Husbandman, gave an interesting address on "Breeding Dairy Cattle." On the following day, A. Leitch, Farm Superintendent at the O. A. C., Guelph, discussed the "Feeding and Management of Dairy Cattle," and in the evening spoke on "Farm Management," giving figures resulting from the recent survey in Peel County. W. J. Black, Commissioner of Agriculture, Ottawa, spoke on "Agricultural Education," and he handled the subject in such a way as to introduce new ideas and interest his hearers in this important matter. Seed selection was the subject of an address by T. G. Raynor, Inspector of Seeds for Eastern Ontario. He referred frequently to charts to make his points clear, and while he did not fail to mention the many conditions which determined the prospects for good crops he dwelt chiefly on seed selection. In this connection he brought out the following facts: Seed selection may be carried on in two ways—by fanning mill and by hand. The fanning mill is the more common way, but it is not used as it should be. The fact that buyers take the farmer's crop, to a very large extent at least, as it comes from the machine, has caused many owners of fanning mills to become lax in regard to keeping them in repair. When a farmer wants to get his seed ready for cleaning in the spring he often finds his sieve out of repair, and then it may be too late to send away for his sieving and get his grain properly graded for spring use. When a power mill often takes out twenty-five per cent. dockage at one cleaning, it means that with the ordinary hand mill it should be cleaned three or four times before it is really fit for use. This is truer of seed oats than of barley or wheat, which, however, should be fanned twice at least; in fact, less than twice milling is too little for seed purposes.

In conclusion, Mr. Raynor said: "In this year 1918 farmers everywhere should try to adopt all the very best methods in crop production, and leave nothing to chance if we are to measure up to the standard expected in every man."

Eradication of Weeds.

Weeds and their eradication was the subject of a very instructive address by Prof. J. E. Howitt, of the Ontario Agricultural College. The speaker mentioned several experiments which have been conducted in connection with the eradication of weeds and reviewed the results therefrom. In Prof. Howitt's judgment the seriousness of the weed problem is due to many factors, chief among which are: (1) The lack at the present time of proper farm labor. (2) Lack of sufficient knowledge of weeds and weed seeds by those engaged in agriculture. (3) Carelessness, and in some cases ignorance, in buying clover, grass and seed grain. (4) Carelessness in methods of cultivation and lack of a proper system of crop rotation, due in many cases to an attempt to farm more land than can be properly cared for. (5) The need of definite information regarding the best ways of dealing with many of our bad weeds. This need, I am glad to say, is being met by the results of co-operative experiments carried on by the Ontario Agricultural and Experimental Union. From these experiments considerable valuable information has been obtained regarding the best methods of dealing with many of our most troublesome weeds. (6) The non-enforcement of the present legislation for the control of weeds.

Prof. Howitt then dealt with ways and means by which some of these factors may be, to a certain extent, overcome. He treated these under three heads: 1, General principles; 2, General methods; 3, Definite methods.

Results of the Inter-County Live-Stock Judging Competition.

County	Dairy Cattle	Beef Cattle	Horses	Sheep	Swine	Total
1. Glengarry	478	386	447	434	432	2,177
2. Dundas	420	388	439	388	381	2,016
3. Lanark	410	350	481	310	313	1,894
4. Peterborough	415	397	427	270	319	1,828
5. Grenville	286	396	424	299	421	1,826
6. Frontenac	499	263	401	334	251	1,748
7. Carleton	449	320	368	233	339	1,709

Under definite methods for eradicating weeds, Prof. Howitt outlined methods for the control of perennial sow thistle and twitch grass; bladder campion or cow bell; ox-eye daisy; mustard; wild oats; and rag weed. The recommendations made in regard to these may be found elsewhere in this issue, under the head of "Co-operative Experiments in Weed Eradication."

Crop Rotation.

Prof. G. H. Gridale, Director Dominion Experimental Farms, outlined a proper system of crop rotation for a dairy farm, and based his remarks particularly on conditions in the district where he was speaking. His address may be summarized somewhat as follows:

To increase crop production, probably the quickest and surest plan is to introduce a good crop rotation. Such a change, together with proper cultural methods which should go with it, are sure to work wonders in the way of increasing and ensuring crop yields.

A crop rotation, to be a good one, must have several marked peculiarities: (1) It must include all the crops it may be desired to grow as regular farm crops and in the right quantities, relatively at least. (2) The succession of crops must be such as to ensure the greatest yields at the lowest cultural cost. (3) It must be suited to the line of live-stock work it is desired to follow. (4) It must be suited to the soil and climatic conditions of the district. (5) It must be simple and easily introduced. (6) It must leave the farm at the end of a number of years in better condition as to fertility and cleanliness or freedom from weeds than it was at the start.

Since the crops we require in Eastern Ontario are, speaking generally, corn, roots, potatoes, peas, cereals (oats, barely, wheat, etc.), clover hay, timothy hay and pasture, these must all be provided for in any rotation likely to be satisfactory.

The above fall easily into three groups: Hoed crops, grain crops and hay or grass crops.

Further, experimental work on all Eastern Experimental Farms and the experience of many good farmers, go to show that hoed crops do best on sod, that cereals do best after hoed crops and that, as we all know, we must prepare for the grass or hay crop by seeding down with the cereal.

The natural result is a four-year rotation:

First year: Hoed crop—Corn, potatoes, roots and peas.

Second year: Cereals—Oats, barley, wheat, seeded down.

Third year: Hay—Largely clover.

Fourth year: Hay—Largely timothy, or pasture.

Or, if rough pasture is available and it is desired to get all the feed possible off the arable area, then a three-year rotation is the logical crop:

First year: Hoed crop.

Second year: Cereal, seeded down.

Third year: Hay.

Apply the manure in the winter. Spread if possible. If not practicable to spread, then put in small piles of 200 to 400 pounds, spread in spring and plough and roll land as soon as possible after spreading. Work down thoroughly with disc and smoothing harrow. Get corn in early and keep well cultivated.

Sow grain as early as practicable. Seed down with 10 lbs. timothy, 10 lbs. red clover and 2 lbs. alsike, or 8 lbs. red, 2 lbs. alsike and 5 or 6 lbs. alfalfa.

The Inter-County Stock Judging Contest.

The Inter-County Stock Judging Competition was conducted on Tuesday, January 22. Some of the winners in the different departments were: Beef Cattle, Clarence Wilson, Grenville County; Dairy Cattle, Victor Armstrong, Carleton County; Horses, Clarence Wilson; Swine, Victor Armstrong; Sheep, Joe Kennedy, Glengarry County. In individual prizes, representatives of the various counties won as follows: Carleton, \$31; Dundas, \$32; Frontenac, \$29; Glengarry, \$51; Grenville, \$39; Lanark, \$28; Peterboro, \$15. The Peter White Trophy, which went to the county whose team made the highest total score was carried off by Glengarry. The accompanying chart shows the standing of the various counties in the competition.

Other Addresses.

Fruit growing in Eastern Ontario was dealt with by Prof. W. T. Macoun, Dominion Horticulturist, who confined his remarks chiefly to apple growing, which is the most important line in Eastern Ontario. Suitable varieties for the district were discussed and samples of these varieties were displayed. The Management and Judging of Swine was dealt with in an interesting man-

ner by G. B. Rothwell, of the Experimental Farm, Ottawa. Co-operation and marketing was the subject of an address by F. C. Hart, and W. J. Reid, Director of Agricultural Instruction, Prince Edward Island, reviewed the history and development of the co-operative wool-grading and marketing scheme in that Province.

Throughout the different sessions, agricultural moving pictures were shown, and these were not a small factor in making the program a success. Different lines of work on the farm, demonstrations in judging live stock, and many features of farm life were cast on the screen. The concluding address of Farmers' Week was given by S. C. Johnston, Ontario Government Moving-Picture Expert, who outlined the plan under which these moving pictures will be used in Ontario and the distribution which will be made of them.

Those taking part in the judging demonstrations were: A. Leitch and J. P. Sackville, of Guelph, as well as W. J. Bell, Principal of the School.

The Seed Fair.

The Seed Fair was an important feature of the event at Kemptville. The entries from the Standing Field Crop Competition were exceptionally strong and of good quality. At the sale a good disposition of the grain was made, mostly locally, and at fair prices.

Increase in Railway Rates Postponed.

On January 24, a strong representation from many Canadian interests affected by the increase in railway rates, which were to go into effect on February 1, met in Ottawa to present an appeal before the Cabinet Council. The Western representation had the first hearing and their case was presented by H. J. Symington, K. C., Winnipeg. At the conclusion of his argument the hearing was postponed and the remainder of the case must be presented in writing. Those who oppose the order of the Railway Board must have their cases in the hands of the Government in printed form by February 8. The Railways may take until February 18 to reply, and the rejoinder on behalf of the protesting Governments and interests could be prepared not later than February 28. The hearing of verbal arguments was deferred until March 1, and the new rates will be postponed until some time after the date fixed for the resumed hearing.

Double Treatment for Cholera Allowed on Referendum.

Recently, Dr. Torrance, the Veterinary Director General was interviewed by a representative of "The Farmer's Advocate" in regard to the double treatment for hog cholera. Mention was made in the issue of January 24 that he would favor the use of such treatment in a county or counties which expressed themselves as desiring it. Dr. Torrance stated to "The Farmer's Advocate" representative that a county is the smallest unit of territory that he would consider and that the majority of the farmers or hog raisers in the county must express a desire for the use of the double treatment.

Milk and Cream Producers' Association Annual Meeting.

The annual meeting of the Ontario Milk and Cream Producers' Association will be held in the Carls-Rite Hotel, Toronto, on Thursday, February 7, at 2 p.m. The Secretary, Manning W. Doherty, requests all local associations throughout the Province to send delegates.

Jean Armour is Dead.

The death of that world famous Ayrshire cow, Jean Armour was recently announced. She was bred by John McKee, Norwich, and was the first Ayrshire cow to produce over 20,000 pounds of milk in a year. Her daughter Jean Armour 3rd, is the present world champion Ayrshire, three-year-old, her record being 21,938 pounds of milk and 859.65 pounds of fat. Jean Armour was a splendid individual and a great breeding cow. She was over sixteen years of age at time of her death.

People Must Eat Poorer Flour.

A special committee has been working for some time on a scheme to stretch out our wheat supply and thus make more of it available for export. In addition to the licensing of all mills by the Food Controller's Department, the millers are required to standardize their extraction, or, in other words, produce a definite quantity of flour from a given quantity of wheat. The committee in question of which Prof. R. Harcourt, of the Ontario Agricultural College, has been a member, have decided that Canadian mills shall work on a 74 per cent. extraction, or mill 196 pounds of flour from 265 pounds of clean spring wheat or 275 lbs. of clean winter wheat. This means that five per cent. of the by-products or a portion of what formerly sold as "red dog," or low-grade flour, must now be incorporated with the standard flour for human consumption. More than that, all grades will be combined.

Toronto, Montreal, Buffalo, and Other Leading Markets

Week Ending January 24.

Receipts and Market Tops.

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

	CATTLE						CALVES					
	Receipts		Top Price Good Steers (1,000-1,200)				Receipts		Top Price Good Calves			
	Week Ending Jan. 24	Same Week 1917	Week Ending Jan. 17	Week Ending Jan. 24	Same Week 1917	Week Ending Jan. 17	Week Ending Jan. 24	Week Ending Jan. 17	Week Ending Jan. 24	Same Week 1917	Week Ending Jan. 17	
Toronto (Union Stock Yards)	8,032	7,213	1,994	\$12.50	\$10.00	\$12.35	671	39	142	\$17.50	\$13.50	\$16.00
Montreal (Pt. St. Charles)	784	725	718	12.00	9.50	12.00	225	290	137	16.00	11.00	17.00
Montreal (East End)	945	814	654	12.00	9.50	12.00	270	194	77	16.00	11.00	17.00
Winnipeg	2,205	1,464	2,162	12.00	8.75	12.00	77	39	40	12.00	8.25	12.00
Calgary	1,261	1,227	1,208	11.50	7.75	10.75	271					

	HOGS						SHEEP					
	Receipts		Top Price Selects				Receipts		Top Price Good Lambs			
	Week Ending Jan. 24	Same Week 1917	Week Ending Jan. 17	Week Ending Jan. 24	Same Week 1917	Week Ending Jan. 17	Week Ending Jan. 24	Week Ending Jan. 17	Week Ending Jan. 24	Same Week 1917	Week Ending Jan. 17	
Toronto (Union Stock Yards)	13,933	10,138	3,321	\$19.75	\$13.62	\$19.50	1,465	1,812	470	\$19.25	\$15.00	\$19.50
Montreal (Pt. St. Charles)	1,003	863	800	20.25	14.00	19.75	1,682	1,337	1,829	17.00	13.50	16.50
Montreal (East End)	1,170	994	548	20.25	14.00	19.75	1,135	1,982	879	17.00	13.50	16.50
Winnipeg	6,528	7,183	9,600	18.75	13.00	19.00	5	30	47	17.00	12.50	16.50
Calgary	4,548	6,835	4,390	19.00	12.50	18.25						

Market Comments.

Toronto (Union Stock Yards.)

Four thousand cattle were on sale on the Monday market, followed by thirteen hundred on Tuesday, fifteen hundred on Wednesday and about six hundred on Thursday. With the large number available on Monday, prices weakened considerably and the cattle were weighed up in a slow market at fully 50 cents and in some cases 75 cents, below last week's unusually high prices. On Tuesday the market was steady but dull at Monday's decline, while a further paring of prices resulted on Wednesday, when quotations were 10 to 15 cents further reduced on most grades of cattle. The market closed steady at the decline on Thursday. While there are many good cattle being marketed and the general quality is averaging better than that of a year ago, there are quite a number that might well be retained in the feeding pens for about two months, as at present many are little better than feeder cattle; no doubt many of these light cattle were being rushed to the market in the hope that they might get the advantage of the high prices that prevailed during the traffic blockade of last week. There were but few heavy cattle on sale. One of the best loads numbering twenty-six head and weighing twelve hundred and fifty pounds sold on the Monday market at \$12.50 per hundred; this was the highest price paid after Friday, on which day one load of steers of eleven hundred pounds sold at \$13.50, while other loads brought \$13.25 and \$13.30, respectively. For steers of ten hundred to twelve hundred pounds, \$11.25 to \$11.85 was the range for the best loads, nine head selling at the latter price, while quite a number of loads sold from \$11.25 to \$11.75. Handy weight butcher steers and heifers sold from \$10.65 to \$11.25 with extra good loads realizing \$11.50. Medium quality in these grades brought from \$9 to \$9.75, and common from \$8 to \$9. Bulls and cows were weaker in sympathy with the decline in other grades of butcher cattle, \$10.75 being about the top for the best bulls, and \$10.50 for choice cows. The exceptions included a choice cow that sold at \$12, and two or three bulls that realized \$11.75. Medium bulls sold at \$8 to \$9, and medium cows at \$7.50 to \$8.50 per hundred. There was a light demand for stockers and feeders at slightly easier prices; the bulk are now moving out at \$8.50 to \$9.50 per hundred. Calves were about steady at last week's quotations, with choice veal selling at \$15 to \$17.50 per hundred.

Only limited supplies of lambs were available and prices were a trifle easier with the bulk of the lambs moving at \$18 to \$18.75 per hundred, common at \$15 to \$17, light sheep at \$12 to \$14, and heavy sheep at \$10 to \$12.

Hogs sold on Friday at \$19.75, fed and watered. On Monday prices were reduced to \$19.25, while on Tuesday a further decline of 75 cents was made, \$18.50 being quoted as the top price. On Wednesday, commission houses endeavored to raise prices but their efforts proved futile, quotations remaining at \$18.50, although there were rumors of \$18.75 being paid in some cases. This was not confirmed. The market closed steady and unchanged on Thursday.

On the disposition from the Yards for the week ending January 17th,

CLASSIFICATION	No.	TORONTO (Union Stock Yards)			MONTREAL (Pt. St. Charles)			
		Avg. Price	Price Range Bulk Sales	Top Price	No.	Avg. Price	Price Range Bulk Sales	Top Price
STEERS								
heavy finished	120	\$12.27	\$11.75-\$13.00	\$13.00				
STEERS								
good 1,000-1,200	593	11.47	10.75-12.50	12.50	14	\$11.10	\$10.75-\$12.00	\$12.00
common	32	10.45	9.75-10.75	10.75				
STEERS								
good 700-1,000	1,785	11.20	10.75-11.75	11.75	22	11.25	10.75-11.75	12.00
common	314	9.54	9.00-10.00	10.00	86	9.80	9.25-10.00	10.50
HEIFERS								
good	977	11.37	10.75-12.00	12.50	12	11.20	11.00-11.50	11.50
fair	633	9.58	9.00-10.50	10.50	25	9.60	9.50-10.50	10.75
common	49	8.56	8.00-9.25	9.25	86	8.25	8.00-9.25	9.25
COWS								
good	301	9.60	9.00-10.75	11.25	48	10.00	9.75-10.50	10.50
common	1,221	7.67	7.00-8.25	9.50	210	9.25	8.50-9.50	9.50
BULLS								
good	163	9.78	9.25-10.50	11.50	22	10.90	10.50-11.00	11.00
common	110	7.75	7.25-8.50	9.75	72	8.50	8.25-10.00	10.25
CANNERS & CUTTERS	876	6.25	5.75-6.50	6.50	169	6.60	6.00-6.75	6.75
OXEN								
CALVES								
veal	667	14.58	13.00-17.00	17.50	161	15.00	10.00-16.00	16.00
grass	4	8.00	7.00-9.00	9.00	64	7.25	7.00-8.00	8.00
STOCKERS								
good 450-800	81	8.41	8.00-8.75	9.00				
fair	126	7.65	7.25-8.00	9.00				
FEEDERS								
good 800-1,000	486	9.68	9.25-10.00	10.25				
fair	165	9.14	8.75-9.50	9.50				
HOGS								
Selects	13,129	18.88	18.50-19.75	19.75	1,442	19.80	19.75-	20.25
heavy					2			
(fed and watered)					206	18.65	18.50-19.00	19.00
lights	506	17.73	17.00-18.75	18.75	26	17.50	17.00-17.75	17.75
sows	287	17.61	16.50-18.50	18.75				
stags	11	14.77	14.50-15.75	15.75	6			
LAMBS								
good	1,148	18.61	18.00-19.25	19.25	549	16.60	16.50-	17.00
common	119	16.52	15.00-18.00	18.00	271	15.50	15.00-16.00	16.00
SHEEP								
heavy	56	11.00	10.00-13.00	13.00	146	12.75	12.50-13.00	13.00
light	117	13.26	12.00-15.00	15.00	37	11.25	10.00-12.00	12.00
common	25	8.00	7.00-9.00	9.00				

Canadian packing houses bought 74 calves, 26 bulls, 1,908 butcher cattle, 7,529 hogs, and 443 sheep and lambs. Local butchers purchased 58 calves, 240 butcher cattle and 398 sheep and lambs. Canadian shipments were made up of 4 calves, and 8 milch cows. There were no shipments to United States' points during the week.

The total receipts from January 1st to January 17th, inclusive, were: 8,673 cattle, 985 calves, 3,976 sheep and 17,816 hogs; compared to 15,998 cattle, 2,049 calves, 4,972 sheep and 27,654 hogs, received during the corresponding period of 1917.

Montreal.

Receipts of cattle were more than those of the previous week by about four hundred, but the average weight per head was considerably less. The proportion of good steers and heifers of all weights compared with last week, was fully fifty per cent. less, while a comparison of the relative numbers of common cattle shows twenty-five per cent. increase compared with the receipts of the previous week. In the absence of any appreciable number of finished cattle, prices on quality basis advanced 25 cents to 35 cents per hundred, compared with prices ruling at the close of the previous week. A few lightweight, well finished steers were on hand and these

sold at \$12 per hundred, together with the pick of the heifers which were of very good finish. Most of the good cows sold at \$10 per hundred, while a few of the same class sold at \$9.50. Common butcher cows sold from \$7.50 to \$9.25, a wide range of price partly due to a large number of scarcely better than cutter quality. The wide difference between prices for cutter cows and cows of good weight would infer a good profit if the former were fed to heavier weights. Cannery and cutters were quickly bought up from \$6 to \$6.75 per hundred. Bulls of beef breeding sold up to \$11 per hundred, while good bulls of dairy breeding sold at \$10, and the common kind from \$7 to \$9. The receipts of calves were twice as many as those of last week and of a much higher quality. Prices, while not having as high a top as last week, were advanced \$1 per hundred on the average. A few grass calves were on hand from the lower provinces and these sold from \$7 to \$8 per hundred.

Over two thousand sheep and lambs were on hand, being fewer by five hundred head than the receipts of the previous week. Receipts have been unusually large during the past weeks compared with the same period of other years. The majority of the lambs were from Quebec province and were of a very good quality. The market opened strong

at last week's prices, which were well maintained throughout the period and accompanied by a tendency toward a higher level. Good lambs sold from \$16.50 to \$17 and common from \$15 to \$16. Sheep were unchanged.

Receipts of hogs were increased over those of last week by one hundred per cent. Under a strong demand the market advanced to a top of \$20.25 per hundred for selects, fed and watered, while the ruling price of the week was \$19.75. The market closed unchanged in price but with an easier feeling prevailing. A large per cent. of the run this week consisted of light unfinished hogs, which condition was probably responsible for the easier undertone at the close.

PT. ST. CHARLES.—Of the disposition from the Yards for the week ending January 17th, Canadian packing houses and local butchers bought 137 calves, 148 cannery and cutters, 89 bulls, 481 butcher cattle, 800 hogs and 1,829 sheep and lambs. There were no Canadian shipments or shipments to United States' points during the week.

The total receipts from January 1st to January 17th inclusive, were, 1,601 cattle, 406 calves, 2,707 sheep and 2,925 hogs, compared to 2,373 cattle, 700 calves, 3,230 sheep and 3,414 hogs, re-

THE ROYAL BANK OF CANADA

Capital Authorized - - - \$ 25,000,000
 Capital Paid Up - - - 12,900,000
 Reserve Funds - - - 14,300,000
 Total Assets - - - 270,000,000

HEAD OFFICE, MONTREAL

Branches Throughout Every Province
 of the Dominion of Canada

Accounts of Farmers
 Invited

Sale Notes Collected

Savings Department at
 all Branches

ceived during the corresponding period of 1917.

EAST END.—Of the disposition from the Yards for the week ending January 17th, Canadian packing houses bought 77 calves, 641 butcher cattle, 548 hogs, and 879 sheep and lambs. Canadian shipments were made up of 13 butcher cattle. There were no shipments made to the United States points during the week.

The total receipts from January 1st to January 17th, inclusive, were: 1,747 cattle, 307 calves, 2,502 sheep and 1,777 hogs; compared to 2,769 cattle, 733 calves, 4,442 sheep, and 3,397 hogs, received during the corresponding period of 1917.

Winnipeg.

The market for choice steers held steady to strong, while in some cases, sales of this class of stock were considerably higher than the top sales of the previous week. Butcher cows and heifers and all medium grades of cattle were advanced 25 cents per hundred on the opening market of the week, while in some instances so strong were the advances that the packing houses complained of losses, and as a consequence a decline in prices was experienced at the close of the week, butcher steers being reduced by 10 to 25 cents, good cows 25 cents, medium cows 50 cents, and oxen and bulls 25 cents. The top sale of the week was for two cars from Newton, Manitoba, consisting of thirty head averaging twelve hundred pounds at \$12.50 per hundred, which dressed fifty seven per cent. Thirty-six steers from Marquette district, Manitoba, averaging twelve hundred and seventy pounds sold at \$11.50 per hundred, and numerous individual sales were made around \$12, while the bulk of the steers weighing over twelve hundred pounds sold from \$9.50 to \$12.25. Eighteen steers averaging eleven hundred and ninety pounds sold at \$12 and fourteen of eleven hundred and eighty pounds at \$11.75. Most of the best cattle around these weights sold from \$10.50 to \$11.50 per hundred and medium from \$8.50 to \$9.75.

No market was established for sheep and lambs; prices quoted were from \$15 to \$17 per hundred for choice lambs, and from \$12 to \$15 for sheep.

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Receipts of hogs totalled sixty-five hundred, a decrease from the previous week of thirty-one hundred; the quality of the run was fair to good. As predicted last week, the market declined and prices closed \$1.50 per hundred below the record price of \$19 per hundred, for selects, fed and watered, on last week's market.

Buffalo.

Cattle.—Cattle prices remained exceptionally and unreasonably high last week, but on shipping steers and the higher-priced butchering grades, the range was not up to the preceding week, when the wildest values prevailed, the decline last week on the kinds mentioned being from a quarter to half a dollar under the preceding week, while fat cows and heifers, bulls and milk cows and springers sold at about steady prices. All classes of stockers and feeders are being sold for slaughter. Best steers last week ranged from \$13.50 to \$13.75, the extreme price being paid for a choice, good weight

kind of shipping steers. Fat cows sold up to \$12.50, bulls made \$12 and the market all round was considered especially high. Bad railway transportation, resulting in only moderate receipts but stronger than for the week previous, was the main cause for the high range. With normal conditions restored, general impression among sellers is that prices will show even a heavier break. Offerings for the week totaled 4,050 head, as against 1,950 for the previous week and 4,025 head for the corresponding week last year. Quotations:

Shipping Steers—Natives—Choice to prime, \$13 to \$13.75; fair to good, \$12.25 to \$12.75; plain, \$10.50 to \$11.25; very coarse and common, \$9.75 to \$10.25.

Shipping Steers—Canadians—Best grass, \$12 to \$12.50; fair to good, \$11.50 to \$11.75; common and plain, \$9.50 to \$10.

Butchering Steers—Choice heavy, \$12.50 to \$13; fair to good, \$11.50 to \$12.25; best handy, \$12 to \$13; fair to good, \$11.50 to \$12; light and common, \$9.75 to \$10.25; yearlings, choice to prime, \$12.50 to \$13.50; fair to good, \$11.75 to \$12.

Cows and Heifers.—Best heavy heifers, \$10.75 to \$11.50; good butchering heifers, \$10.25 to \$11; fair butchering heifers, \$9 to \$9.75; common, \$7 to \$8; very fancy fat cows, \$10.50 to \$11; best heavy fat cows, \$9.75 to \$10.25; good butchering cows, \$8.50 to \$9.25; medium to fair, \$7 to \$7.50; cutters, \$6 to \$6.75; canners, \$4.50 to \$5.75.

Bulls.—Best heavy, \$10 to \$11.50; good butchering, \$9 to \$9.50.

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

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

Hogs.—Receipts last week were quite liberal and as a result prices showed a heavy decline from the week before, when the Buffalo market was a runaway affair. Monday there was break of \$1.75 per cwt., on the good hogs compared with the closing day of the previous week, when best grades sold up to \$19.75, and within a period of five days the take-off figured at \$2.50 per cwt. On the opening day of the past week it was generally a one price deal of \$18 for all grades and before the week was out on Friday buyers landed best grades down to \$17.25 and pigs went at a range of from \$17 to \$17.25. Roughs \$15.75 to \$16 and stags \$14 to \$15. Last week receipts were 31,600 head as compared with 10,930 head for the week before and 24,000 head for the same week a year ago.

Sheep and lambs.—Last week started with prices showing a very high range. Monday best lambs sold up to \$19.75 and \$20, culls reached \$18.75, yearlings made a new record, two loads going at \$18, wether sheep were quoted up to \$14.50 and ewes from \$13.50 down. The balance of the week saw selling sheep steady and lambs ruled lower, the low days for lambs being Thursday and Friday, when bulk of the tops went at \$19 and culls ranged from \$18 down. Receipts for the week totaled 11,200 head, as against 7,602 head for the week previous and 17,500 head for the same week a year ago.

Calves.—Market was erratic last week. Monday top veals sold mostly at \$19, Tuesday's trade was steady, Wednesday choice lots went at \$18 and \$18.25, Thursday none sold above \$18 and Friday, under a very keen demand, all previous records were broken, when best veals sold up to \$19 and \$19.25. Culls ranged from \$16 down and fed calves ranged from \$7 to \$9. Receipts for the week reached 2,000 head, as against 1,252 for the week before and 2,000 head for the corresponding week a year ago.

Toronto Produce.

Live stock receipts at Union Stock Yards, West Toronto, Monday, January 28, were: 137 cars, 2,401 cattle, 118 calves, 1,779 hogs, and 233 sheep and lambs. Market opened slow but developed strength toward noon when prices on cattle were a good fifty cents higher; sheep, lambs and calves were 25 cents to 50 cents higher, most of the hogs were contracted for at \$18.50 fed. A few loose hogs brought \$19 fed.

Breadstuffs.

Wheat.—Ontario, No. 2, winter, per car lot, \$2.22; (basis in store Montreal).

Manitoba wheat, in store, Ft. William—including 2½¢ tax—No. 1 northern, \$2.23½; No. 2 northern, \$2.20½; No. 3 northern, \$2.17½; No. 4 wheat, \$2.10½.

Oats.—(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., 88½¢; No. 3, C. W., 82½¢; (in store, Fort William). Extra No. 1 feed, 82½¢; No. 1 feed, 78½ cents.

Barley.—Malting, \$1.46 to \$1.48.

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

Corn.—American (track, Toronto), No. 3, nominal.

Rye.—No. 2, \$1.78.

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

Hay and Millfeed.

Hay.—Track, Toronto, No. 1, \$16 to \$17 per ton; mixed, per ton, \$13 to \$16.

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

Bran.—Per ton, \$35.

Shorts.—Per ton, \$40; middlings, per ton, \$45 to \$46.

Good feed flour, per bag, \$3.25.

Hides and Wool.

Prices delivered, Toronto:

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

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

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

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

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

Farm Produce.

Butter.—Creamery butter showed a slightly firming tendency on the wholesales, during the past week—the dairy variety remaining stationary. Creamery, fresh-made pound squares, at 50c. to 51c. per lb.; creamery, solids, at 46c. to 47c. per lb.; dairy, 35c. to 40c. per lb.

Oleomargarine.—32c. per lb.

Eggs.—Cold storage eggs advanced in price as there has been an embargo placed on them by the United States Government; the new laid, however, declined, selling as follows: New-laid, 60c. to 65c. per dozen; cold-storage, No. 1's, 48c. to 49c. per dozen; selects, 52c. per dozen.

Cheese.—Cheese remained unchanged in price; Old cheese selling at 30c. per lb.; new at 24c. per lb., and new twins at 24½¢ per lb.

Beans.—The bean market has been slightly easier in tone. Hand-picked Canadians selling at \$7.75 per bushel, wholesale; the Indias going at \$6.40 per bushel; Lima beans selling at 16½¢ to 17c. per lb.

Honey.—There is very little honey on the market, and it is very firm in price. Extracted, 5-lb. and 10-lb. pails, 22c. per lb.; 60-lb. pails, 22c. per lb. The comb selling at \$3.25 to \$3.75 per dozen.

Poultry.—Poultry kept about stationary in price during the past week. The following prices being quoted for live weight: chickens, milk fed, per lb., 25c.; chickens, ordinary fed, per lb., 22c.; fowl, 3½ lbs. and under, per lb., 20c.; fowl, 3½ lbs. to 5 lbs., per lb., 24c.; fowl, 5 lbs. and over, per lb., 27c.; ducklings, per per lb., 24c.; geese, per lb., 18c.; turkeys, young, per lb., 25c.; turkeys, old, per lb., 22c.

Chicago.

Cattle.—Beeves, \$8.30 to \$13.70; Texas steers, \$7.10 to \$10.60; cows and heifers, \$6.10 to \$11.65; calves, \$9 to \$15.50.

Hogs.—Light, \$15.20 to \$15.85; mixed, \$15.45 to \$16; heavy, \$15.40 to \$16; rough, \$15.40 to \$15.55; pigs, \$12 to \$14.25.

Sheep.—Lambs, native, \$14.45 to \$17.75.

Every farmer who desires to do business with

The Molsons Bank

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

Montreal Produce.

Horses.—There is a rather unusual lack of interest in the horse market, this being to some extent attributable to the increased popularity of motor cars and trucks. Dealers report almost nothing doing. Supplies being light, prices were steady. Heavy draft, weighing 1,500 lbs. to 1,700 lbs., \$225 to \$275 each; light draft, weighing 1,400 to 1,500 lbs., \$175 to \$225 each; small horses, \$150 to \$200 each; culls, \$75 to \$125 each; good saddle and carriages horses \$200 to \$250 each.

Poultry.—The market for poultry continued fairly active, especially as prices were reasonable, compared with meat. Choicest turkeys were quoted at from 34c. to 35c. per lb., and chickens and ducks at 25c. to about 29c. Geese and fowl ranged from 19c. to 23c. per lb.

Dressed Hogs.—Dressed hogs sold well up to record prices last week. The supply was very light. Fresh-killed, abattoir hogs sold at 27½¢ to 28c. per lb., and country-dressed were available at 26c. to 26½¢.

Potatoes.—Very little change has taken place in the market. Arrivals were light, and prices firm. Green Mountains were \$2.25 per 80 lbs., ex-store, while Ontario White potatoes are \$2.15 and reds \$2.05, in a retail way prices were fully 25c. above these figures.

Honey and Maple Syrup.—It is still some time until the new crop of syrup will be coming along, and very little is to be had. Quotations were, nominally, \$1.40 to \$1.80 per gallon for syrup, sugar being 15c. to 20c. per lb. Honey was steady, at 19c. to 22c. for white clover comb; and 17c. to 19c. for white extracted or brown comb.

Eggs.—It is almost impossible to secure really fresh eggs, and the price of these would be upwards of 70c. per dozen. The market was firm throughout. So-called fresh were 58c.; cold storage selects 52c.; No. 1, 48c.; No. 2, 45c. per dozen.

Butter.—The market for butter showed a firm tone, and supplies were evidently not in excess or requirements, in spite of the fact that quite a lot of oleo is being consumed. Finest September and October creamery was still quoted at 46½¢ to 47c., with fine quality at a range of 1c. below. Current makes were 44½¢ to 45c., and dairies 38c. to 39c.

Cheese.—Prices were steady at 21¾¢ per lb. for No. 1 white; 21¼¢ for No. 2, and 20¾¢ for No. 3.—Commission prices.

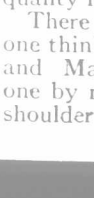
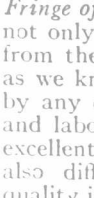
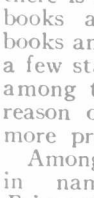
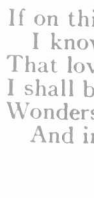
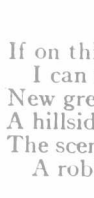
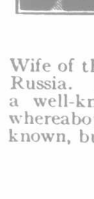
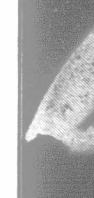
Grain.—The market for oats continued to advance. No. 3 Canadian Western sold at 99½¢ per bushel; No. 1 feed, 97½¢; No. 2 feed, 94c., ex-store.

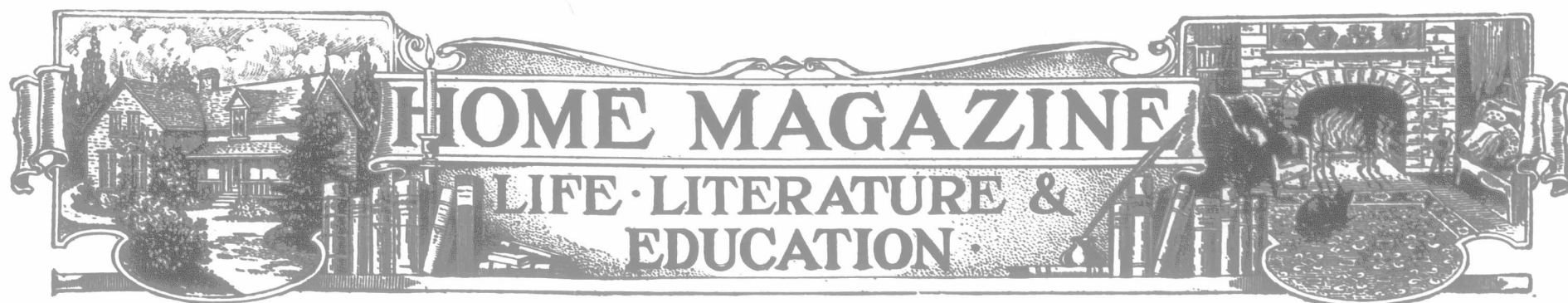
Flour.—Millers are looking forward to the new standard grades which are now to be produced for consumption. Prices were unchanged in the meantime, at \$11.60 for Manitoba first patents; \$11.10 for seconds and \$10.90 for strong bakers, per barrel, in bags. Ontario winter wheat flour was steady at \$10.70 to \$11 per barrel for 90%, and \$5.25 to \$5.40 per bag.

Millfeed.—Demand was good and prices were unchanged at \$35 per ton for bran, in bags; \$40 for shorts; \$45 to \$50 for middlings, \$55 to \$58 for mixed mouille, and \$61 to \$63 for pure grain mouille.

Hay.—There is nothing new in the market. Government is purchasing actively, and prices on spot were \$14.50

Continued on page 170.





Madame Kerensky.

Wife of the ex-premier and revolutionary leader of Russia. Before her marriage Mme. Kerensky was a well-known Russian actress. At present the whereabouts of Kerensky and his wife is not known, but they are believed to be in Sweden.

Faith.

BY HORTENSE FLEXNER.

If on this night of still, white cold,
I can remember May,
New green of tree and underbrush,
A hillside orchard's mounting flush,
The scent of earth and noon's blue hush,
A robin's jaunty way;

If on this bitter night of frost,
I know such things can be,
That lovely May is true—Ah! well,
I shall believe the tales men tell,
Wonders of bliss, and asphodel,
And immortality.

Among the Books.

"On the Fringe of the Great Fight."

[On the Fringe of the Great Fight, by Col. George G. Nasmith, C. M. G. of Toronto. McClelland, Goodchild & Stewart, publishers, Toronto. Price \$1.50.]

OF the making of books there is no end" might be paraphrased to-day into "Of the making of war books there is no end." Yet, just as there are books and books, so there are war-books and war-books. Among the legion a few stand out pre-eminently, and even among these a few more stand out, by reason of something different in them, more pre-eminently still.

Among these last we have no hesitation in naming Colonel Nasmith's *On the Fringe of the Great Fight*. It is different not only from the fact that it has come from the pen of a scientist (it is, so far as we know, the only book yet written by any of the army of sanitary officers, and laboratory men who are doing such excellent work behind the lines); it is also different by reason of a certain quality in its style.

There are certain books—and here one thinks of the work of T. P. O'Connor and Marguerite Audoux—which strike one by reason of their straight-from-the-shoulder simplicity. There are no cir-

cumlocutions. One has never to stop to catch the meaning, as one often has to do, for instance, in reading the works of Henry James and George Meredith. There is not even "the art that conceals art". The impression is that of a vast sincerity, a story told in the most direct way, but with a rare facility in words that constitutes, of itself, an exquisite artistry.

Of such quality is this book by Colonel Nasmith.—Less picturesque, perhaps, than those inimitable war books by Philip Gibbs; less humorous than those delightful babbings over of "Billy" of Flanders fame; yet clear, direct, concise, and lacking neither in picturesque nor humor, for there are abundant passages of both.—In short, a delightfully readable book, containing much of information and interest that will be sought for in vain elsewhere.

COLONEL Nasmith, who has long been identified with laboratory work in Toronto, was sent out with the first Canadian Division to take charge of the field sanitation. "My object," he tells us, "was to educate all the artillery and cavalry units on the danger of using impure water, on typhus fever and how it was conveyed by lice, and on the value and necessity of anti-typhoid inoculation". . . . And again: "Our laboratory had charge of both the bacteriological and hygiene work of a given area."—Easily said, but this meant being on the continual lookout for "germs"; examining water supplies; swabbing soldiers' throats in a search for the bacilli that betray diphtheria; examinations to detect malaria, tuberculosis, cerebro-spinal meningitis, venereal diseases and other plagues more dangerous among massed bodies of men, if unchecked than the worst onslaughts of the Germans. The work, too, involved trips very close to the front line trenches, to examine the water used there; it demanded frequent lectures to the soldiers; and—an utterly unexpected experience—it called for skilled scientific knowledge when the German gas attacks were launched. Col. Nasmith himself chanced to be within reach of the gas when that devilry was first sent over from the Hun lines, and was one of the very first to suggest gas masks and other means of combating the new danger.

In course of his work—and to make a considerable story short, for we must stop at the very beginning of a record of scientific achievement that is intensely interesting and intensely illuminating—Colonel Nasmith travelled about 18,000 miles up and down the lines in France and Flanders, and so invaluable did his work prove to the British arms that he was decorated by the King.

THE book begins with a "wish" on a verandah at Ravenscrag, Muskoka,—a wish fulfilled when Col. Nasmith was called hurriedly to the war.

In quick succession—Toronto;—Ottawa, with an interview in the office of the Minister of Militia, where Sir Sam "cracked jokes, dictated letters, swore at the telephone operator, and carried on a conversation with a number of persons all at the same time."—Then—Valcartier—the embarkation—Plymouth—Salisbury Plain and—France,—each standing out sharp and clear, as one reads, like pictures in a "movie."

The writer is astounded at the general indifference in England, at the beginning of the war. "It must have made the men in the trenches fighting mad" he says, "to realize that while they were fighting under the most adverse conditions day by day and being killed in the defence of their homeland, there were 30,000 slackers at one football match at home.

At the "heart of things," however, the War Office, he finds the under currents that are to set the vast machine moving,

and that are eventually to place the wonderful little Welshman at the helm of the fortunes of Britain. . . . Just here, a paragraph written of that time makes especially interesting reading:

"There was no great leadership anywhere, and the Englishman in his heart of hearts knew it. Lloyd-George, whom he acknowledged to be the only genius in the Government, he either idolized or cursed, according to whether he approved of his socialistic ideas or not. Englishmen I talked to, even in France later on, fairly foamed at the mouth when the little Welshman's name was mentioned, and refused to read the 'Times' which, they said was run by 'that traitor Northcliffe'. It was all very interesting to us, who hoped against hope that the man who to our perspective was the one great man of vision would be given the opportunity to become the man of action."

But it is scarcely fair to the reader to give too much of Col. Nasmith's book here. One would like to keep on quoting,—descriptions of Salisbury Plain, known to so many of our soldiers, descriptions of the vast sanitary and scientific arrangements that transcend anything hitherto seen on a battleground, and, as examples of the artist touch, some bits of nature coloring, dainty as pastels, and the truly splendid description of the funeral of Lord Roberts, thrown on the pages like a sombre canvas of Dutch art with the figures looming out of the fog.

But suffice it to close with part of a chapter which tells of the first battle witnessed by the writer. When you have read it you will have some idea of the interest in store for you when you read the whole of "On the Fringe of the Great Fight."

From Chapter VII. "The Second Battle of Ypres."

AT the outskirts of the village (Wielte) we noticed a peasant planting seeds in the little garden in front of his house. The earth had all been dug and raked smooth by a boy and a couple of children. To our "Bon jour" he replied, and added: "Il fait bon temps n'est ce pas?" looking up at the sun with evident satisfaction.

No motor transport was allowed to pass Wielte because the road beyond was exceedingly rough, and it would only have been inviting disaster from break-downs and German shells to have proceeded farther.

As we tramped along towards St. Julien our attention was attracted to a greenish yellow smoke ascending from the part of the line occupied by the French. We wondered what the smoke was coming from. Half a mile up the road we seated ourselves on a disused trench and lit cigarettes, while I began to read a home letter which I had found at Brielen.

An aeroplane flying low overhead dropped some fire-balls. Immediately a violent artillery cannonade began. Looking towards the French line we saw this yellowish-green cloud rising on a front of at least three miles and drifting at a height of perhaps a hundred feet towards us.

"That must be the poison gas that we have heard vague rumors about," I remarked to the Captain. The gas rose in great clouds as if it had been poured from nozzles, expanding as it ascended; here and there brown clouds seemed to be mixed the general yellowish-green ones. "It looks like chlorine", I said, "and I bet it is." The Captain agreed that probably it was.

The cannonade increased in intensity. About five minutes after it began a hoarse whistle, increasing to a roar like that of a railroad train, passed overhead. "For

Ypres," we ejaculated, and looking back we saw a cloud as big as a church rise up from that ill-fated city, followed by the sound of the explosion of a fifteen-inch shell. Thereafter these great shells succeeded one another at regular intervals, each one followed by the great black cloud in Ypres.

The bombardment grew in intensity. Over in a field not two hundred yards away numerous coal-boxes exploded, throwing up columns of mud and water like so many geysers. General Alderson and General Burstall of the Canadian Division came hurrying up the road and paused for a moment to shake hands, and to remark that the Germans appeared to be making a heavy attack upon the French. We wondered whether they would get back to their headquarters or not.

Shells of various calibres, whistling and screaming, flew over our heads from German batteries as well as from our own batteries replying to them. The air seemed to be full of shells flying in all directions. The gas cloud gradually grew less dense, but the bombardment redoubled in violence as battery after battery joined the angry chorus.

Across the fields we could see guns drawn by galloping horses taking up new positions. One such gun had taken a position not three hundred yards away from us when a German shell lit apparently not twenty feet away from it; that gun was moved with despatch into another position.

Occasionally we imagined that we could hear heavy rifle and machine gun fire, but the din was too great to distinguish much detail. The common expression used on the front "Hell let loose," was the only term at all descriptive of the scene.

Streaking across the fields towards us came a dog. On closer view he appeared to be a non-descript sort of dog of no particular family or breeding. But he was bent on one purpose, and that seemed to be to put as great a distance as possible between himself and the Germans. He had been gassed, and had evidently been the first to get out of the trenches. Loping along at a gait that he could, if necessary, maintain for hours, he fled by with tail between his legs, tongue hanging out and ears well back. And as he passed he gave us a look which plainly said "Silly fools to stand there when you could get out; just wait there and you will get yours." And on he went, doubtless galloping into the German lines on the opposite side of the salient.

By this time our eyes had begun to run water, and become bloodshot. The fumes of the gas which had reached us irritated our throat and lungs, and made us cough. We decided that this gas was chiefly chlorine, with perhaps an admixture of bromine, but that there was probably something else present responsible for the irritation of our eyes.

A lull in the cannonading made it possible to distinguish the heavy rattle of rifle and machine gun fire, and it seemed to me to be decidedly closer.

The Canadian artillery evidently received a message to support, and down to our right the crash of our guns, and the rhythmical red flashes squirting from the hedgerows, focussed our attention and added to the din.

Up the road from St. Julien came a small party of Zouaves with their baggy trousers and red Fez caps. We stepped out to speak to them, and found that they belonged to the French Red Cross. They had been driven out of their dressing station by the poisonous gas and complained bitterly of the effect on their lungs.

Shortly afterwards the first wounded Canadian appeared—a Highlander,—sitting on a little cart drawn by a donkey which was led by a peasant. His face and head were swathed with bandages and he looked as proud as a peacock.

Soon after, another Canadian High-

lander came trudging up the road, with rifle on shoulder and face black with powder. He said that his platoon had been gassed, and that the Germans had got in behind them about a mile away, in such a manner that they had been forced to fight them on front and rear. Finally the order had been passed, "Every man for himself," and he had managed to get out; he was now on his way back to report to headquarters.

Then came a sight that we could scarcely credit. Across the fields coming towards us, we saw men running, dropping flat on their faces, getting up and running again, dodging into disused trenches, and keeping every possible bit of shelter between themselves and the enemy, while they ran. As they came closer we could see that they were French Moroccan troops, and evidently badly scared. Near us some of them lay down in a trench and lit cigarettes for a moment or two, only to start up in terror and run on again. Some of them even threw away their equipment after they had passed, and they all looked at us with the same expression that the dog had, evidently considering us to be madmen to stay where we were. It was quite apparent that the Moroccan troops had given way under the gas attack, and that a break, doubtless a large one, had been made in the French front line.

Then our hearts swelled with a pride that comes but seldom in a man's life—the pride of race. Up the road from Ypres came a platoon of soldiers marching rapidly; they were Canadians, and we knew that our reserve brigade was even now on the way to make the attempt to block the German road to Calais.

Bullets began to come near. Neither of us said a word for a while as we saw spurt after spurt of dust kicked up a few yards in front of us.

"I think we had better move, Colonel," said Captain Rankin at last. As he spoke a bullet split a brick in the road about three feet away from me, and slid across the road, leaving a trail of dust.

"I think we had," I said as I walked over, picked up the spent bullet and dropped it in my pocket. Another bullet pinged overhead and another spat up the road dust in front of us. "Those are aimed bullets," I said. "The Germans cannot be far away; it's time to move." It was then about 6.30 and we walked back to Wieltze, near which we met our anxious chauffeur coming out to meet me.

With this we close our quotation from *On the Fringe of the Great Fight*. Today all Canada knows what Canadians did at the Second Battle of Ypres. Hence

it is almost unnecessary to add that the men whom Colonel Nasmith saw marching rapidly up to the lines were the same who, in spite of gas and all the other horrors of war, held the line and kept the Germans from reaching Calais. "The whole world," says Colonel Nasmith, in speaking of the days after the battle, "was ringing with the story of how the colonial troops had barred the road to the channel to a force many times its size in men and guns, and armed with poison gas, the most terrible device of warfare that had yet been invented."

Mental Vision.

When King Solomon affirmed: "Where there is no vision, the people perish," he evidently had in mind the higher vision—the vision that exalts, not that which debases. The vision suggested is not the vision of the Hun, not the vision of the man or the nation that seeks to "wade through slaughter to a throne and shuts the gates of mercy on mankind," not the vision of demolition and bloodshed, not the vision of might against right, not the vision of aggression, domination, or lawless self-aggrandizement.

To-day, "The people perish" because of vision—because of false vision—because of false philosophy—of false religion, or irreligion. The people perish of bald materialism—because of a false conception of the plan of the universe and of man's place therein—because of a false estimate of the relative values of things and of the dignity of human nature.

Mental vision or seeing with the mind is not a figure of speech, neither is it a chimera, a dream, nor a theory. It is a fact established by science and verified by experience. Physiologists tell us the "optic lobes", in the base of the brain, near the pineal gland, are the real organs or "psychic centres of sight," just as the other senses have each its special brain-centre. Serious injury to the "optic lobe" results in loss of eyesight. Similarly, in our present condition of being, all our vision, all thought, all conception may be referred to specific function of the brain or brain cells, the higher faculties of conscious mind being generated by the "cortex or upper brain."

May not the human mind be capable of vision sublime and limitless? Was not this the view of Longinus, when he wrote: "The whole world is not large enough for the speculations and reasonings of man's aspiring intellect, but often his thoughts pass even the bounds that circumscribe the material universe." What of Shakespeare's mental visions?—of

Wordsworth's "trances of thought and mountings of the mind"—of St. Paul, who declared that "invisible things . . . are clearly seen, being understood by things that are made?" What of the vision of Job, of Isaiah, of Ezekiel, of Daniel and of St. John on Patmos?

Is it too much to assert that a lifting of the veil that obscures our mental vision, would disclose a world of beauty and worth to all of us?—for it is the mind and not the eye that really perceives. To one man, "a primrose by the river's brink a yellow primrose is, and it is nothing more;" to another, it is a text or a sermon. To some of us, as farmers, a head of wheat or an ear of corn may seem so commonplace a thing as to be scarcely fitted for particular study or attention; to others, these products of the field suggest the study of type, selection of the best seed, improved tillage, increased yields to meet the urgent need of food supply. There may also be suggestion of national development and expansion and the tread of millions yet to be.

To men of vision we owe all progress and all achievement—the founding of governments, the clearing of the forest, the building of homes, schools and churches, the construction and operation of railroads and other means of transportation, and all invention and discovery. The thing, done, invented or discovered always exists first in the vision of some mind.

Rays of light scintillate and dart from flowers and from stars, from the diamond and from the dust floating in the sunbeams, from the tassel of the corn and from the comet in its eccentric but prescribed course, from life in a water-drop and from life in a world. But greater, grander than all—thrusting these into shadow with the vividness of the lightning's flash—is the light of the intellect. The light of the mind is a matchless power and splendor. The truly enlightened mind is an abiding source of noble achievement, of light and of vision.

Kent Co., Ont. W. J. WAY.

Juneau, Alaska, has opened a modern three-story high-school building that would do credit to any city. It was erected at a cost, exclusive of furnishing, of \$75,000, and is equipped with shower and dressing rooms for boys and girls, manual training shop, sewing room, domestic science room, gymnasium, auditorium with gallery and stage, plenum system of heating and ventilation, library and two laboratories—this in addition to the classrooms, etc., common to any school.

Hope's Quiet Hour

Gathering His Treasures.

My Beloved is gone down into His garden. . . to gather lilies.—Cant. 6:2.

They shall be mine, saith the LORD of hosts, in that day when I make up My jewels.—Mal. 3:17.

He that gathereth not with Me scattereth abroad.—S. Matt. 12:30.

I have been reading "The Salvage of War" in the "Saturday Post," an amazing description of the way the fragments are gathered up behind the armies, resulting in a saving to the British Government of "more than twelve million dollars a year." Old clothes are cleaned and renovated, every scrap of flour is removed by machinery from flour bags (in one bakery this little bit of economy saves about \$250 a week.) Garbage is changed into fat for making of soap and the much-needed glycerine and bones (after all the fat is extracted) are crushed and sold for fertilizer. The scraps from soldiers' plates are used for chicken food. We can gain some idea of the value of fragments when we hear that last year about 1,800 tons of glycerine came out of the refuse of the camp kitchens. This meant a saving of nearly two million dollars from what used to be considered worthless garbage.

We are just beginning to discover the wisdom of our Lord's command to gather up fragments and allow nothing to be lost. Solomon seems to think that silver and gold are the peculiar treasure of kings and princes, so we begin to believe that apparently valueless rubbish is worth saving when it can be changed into dollars.

But God's idea of "treasure" is different. Over and over again in the Bible His people are called His "peculiar treasure", and the prophet Malachi says that those who fear the Lord and think upon His name will be gathered carefully as His jewels. As Solomon put the things his father David had dedicated among the treasures of the house of the Lord, so Christ treasured the men His Father had committed to His charge. "Those that Thou gavest Me I have kept," He said, "and none of them is lost, but the son of perdition. . . Neither pray I for these alone, but for them also which shall believe on Me through their word."

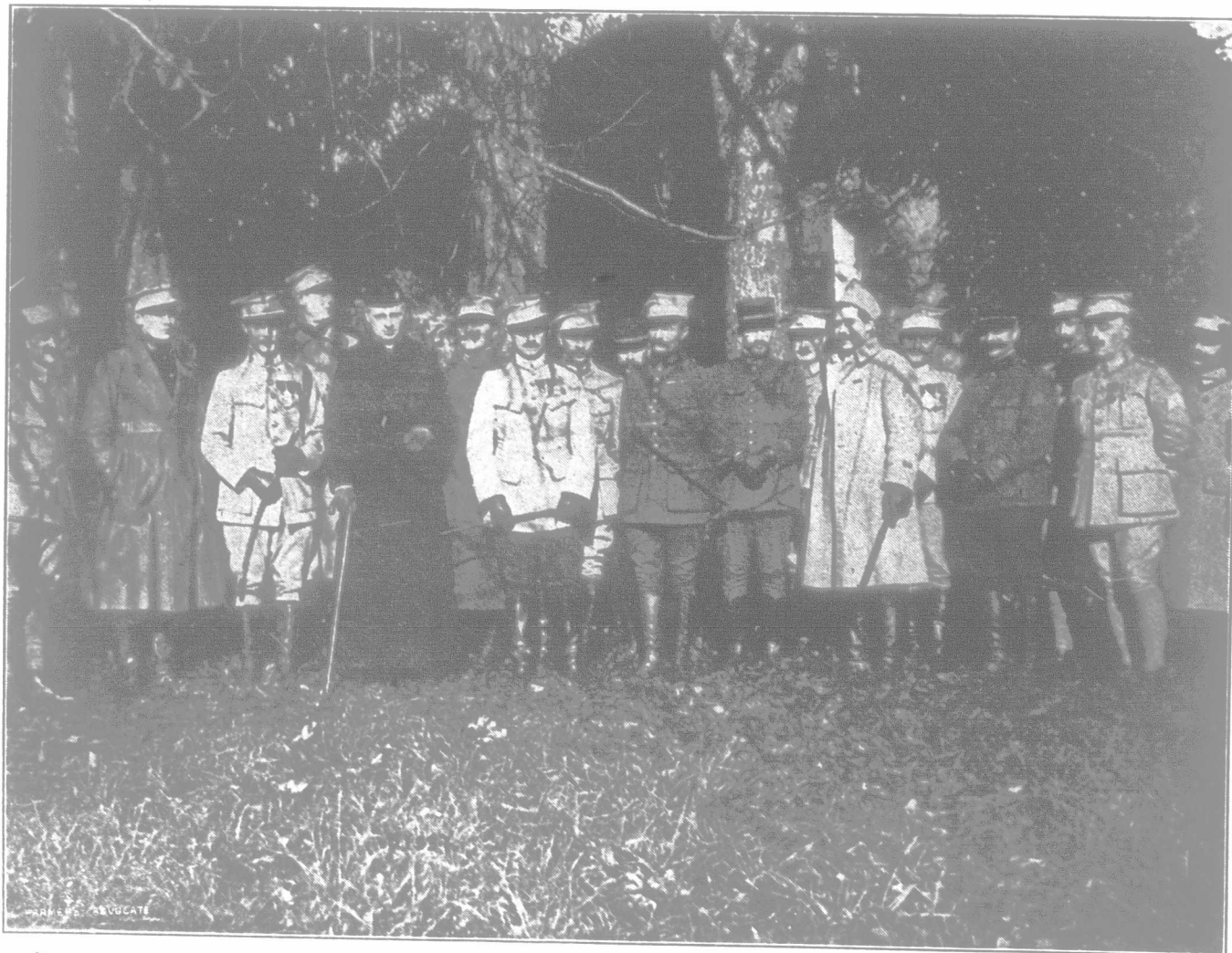
How often our Lord showed, by word and act, that even the outcasts of society were precious in His sight. He was called, in contempt, the "Friend of publicans and sinners." He eagerly accepted their invitations, and even on one occasion invited Himself to be the Guest of a despised tax-gatherer. He wanted to seek and save those whom religious people despised as worthless.

In the Song of Songs we hear the question asked of the Church: "Whither is thy Beloved gone, O thou fairest among women? Whither is thy Beloved turned aside? that we may seek Him with thee."

What can the Church reply but the answer of our text? "My Beloved is gone down into His garden. . . to gather lilies."

Even the fiercest enemies of Christ did not dare to say that He sought the society of sinners because He loved sin. His passionate purity was like a fire that could not be sullied by contact with evil. His love for all that was good drew Him into places where good desires and the weak beginnings of holiness needed a helping hand. He is seeking His lilies—white blossoms of fragrant purity—and He will not overlook one flower that is trying to spring up in the midst of thorns. "As the lily among thorns, so is My love among the daughters," He says tenderly. His eyes are quick to detect the gleam of white—the least trace of soul-beauty—in the midst of sordid surroundings. He gathers every fragment of gold out of earth's rubbish—each aspiration after God, each kindly word and act. Every tear of penitence for sin is a pearl of price, to be gathered into the treasury of the House of the Lord.

Yesterday I saw a woman comforting a little girl who had fallen on the sidewalk. The child was cold and frightened. She could hardly stand up against the fierce gale that swept down the street, but the woman ran to her help and the childish tears were soon dried. I thought of our Master's words, as He looked down



New Polish Legion Being Formed in France.

Photo, Kadel & Herbert, N. Y.

tenderly on the little child sitting on His knee, and said to the apostles, who had been disputing who should be the greatest in His kingdom: "Whosoever shall receive one of such children in My name, receiveth Me; and whosoever shall receive Me, receiveth not Me, but Him that sent Me."—S. Mark 9 : 37.

He will not overlook any little act of kindness shown to the little ones—His His own little ones. His treasury is heaped high with gifts of real value—gifts which were not done for the praise of men, which are soon forgotten by the giver. He gathers up every fragment of good and will not allow any love to be lost.

"Our lives are full of odds and ends,
First one and then another,
And though we know not how or when
They're deftly woven together.
The Weaver has a Master's skill,
And proves it by this token;
No loop is dropped, no strand is missed
And not a thread is broken.
Not e'en a shred is thrown aside,
So careful is the Weaver,
Who, joining all with wondrous skill,
Weaves odds and ends together."

It was the glory of God that He gathered the "outcasts" of Israel (Isa. 56 : 8) and the Son of God has changed many miserable outcasts into noble princes of His kingdom. We speak of Mary Magdalene as a "saint", yet she was possessed by seven devils. "Saint" Paul was once a fierce persecutor of God's children, and "Saint" Augustine's reckless sinfulness—in his early manhood—was a heartbreaking sorrow to his mother.

The King is in His earth-garden gathering lilies, and He expects those who profess to be His servants to help in that great task. He wants everything that is of value to be saved—lilies of purity and the good grain of loving deeds. He wants to gather in His harvest, to gather His fruit unto life eternal, and the labourers are few. Isn't that the cry of many men, in these days when every grain of food is desperately needed?

His workers are warned to be careful. Wheat and tares grow together, and those who recklessly try to root out the tares may pull up many young blades of wheat. It is not our place to judge our brothers. The Pharisee scorned the publican as a worthless lumberer of the ground, yet God was nursing the fire of penitence in that publican's heart. What could the self-satisfied professor of religion know about the humble silent prayer of the man who stood beside him? Let him look into his own tightly-closed heart, and open the door for its rightful Owner.

It is not our business to root out from God's garden the people we suppose to be worthless, but we are called to be encouragers of the good. Are we satisfied, caring nothing for the salvation of others? Then let us remember the warning of our Master to all who stand idle in His field: "He that gathereth not with Me scattereth abroad."

In the day when we give account before God we may have to say: "Those whom Thou gavest me to train and help I have lost by careless neglect." While we are working with all our might to gain "the peculiar treasure" of earthly kings—gold and silver—God's precious treasure may be slipping through our fingers. We can help other souls to grow more Christlike. Are we praying for their spiritual good? Do we care when a lost sheep is found by the seeking Shepherd? Do we rejoice, with our Father and His angels, when a prodigal has come to himself?

Surely we do not prize gold and silver more than our Master's treasures—the souls of men.

It has been said that "God must love the common people or He would not have made so many of them," but in His eyes there are no "common" people. Has any mother a "common" child? The Good Shepherd feels that it is well worth while to save one of His treasures, even at the cost of His own life. "Take heed," He says warningly to us, "that ye despise not one of these little ones."

DORA FARNCOMB.

Gifts for the Needy.

Three donations for the Quiet Hour purse have reached me this week. One dollar came from a "Ladies' Aid" Society, one dollar from Mrs. W. F. K., and six dollars from C. K. A. (a reader in Quebec

"to help some poor old person." I am dividing this last gift among several old people—two widows and two elderly couples will be helped by it.

Fuel is the chief need just now, and the kindness of our readers has kept the home fires burning (with coke or coal) in several houses, when winter gales were raging outside.

DORA FARNCOMB,
52 Victor Ave., Toronto.

The Windrow

A million-dollar pulp and paper plant is to be established at Kapuskasing, Northern Ontario, and will employ about 200 hands. A returned soldiers' settlement is in the vicinity, and the plant will likely supply work to many of them during the winter.

Mrs. J. Morgan, who lives near Hamilton, Ont., has knitted 6,000 pairs of socks for the soldiers since the beginning of the war. She uses a small knitting machine for the work. In addition she does all her own housework, which is no light matter considering that she has a family of small children.

The first woman ever sent from America as foreign representative is Mrs. Norman De R. Whitehouse, who is to be sent to Switzerland from the United States to further its policy of bringing to the German people, through neutrals, the war aims of the American people.

While there are bravos for the soldiers let us not forget the nurses, who suffer in many ways. The following extract written by a British medical officer in Italy gives one among many varied pictures of experiences the nurses have to go through: "Some of the nurses of our unit, after sitting eight hours in a stationary ambulance, with a hope of a move becoming ever fainter and fainter, were advised by an English artillery officer to get out and walk, as it was no longer safe to remain on the road—no one knew how close behind the Austrians were. It was a horribly dark night, with drenching rain and deep, slimy mud. In spite of this—and having to part with the last hope of keeping the 'quite necessary' things which they had crammed into their suitcases—they started off. Picking their way through the crowd, which was sometimes noisy, sometimes too tired and miserable to show even surprise at seeing these 'femine' appearing through the night, they valiantly struggled on, past overturned carts and dead horses, splashing through puddles—trying not to hear the wail of tired, hungry children, whom they could not comfort, for they had not had food themselves for twenty-four hours. Here and there a soldier would light a match and help to show the way, but only for a yard or so; then the darkness became more dark, and spirits flagged; but for ten long miles they trudged on, till towards morning the Tagliamento bridge was crossed, and the English officer relaxed enough to call a halt. With difficulty a resting-place was found. The last room, the best salon, in a fine old villa was commandeered. Small comfort are gilded chairs, antique mirrors and floor of polished wood to rain-drenched, hungry girls; but that was all that was to had, so they laid them down and slept. Only for a short while, then up and on to a waiting train—which continued to wait for another whole day! But in the end we all got to Padua and safety. Two days and three nights, the quickest record, for what can be done in normal times in four or five hours!"

A London wholesale provision house, which prides itself on filling all orders correctly, received a letter from a provincial customer recently, complaining bitterly of the very poor quality of the last two lots of eggs supplied.

The reputation of the house for never making an error seemed to be at stake, but the bright mind of the junior partner found a way out of it. He wrote:

"Gentlemen: We are sorry to hear that our consignment did not suit you; there was, however, no mistake on our part. We have looked up your original order, and find that it reads as follows: 'Rush fifty boxes eggs. We want them bad.'"—Tid-Bits.

The time-saving secret of Gold Dust

What makes dirt stick and stick and stick? Grease! What dissolves the grease and saves household time? Gold Dust!

Proof? Test Gold Dust on some greasy dishes. See if you don't actually save time.

But Gold Dust saves more than just dish-washing time. In fact, thousands of women save time all through the day by following this rule: "Use Gold Dust for all dirt you can't brush up or sweep off." Such as—stains on woodwork, grease spots on kitchen floor, grease or oil on clothes,

But remember: For Gold Dust results be sure it is Gold Dust you really get. For sale everywhere in large and small packages.

GOLD DUST
The Busy Cleaner

Made in Canada

THE N.E. FAIRBANK COMPANY LIMITED, MONTREAL

Would You Like to Earn \$1 or \$2 Daily the Year Round at Home?

The hosiery trade is booming and the demand far exceeds the supply. We gladly take all the goods you can send us.

We must have more workers at once to help us keep pace with the demand. The Auto Knitter is sent on favorable terms to reliable persons, and we furnish full instructions how to knit socks, etc., also all yarn needed. The work is simple and easily learned; the Auto Knitter is a high-speed machine, and works by turning a handle. Our fixed rates of pay guarantee you a steady income the year round, no matter where you live, but our workers often largely increase this by working for private customers.

Working either whole or spare time, this pleasant employment has brought prosperity to many workers in their own homes, and should do the same for you.

Write to-day, enclosing 3c. in stamps, for full particulars, rates of pay, etc., and see what you and your family can now earn at home.

Auto-Knitter Hosiery (Canada) Co., Limited
DEPT. 302A, 257 COLLEGE ST., TORONTO

CLEOPATRAS TO-DAY

Thousands of women in Canada, if placed in Cleopatra's position as Queen of Egypt, would far exceed her fame for beauty. The modern means of having a beautiful skin are within easy reach of every woman. We have specialized for twenty-five years and our preparations are unequalled for their efficacy. Pimples, Blackheads, Wrinkles, Crow's Feet, Roughness or Redness, Patches, and non-infectious skin troubles cured at our Institute or at home by using our preparations.

Princess Skin Food	\$1.50
Hiscott Hair Rejuvenator	1.00
Goitre Cure	2.00

Mailed or expressed with full instructions, to any address, on receipt of price.

SUPERFLUOUS HAIR PERMANENTLY REMOVED

We have made a specialty of the process of Electrolysis for 25 years. Results guaranteed permanent. Write us for Booklet "F" and full particulars.

HISCOTT INSTITUTE LIMITED, 61A COLLEGE STREET, TORONTO

If You Have Any Skin Troubles Write Us for Advice FREE

New Flour Regulations

"The food situation in Great Britain, France and Italy is exceedingly grave," declares the Canadian Food Controller. In all the European neutral countries it is desperate. In the presence of this serious condition of affairs, the Controller is exerting every effort to improve the situation and to regulate manufacture so that home consumption will be under more effective control.

The Food Controller has adopted regulations providing for changes in the manufacture of flour. Heretofore, the wheat of each class has been milled into several grades of flour for the purpose of filling different requirements of the public. That is, the modern system of milling has enabled the manufacturer to divide into four grades or classes the stream of flour milled from any given quantity of wheat, and the different grades have been sold at home, or exported, according to the demands of the market to be served.

The new regulations require that from each class of wheat shall be milled only one grade of flour. The different streams of flour will now have to be turned into one, and the manufacture of high-class patent flours will, therefore, cease.

The Campbell Flour Mills Company, Limited, desires to announce that, in compliance with the regulations, it will mill from each kind of wheat one grade of flour only under the following names:

Cream of the West Flour (War Quality)

Western Hard Wheat Flour For Bread

Monarch Flour (War Quality)

Ontario Soft Wheat Flour For Pastry

Queen City Flour (War Quality)

A Blend of Hard and Soft Wheat Flours For All Purposes

The effect of the regulations is to provide for a minimum percentage of 74% instead of the present maximum of 74% of the wheat to be retained in the flour. In other words, the policy of milling one stream of flour only, from a given quantity of wheat, will restore conditions that existed half a century ago, or less, when only one grade of flour could be produced from the wheat.

The bread or other baked products made from the flour will still be palatable and nourishing, and will be fully adequate to sustain the people, and we trust the necessity for the change will be recognized as arising from the time of stress through which the world is passing. The new flour must still be distinguished from what is commonly known as whole wheat flour.

It must not be inferred that the war flour is of an inferior or unusable character. On the contrary it is, as you will find, a good, clear, white flour suitable for all practical purposes and as such we guarantee it. The Food Controller of Canada realizing the serious shortage of food-



stuffs not only in Canada and the United States, but all over the World, has ordered the war grade flour. It is for us, as millers, to give you the best we can under the Food Controller's regulations. It is for you, as consumers, to adapt yourselves to the new conditions and make the best of a situation that might conceivably be much worse than it is. Bear in mind that every bag or barrel which bears the name of this Company and a reproduction of "Ye Olde Miller" means the utmost in value that we are permitted to give for the money you pay.

Under the new regulations The Campbell Flour Mills Company, Limited, will continue to maintain a high standard of uniformly excellent quality, and will furnish the public with the best class of flour that the regulations will permit. Samples of all shipments of wheat used in Campbell's Flour are first tested by experts in our own Chemical Laboratory. Knowing exactly what is in the wheat, we are able to maintain the excellence of the flour.

Do Not Hoard Flour

In hearty co-operation with the Food Controller in his efforts to aid the Allies to the utmost of which Canada's resources are capable, The Campbell Flour Mills Company, Limited, desires to join in an appeal to the public to refrain from hoarding flour. There is no necessity for hoarding. Such abnormal withdrawals from the available supply will only serve to increase the difficulties of the Allies, and hinder the patriotic efforts of the Controller, without benefiting anyone. Do not hoard flour.

Cannot Give Books Hereafter

The new regulations come into effect on Jan. 8th. After that date all flour must be milled according to the Food Controller's rules. The Food Controller has also decided that no premiums of any kind can be given with food products. This means that the Campbell Flour Mills Co., Limited, cannot place any more library cards in the flour bags. Many of our patrons have been saving library cards

and exchanging them for books to which they were entitled.

The Food Controller's regulations mean that this must end. Customers may continue to save the cards as long as they find them in the bags or barrels and we will keep faith with the public, supplying the books as long as the cards keep coming in. But no more cards will be placed in the bags.

The Campbell Flour Mills Co., Limited, West Toronto, Ontario

The Fashions.

How to Order Patterns.

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

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

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



No. 9586 Girl's Dress, 4 to 14 years.



No. 9614 Girl's Dress, 4 to 14 years.



No. 9604 Girl's Coat, 6 to 10 years.



No. 9577 Boy's Suit, 4 to 6 years.



No. 9628 Blouse with Rolling Collar, 34 to 42 bust.



No. 9596 Blouse, 34 to 42 bust.

No. 9625 Straight Skirt with Yoke, 24 to 30 waist.

No. 9601 Bustle Skirt, 24 to 30 waist.



No. 9611 Blouse, 34 to 41 bust.

No. 9601 Bustle Skirt, 24 to 30 waist.



No. 9511 Dress with side boning, 34 to 42 bust.



No. 9591 Dress, sizes 12 and 16 years.

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.]

Some Overseas Neighbors.

THIS morning (Jan. 9th), passing the bulletin board, I noticed an item which stated that President Creelman of the O. A. C. has suggested that 100,000 Chinese be brought here to work on the farms next summer. The suggestion may not go through—indeed there are many who think it unwise that it should go through. Nevertheless the mere mention of such a step should be sufficient to bring one thing before us: If we have not been interested in the Chinese before, we should become interested in them now.

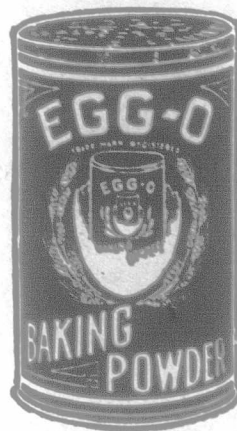
Heretofore, I am afraid, most of us have given them very little consideration indeed. We have judged them by the few laundrymen who have become scattered among our towns and cities. We have felt that they were a "heathen" race, "savages, as shown in the Boxer riots." We have looked upon them as an illiterate and disgusting people, who have given us much anxiety concerning British Columbia. We have read of an occasional murder case in which a Chinaman was implicated, and have judged the Chinese thereby.

We have been greatly mistaken,—we have been *greatly* mistaken. In the first place, the Chinese laundrymen are, perhaps, in the lowest stratum of society in China. Even then, as Bishop White of Honan said to me a few years ago, "compare them with the people in our lowest stratum of society and they compare very favorably indeed." They are quiet and industrious, and pay their way. If, occasionally a Chinese "den" is raided by the police and some of them are exposed for playing fantan—a gambling game—the fact is entirely overlooked that in our "gentlemen's" clubhouses and other places "poker" is played—also a gambling game. If the Chinaman, in the past, smoked opium, so did many of our "respectable" men drink wines and liquors of other kinds; and if the Chinaman were in his own land to-day he would not be permitted to touch opium. China's fight in expelling opium—in the face of its being forced upon her from India—is one of the noblest examples of national care for its people provided by history.

Again, the Boxer riots were rather dreadful—but was there anything in them comparable to the cruelties inflicted in Europe during the last few years.

Eliminate Guesswork and Practise Real Economy

Every Housewife should be familiar with the Egg-O Tin



Use a level teaspoon of Egg-O to each cup of flour

You can eliminate guesswork and practise real economy by using

EGG-O Baking Powder

In these days of rising costs, where sugar, flour and other expensive ingredients are involved, you cannot afford to use a baking powder that is less than perfect; and in the face of war-time's necessity of conservation of food, it is your patriotic duty to exercise the greatest economy and to eliminate all waste. With Egg-O Baking Powder your results will be success and economy combined; not only good baking but actually better baking than you have ever had before and with decidedly less expense.

Egg-O Recipe Book Free

Buy a tin of Egg-O Baking Powder from your grocer to-day. Send us the coupon from the can and we will mail you, free, a copy of the Egg-O Book of Reliable Recipes, which contains many more clever recipes for just the dishes you would like to make at this time.

Sample Tin 10 Cents

If your grocer does not sell Egg-O, send us 10c. and your grocer's name and we will send a trial tin (1/2-lb. net weight) of Egg-O Baking Powder and the Book of Reliable Recipes as well.

Egg-O Baking Powder Co. Limited
Hamilton, Ontario



Doubling Crops is Doubling Dollars

Doubling crops is more than doubling dollars, it is often trebling dollars and the soil is permanently improved every time you put fertilizer on it. Fertilizers are inexpensive

compared with the results. Crops have advanced in price more than Fertilizers have. A Bushel of Corn will buy 50 per cent more Fertilizer now than before the war. You certainly will never increase crop production until you use fertilizer. There is serious shortage of farm products, so order your Fertilizer now for this year, when your effort to increase crops is so much needed. Explain your soil to us and state what crops you want to put in and we will advise you what kind of fertilizer and how much you need. Special rates to farmers who club together and order in car lots. Recommend a good reliable agent for us in your district, if you can.

"Best-by-Test" FERTILIZERS

Reliable Agents Wanted
Write for our Free Book on Plant Food
CANADIAN FERTILIZER CO., Limited
12 Market Chambers, CHATHAM, ONT.



130-Egg Incubator and Brooder For \$15.75

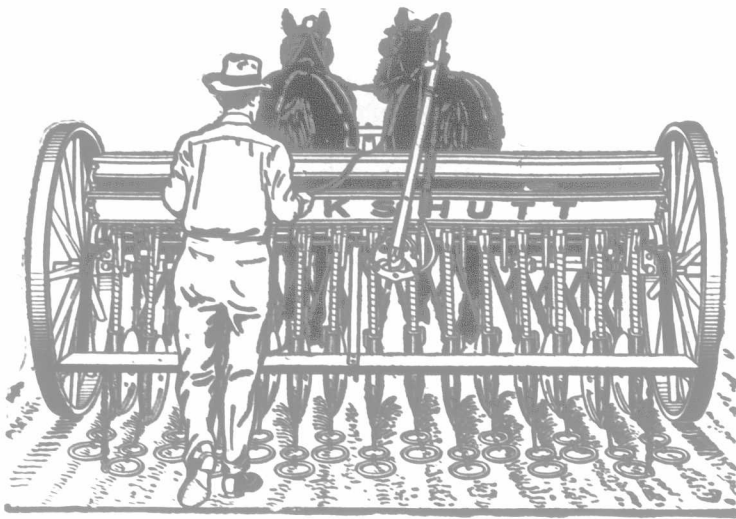
If ordered together we send both machines for only \$15.75 and we pay all freight and duty charges to any R. R. station in Canada. We have branch warehouses in Winnipeg, Man. and Toronto, Ont. Orders shipped from nearest warehouse to your R. R. station. Hot water, double walls, dead-air space between, double glass doors, copper tanks and boilers, self-regulating. Nursery under egg tray. Especially adapted to Canadian climate. Incubator and Brooder shipped complete with thermometers, lamps, egg testers—ready to use when you get them. Ten year guarantee—30 days trial. Incubators finished in natural colors showing the high grade California Redwood lumber used—not painted to cover inferior material. If you will compare our machines with others, we feel sure of your order. Don't buy until you do this—you'll save money—it pays to investigate before you buy. Remember our price of \$15.75 is for both incubator and brooder and covers freight and duty charges. Send for FREE catalog today, or send in your order and save time. Write us today. Don't delay.
WISCONSIN INCUBATOR CO., Box 226, Racine, Wis., U. S. A.

Cockshutt Disc Drills

Superior construction guarantees rapid, easy, correct seeding.

The heavy sales of Cockshutt Disc Drills show the up-to-date farmer realizes that only the best is good enough for such an important work as seeding. A Disc Drill must have a big margin of strength and reliability so as not to "fall down" at a critical time. Be wise: get a Cockshutt Drill.

Seeding time may be short and labor scarce! So, the Cockshutt Disc Drill is built strong, but it is built for speed. Its light draft makes for rapid work in any kind of soil, rough or well tilled, hilly or level. The discs open a channel wide enough for even planting, the shoes are non-clogging and plant the seed at any desired depth to suit any land. Trash cannot lodge in the discs; they "draw away" from the shoes. The heavy, high-carbon I beam—the "back-bone" of the machine, is immensely strong and rigid, preventing the slightest warping or sagging in the centre. The feed is positive and simple. Doesn't get out of order—doesn't crack or bruise the seed—sows any quantity to the fraction of a pint.



Cockshutt Standard Drills are built in 12, 13 and 15 Disc sizes with 6-inch spacing, and in 11 and 13 sizes fitted with 7-inch spacing.

Cockshutt Grain and Fertilizer Drills. Drill the fertilizer into trench with the seed. Accurate work, durability and light draft are three dominant Cockshutt qualities in this splendid implement for bringing your land back to virgin fertility in a systematic, positive way.

Made in 9, 11 and 13 sizes fitted with either single discs, or hoes, with 7-inch spacing between.

Get Cockshutt Disc Drill Booklet from our nearest Branch, it gives you fullest particulars.

COCKSHUTT PLOW CO. LIMITED
BRANTFORD, ONT.

Sold in Eastern Ontario,
Quebec and Maritime
Provinces by

The FROST & WOOD CO. LIMITED
Montreal, SMITH'S FALLS, St. John

Protein

Productiveness—
Proficiency—Prosperity
More and more do we realize the tremendous significance of protein and nitrogen in our business as farmers. They mean flesh-forming elements in the stable, plant food in the soil. We pay out good money for both, and regard it as good business to do so. Our own business is to demonstrate to you that there are two ways of getting these precious elements. One is the railway, the other is the clover way. Every now and then some enthusiastic experimenter tells you something about the enormous food-producing and soil-fertilizing power of sweet clover. Who doubts its value as a food now? Who discredits its soil-rebuilding power? Its reputation is established, the need for its services are insistent. Grow bigger crops of feed, feed more live stock and feed them better, at the same time rebuilding, not depleting your fields. Probably ten thousand farmers will grow it this year for the first time. As others' experiences have been, theirs will be. Sow Sweet Clover. Sow the best. For forage, for pasture, we recommend our own select strain of sweet clover, known as Canadian Alborea. It is finer of stalk, more tender and less rank, more prolific of seed. Write for our descriptive pamphlet, "The Hollow Stem," that tells you all about it.

CANADIAN ALBORTA CLOVER CO., LTD.
Warehouse and Shipping Office:
Listowel, Ontario

PROHIBITION IS BOUND TO STAY
Make your Genuine, Superior Lager Beer
at Home with Our Popular

HOP-MALT BEER EXTRACT
CONFORMING TO TEMPERANCE ACT.
Large Cans, making 6 1/2 to 7 gallons . . . \$1.75
Small Cans, making 2 1/2 to 3 gallons . . . \$1.25
Sample Cans making 1 gallon50

This temperance beer has been a distinct surprise and has been called a most satisfactory and equal substitute by everyone who is fond of the regular beer.

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

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

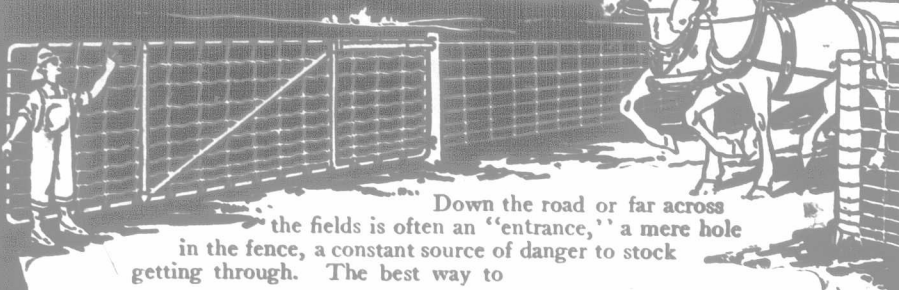
Hop-Malt Company Limited, Dept. D.2, Hamilton, Ont.

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

Herd Books Wanted

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

PEERLESS GATES



Down the road or far across the fields is often an "entrance," a mere hole in the fence, a constant source of danger to stock getting through. The best way to
Keep Your Stock Where You Want Them
is to provide real gates, strong and durable. All Peerless Farm Gates are of heavy open hearth steel wire on strong tubular steel frames electrically welded in one solid piece, and braced like a steel bridge. No sag, no rust, no wearing out. Ask your dealer to show you Peerless Gates, also Peerless Perfection Farm and Poultry fencing with the famous Peerless lock at all intersections.
SEND TODAY FOR CATALOG. It tells you how to put up a fence to "stay put."
The Banwell-Hoxie Wire Fence Co., Ltd.
Winnipeg, Manitoba Hamilton, Ontario

Registered—Prize-winning CLYDESDALES

AT AUCTION
Wednesday, February 20th, 1918

I have sold my farm and will offer my prize-winning Registered Clydesdale Horses, Mares, etc., to the highest bidder at auction.

For Full Particulars, Catalogue, etc., Write to
NEIL McELHERON - Grenville Farm - CHATSWORTH, ONT.
(GREY COUNTY)

"1900" Gravity Washer
Sent free for one month's trial. Write for particulars.

"1900" WASHER COMPANY
357 YONGE ST., TORONTO, ONT.
(Factory, 78-81 Portland St., Toronto)

VOLPEEK
WILL STOP THE LEAK

Don't throw away your Pots and Pans. "Vol-Peek" will mend Graniteware, Tin, Aluminum, etc., in two minutes without tools. Always keep it in the house. At dealers or from us, postpaid, 15 cents.
Vol-Peek Mfg. Co., Box 2024, Montreal, Can.

True, we Allies had to fight, and we are fighting in the vague hope that this war will end war—a noble ideal, the noblest ideal that man can have to-day.—The fact remains that, before the war, every civilized nation was more or less armed, prepared to inflict the cruelties of war; that every civilized nation, every year spent vast sums in armament;—and that comparatively little—almost nothing, to be truthful—was spent in a propaganda to inculcate principles and ideals of peace.

No, the pot cannot well call the kettle black. We occidentals haven't so very much over the Boxers. Probably they also felt that they had a cause. Westerners had not always given China a fair deal, and it was little wonder if they dumped our missionaries in the same pot with all the other "foreign devils"—suspicious of all, because the rapacious and unscrupulous few among commercial men who were exploiting the Chinese, had been found unworthy of trust.

An illiterate and disgusting people?—True, in the old days of China, during those long years in which China stopped going ahead and stood still, there were some disgusting and cruel practices in China. Her treatment of criminals, for instance, was cruel, and may be yet in some places. But let me tell you what I have heard two people, recently returned from China, say.

One, a girl missionary, who had been ten years there, said: "When I am among the high-class Chinese girls I feel like a big, crude, rude, awkward thing. They are so pretty, and dainty, and have such charming manners. Of course their ways are different from ours. For instance they will examine the embroidery on your petticoats and compliment you on the beauty of it—but that is Chinese etiquette."—And then she showed me beautiful silk kimonos, exquisitely embroidered by the Chinese, and silks and linens, so exquisitely fine and beautiful that you could not find their equals to buy for money in this country—all manufactured by these "illiterate" Chinese.

Why when we were all savages, running about naked with our bodies stained with wood, the Chinese had built houses and walls, were wearing clothes, and had invented printing. Even to-day artistic eyes consider her architecture superior in grace and beauty to our own.

BUT China stood still. Yes, she stood still for a long, long time. Now she is awake. When little Japan went over and struck her in the face, a few years ago, she became very wide awake indeed. She said, "What is the matter with us?" And she began to send young men to Europe and to America, to be educated and to find out what was the matter with China. A young Emperor came to the throne, who was progressive. He ordered unification of language in the schools, and popular education more along modern lines. Perhaps he was quietly put out of the way by order of the Empress, the last of the old Manchu autocrats, all tied to the past as she was. But he had set a ball rolling in China. And soon there was revolution. Dr. Sun Yat Sen did his work. Eventually absolute monarchs were put by the board forever. China became a Republic.

Two weeks ago we heard a lecture given by a man who has spent over thirty years in Japan and China. It was a splendid lecture. And one could easily see that the lecturer was filled with admiration for these Eastern peoples, for their philosophy, and for the way they have been progressing during the last twenty years, keeping the best of their old philosophy, and seizing also upon the best thought and ideas that we of the West have to give them. "I thought Japan was a wonderful country," he said, "until I was set down in the midst of China. The thing that most impressed me there was the *Thought-force*—the tremendous *Thought-force* everywhere."

As he said that, we wondered just what would be the impression of a cultured Chinaman set down here in the midst of America. Would he be impressed most of all with our thought-force? Or would he go back, a little sad at heart, as did the famous Hindu, Rabin-dranath Tagore, from the United States, last year, saying that he had found, outstandingly, materialism?

Just now I think of what a man in Toronto told me last winter. He had chanced to be travelling in the United

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States on the train on which was a party of Chinese gentlemen who had come over to look into American educational methods. "They went through the car in which I was sitting," he said, "on their way to the dining car, and I shall never forget the princely air of them. The way they carried themselves, as they walked through, in their embroidered robes! The intelligence of their faces! The something noble that can be felt but not described! I shall never forget it."

YES, there are still festering spots and much superstition, in China, but so we have some sore spots in Western lands.

Let us never forget, in dealing with the Chinese, as the lecturer above referred to said, that we are dealing with a proud, high-minded, cultured race. And let us treat them as they deserve and as befits us. We always lower ourselves when we treat contemptuously any other person, or any other people.

"It is up to us to give China a fair deal," said the lecturer. "If we don't we are running into a problem that will not be easily solved."—And, if we don't give a fair deal, do we not deserve to get into trouble? There are over four hundred millions of people in China.

The worst thing with us is that we have such a tendency to think we are "It"—spelled with a capital "I". We can't realize that we are very ignorant, on the whole, in many things, chiefly in Ideals. When we do understand this, we shall be ready to improve in this way—not before.

Of course I do not mean to say that we are not going ahead. We are, and we shall. But a little self-examination, once in a while, does not hurt any of us. In many things we are splendid. We may be much more splendid.

Just now the improvement in sight is that we put away forever—if it exists in us—any contempt for the Orientals. And that we extend to such Chinamen as may come to us in any capacity the respect and consideration that is their due. Let the word "Chink" be forever banished from among us, with that other epithet "Dago", which the splendid achievements of the Italian soldiers, engineers, aviators and scientists—if nothing else—have rendered so inane. There is no country in the world in which more vigorous efforts are being made to assist agriculture, at the present day, than Italy.

But how I am running away. No more this time.

JUNIA.

Serial Story.

An Alabaster Box.

BY MARY E. WILKINS FREEMAN AND FLORENCE MORSE KINGSLEY.

By arrangement with McClelland, Goodchild & Stewart, Publishers, Toronto, Ont.

Chapter XII.

I am sure I don't know what you'll think of us gadding about in the morning so," began Mrs. Dix, as she caught sight of Lydia.

Mrs. Dix was sitting in the back seat with Mrs. Dodge. The two girls were in front. Lydia noticed mechanically that both were freshly gowned in white and that Fanny, who was driving, eyed her with haughty reserve from under the brim of her flower-laden hat. Ellen Dix had turned her head to gaze after Jim Dodge's retreating figure; her eyes turned to Lydia with an expression of sulky reluctance.

"I'm so glad to see you," said Lydia. "Won't you come in?"

"I should like to," said Mrs. Dodge. "Jim has been telling us about the improvements, all along."

"It certainly does look nice," chimed in Mrs. Dix. "I wouldn't have believed it possible, in such a little time, too. Just cramp that wheel a little more, Fanny."

The two older women descended from the carryall and began looking eagerly around.

"Just see how nice the grass looks," said Mrs. Dodge. "And the flowers! My! I didn't suppose Jim was that smart at fixing things up. Aren't you going to get out, girls?"

The two girls still sat on the high front seat of the carryall; both were gazing at Lydia in her simple morning frock. There were no flowers on Lydia's Panama hat; nothing but a plain black band; but it had an air of style and

elegance. Fanny was wishing she had bought a plain hat without roses. Ellen tossed her dark head:

"I don't know," she said. "You aren't going to stay long; are you, mother?"

"For pity sake, Ellen!" expostulated Mrs. Dodge briskly. "Of course you'll get out, and you, too, Fanny. The horse'll stand."

"Please do!" entreated Lydia.

Thus urged, the girls reluctantly descended. Neither was in the habit of concealing her feelings under the convenient cloak of society observance, and both were jealously suspicious of Lydia Orr. Fanny had met her only the week before, walking with Wesley Elliott along the village street. And Mrs. Solomon Black had told Mrs. Fulson, and Mrs. Fulson had told Mrs. Deacon Whittle, and Mrs. Whittle had told another woman, who had felt it to be her Christian duty (however unpleasant) to inform Fanny that the minister was "payin' attention to Miss Orr."

"Of course," the woman had pointed out, "it wasn't to be wondered at, special, seeing the Orr girl had every chance in the world to catch him—living right in the same house with him." Then she had further stated her opinions of men in general for Fanny's benefit. All persons of the male sex, according to this woman, were easily put upon, deceived and otherwise led astray by artful young women from the city, who were represented as perpetually on the lookout for easy marks, like Wesley Elliott.

"He ain't any different from other men, if he is a minister," said she with a comprehensive sniff. "They're all alike, as far as I can find out: anybody that's a mind to soft-soap them and flatter them into thinkin' they're something great can lead them right around by the nose. And besides, she's got money!"

Fanny had affected a haughty indifference to the doings of Wesley Elliot, which did not for a moment deceive her keen-eyed informer.

"Of course, anybody with eyes in their heads can see what's taken place," compassionated she, impaling the unfortunate Fanny on the prongs of her sympathy. "My! I was telling George only yesterday, I thought it was a perfect shame! and somebody ought to speak out real plain to the minister."

Whereat Fanny had been goaded into wishing the woman would mind her own business! She did wish everybody would leave her and her affairs alone! People had no right to talk! As for speaking to the minister; let any one dare—!

As for Ellen Dix, she had never quite forgiven Lydia for innocently acquiring the fox skin and she had by now almost persuaded herself that she was passionately in love with Jim Dodge. She had always liked him—at least, she had not actively disliked him, as some of the other girls professed to do. She had found his satirical tongue, his keen eyes and his real or affected indifference to feminine wiles pleasantly stimulating. There was some fun in talking to Jim Dodge. But of late she had not been afforded the opportunity. Fanny had explained to Ellen that Jim was working terribly hard, often rising at three and four in the morning to work on his own farm, and putting in long days at the Bolton place.

"She seems to have most of the men in Brookville doing for her," Ellen had remarked coldly.

Then the girls had exchanged cautious glances.

"There's something awfully funny about her coming here, anyway," said Ellen. "Everybody thinks it's queer."

"I expect she had a reason," said Fanny, avoiding Ellen's eyes.

After which brief interchange of opinion they had twined their arms about each other's waists and squeezed wordless understanding and sympathy. Henceforth, it was tacitly understood between the two girls that singly and collectively they did not "like" Lydia Orr.

Lydia understood without further explanation that she was not to look to her nearest neighbors for either friendship or the affection she so deeply craved. Both Ellen and Fanny had passed the place every day since its restoration began; but not once had either betrayed the slightest interest or curiosity in what was going on beyond the barrier of the hedge. To be sure, Fanny had once stopped to speak to her brother; but when Lydia had hurried hopefully out to greet her it was only to catch a glimpse of the girl's back as she walked quickly away.

Jim Dodge had explained, with some awkwardness, that Fanny was in a hurry.

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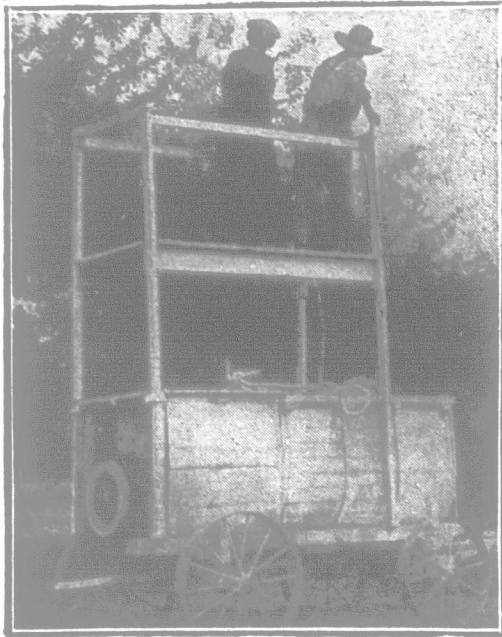
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"Well, now, I'll tell you, Miss Orr," Mrs. Dix was saying, as all five women walked slowly toward the house. "I was talking with Abby Daggett, and she was telling me about your wanting to get back the old furniture that used to be in the house. It seems Henry Daggett has put up a notice in the post office; but so far, he says, not very many pieces have been heard from. You know the men-folks generally go after the mail and men are slow; there's no denying that. As like as not they haven't even mentioned seeing the notice to the folks at home."

"That's so," confirmed Mrs. Dodge, nodding her head. "I don't know as Jim would ever tell us anything that happened from morning till night. We just have to pump thing out of him; don't we, Fanny? He'd never tell without we did. His father was just the same."

Fanny looked annoyed, and Ellen squeezed her arm with an amused giggle.

"I didn't know, mother, there was anything we wanted to know, particularly," she said coldly.

"Well, you know both of us have been real interested in the work here," protested Mrs. Dodge, wonderingly. "I remember you was asking Jim only last night if Miss Orr was really going to—"

"I hope you'll like to see the house," said Lydia, as if she had not heard; "of course, being here every day I don't notice the changes as you might."

"You aren't living here yet, are you?" asked Mrs. Dix. "I understood Mrs. Solomon Black to say you weren't going to leave her for awhile yet."

"No; I shall be there nights and Sundays till everything is finished here," said Lydia. "Mrs. Black makes me very comfortable."

"Well, I think most of us ladies had ought to give you a vote of thanks on account of feeding the men-folks, noons, put in Mrs. Dodge. "It saves a lot of time not to have to look after a dinner-pail."

"Mother," interrupted Fanny in a thin, sharp voice, quite unlike her own, "you know Jim always comes home to his dinner."

"Well, what if he does; I was speaking for the rest of th' women," said Mrs. Dodge. "I'm sure it's very kind of Miss Orr to think of such a thing as cooking a hot dinner for all those hungry men."

Mrs. Dodge had received a second check from the assignees that very morning from the sale of the old bank building and she was proportionately cheerful and content.

"Well; if this isn't handsome!" cried Mrs. Dix, pausing in the hall to look about her. "I declare I'd forgotten how it used to look. This is certainly better than having an old ruin standing here. But, of course it brings back old days."

She sighed, her dark, comely face clouding with sorrow.

"You know," she went on, turning confidentially to Lydia, "that dreadful bank failure was the real cause of my poor husband's death. He never held up his head after that. They suspected at first he was implicated in the steal. But Mr. Dix wasn't anything like Andrew Bolton. No; indeed! He wouldn't have taken a cent that belonged to anybody else—not if he was to die for it!"

"That's so," confirmed Mrs. Dodge. "What Andrew Bolton got was altogether too good for him. Come right down to it, he wasn't no better than a murderer!"

And she nodded her head emphatically. Fanny and Ellen, who stood looking on, reddened impatiently at this:

"I'm sick and tired of hearing about Andrew Bolton," complained Ellen. "I've heard nothing else since I can remember. It's a pity you bought this house, Miss Orr; I heard Mr. Elliot say it was like stirring up a horrid, muddy pool. Not very complimentary to Brookville; but then—"

"Don't you think people will—forget after a while?" asked Lydia, her blue eyes fixed appealingly on the two young faces. "I don't see why everybody should—"

"Well, if you'd fixed the house entirely different," said Mrs. Dix. "But having it put back, just as it was, and wanting the old furniture and all—whatever put that into your head, my dear?"

"I heard it was handsome and old—I like old things. And, of course, it was—more in keeping to restore the house as it was, than to—"

"Well, I s'pose that's so," conceded Mrs. Dodge, her quick dark eyes busy with the renovated interior. "I'd sort

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of forgot how it did look when the Boltons was livin' here. But speaking of furniture; I see Mrs. Judge Fulson let you have the old sofa. I remember she got it at the auction; she's kept in it her parlor ever since."

"Yes," said Lydia. "I was only too happy to give a hundred dollars for the sofa. It has been excellently preserved."

"A hundred dollars!" echoed Mrs. Dix. "Well!" Mrs. Dodge giggled excitedly like a young girl.

"A hundred dollars!" she repeated. "Well, I want to know!"

The two women exchanged swift glances.

"You wouldn't want to buy any pieces that had been broke, I s'pose," suggested Mrs. Dodge.

"If they can be repaired, I certainly do," replied Lydia.

"Mother!" expostulated Fanny, in a low but urgent tone. "Ellen and I—we really ought to be going."

The girl's face glowed with shamed crimson. She felt haughty and humiliated and angry all at once. It was not to be borne.

Mrs. Dix was not listening to Fanny Dodge.

"I bid in the big, four-post mahogany bed at the auction," she said, "and the bureau to match; an' I believe there are two or three chairs about the house."

"We've got a table," chimed in Mrs. Dodge; "but one leg give away, an' I had it put up in the attic years ago. And Fanny's got a bed and bureau in her room that was painted white, with little pink flowers tied up with blue ribbons. Of course the paint is pretty well rubbed off; but—"

"Oh, might I have that set?" cried Lydia, turning to Fanny. "Perhaps you've grown fond of it and won't want to give it up. But I—I'd pay almost anything for it. And of course I shall want the mahogany, too."

"Well, we didn't know," explained Mrs. Dix, with dignity. "We got those pieces instead of the money we'd ought to have had from the estate. There was a big crowd at the auction, I remember; but nobody really wanted to pay anything for the old furniture. A good deal of it had come out of folks' attics in the first place."

"I shall be glad to pay three hundred dollars for the mahogany bed and bureau," said Lydia. "And for the little white set—"

"I don't care to part with my furniture," said Fanny Dodge, her pretty round chin uplifted.

She was taller than Lydia, and appeared to be looking over her head with an intent stare at the freshly papered wall beyond.

"For pity sake!" exclaimed her mother sharply. "Why, Fanny, you could buy a brand new set, an' goodness knows what-all with the money. What's the matter with you?"

"I know just how Fanny feels about having her room changed," put in Ellen Dix, with a spirited glance at the common enemy. "There are things that money can't buy, but some people don't seem to think so."

Lydia's blue eyes had clouded swiftly. "If you'll come into the library," she said, "we'll have some lemonade. It's so very warm I'm sure we are all thirsty."

She did not speak of the furniture again, and after a little the visitors rose to go. Mrs. Dodge lingered behind the others to whisper:

"I'm sure I don't know what got into my Fanny. Only the other day she was wishing she might have her room done over, with new furniture and all. I'll try and coax her."

But Lydia shook her head. "Please don't," she said. "I want that furniture very much; but—I know there are things money can't buy."

"Mebbe you wouldn't want it, if you was t' see it," was Mrs. Dodge's honest opinion. "It's all turned yellow, an' the pink flowers are mostly rubbed off. I remember it was real pretty when we first got it. It used to belong to Mrs. Bolton's little girl. I don't know as anybody's told you, but they had a little girl. My! what an awful thing for a child to grow up to! I've often thought of it. But mebbe she didn't live to grow up. None of us ever heard."

"Mother!" called Fanny, from the front seat of the carryall. "We're waiting for you."

"In a minute, Fanny," said Mrs. Dodge. "Of course you can have that table I spoke of, Miss Orr, and anything else I can find in the attic, or around."

An' I was thinking if you was to come down to the Ladies' Aid on Friday afternoon—it meets at Mrs. Mixer's this week, at two o'clock; you know where Mrs. Mixer lives, don't you? Well; anyway, Mrs. Solomon Black does, an' she generally comes. But I know lots of the ladies has pieces of that furniture; and most of them would be mighty glad to get rid of it. But they are like my Fanny—kind of contrary, and backward about selling things. I'll talk to Fanny when we get home. Why, she don't any more want that old painted set—"

"Mother!" Fanny's sweet angry voice halted the rapid progress of her mother's speech for an instant.

"I shouldn't wonder if the flies was bothering th' horse," surmised Mrs. Dodge; "he does fidget an' stamp somethin' terrible when the flies gets after him; his tail ain't so long as some. . . . Well, I'll let you know; and if you could drop around and see the table and all—Yes, some day this week. Of course I'll have to buy new furniture to put in their places; so will Mrs. Dix. But I will say that mahogany bed is handsome; they've got it in their spare room, and there ain't a scratch on it. I can guarantee that. . . . Yes; I guess the flies are bad to-day; looks like rain. Good-by!"

Lydia stood watching the carryall, as it moved away from under the milk-white pillars of the restored portico. Why did Fanny Dodge and Ellen Dix dislike her, she wondered, and what could she do to win their friendship? Her troubled thoughts were interrupted by Martha, the taciturn maid.

"I found this picture on the floor, Miss Lydia, said Martha; "did you drop it?"

Lydia glanced at the small, unmounted photograph. It was a faded snapshot of a picnic party under a big tree. Her eyes became at once riveted upon the central figures of the little group; the pretty girl in the middle was Fanny Dodge; and behind her—yes, surely, that was the young clergyman, Wesley Elliot. Something in the attitude of the man and the coquettish upward tilt of the girl's face brought back to her mind a forgotten remark of Mrs. Solomon Black's. Lydia had failed to properly understand it, at the time. Mrs. Solomon Black was given to cryptic remarks and Lydia's mind had been preoccupied by the increasing difficulties which threatened the accomplishment of her purpose:

"A person, coming into a town like Brookville to live, by rights had ought to have eyes in the backs of their heads," Mrs. Black had observed.

It was at breakfast time, Lydia now remembered, and the minister was late, as frequently happened.

"I thought like's not nobody would mention it to you," Mrs. Black had further elucidated. "Of course he wouldn't say anything, men-folks are kind of sly and secret in their doings—even the best of 'em; and you'll find it's so, as you travel along life's pathway."

Mrs. Black had once written a piece of poetry and it had actually been printed in the *Grenoble News*; since then she frequently made use of figures of speech.

"A married woman and a widow can speak from experience," she went on. "So I thought I'd just tell you: he's as good as engaged, already."

"Do you mean Mr. Elliot?" asked Lydia incuriously.

Mrs. Black nodded. "I thought you ought to know," she said.

Mr. Elliot had entered the room upon the heels of this warning, and Lydia had promptly forgotten it. Now she paused for a swift review of the weeks which had already passed since her arrival. Mr. Elliot had been unobtrusively kind and helpful from the first, she remembered. Later, he had been indefatigable in the matter of securing workmen for the restoration of the old house, when she made it clear to him that she did not want an architect and preferred to hire Brookville men exclusively. As seemed entirely natural, the minister had called frequently to inspect the progress of the work. Twice in their rounds together they had come upon Jim Dodge; and although the clergyman was affable in his recognition and greeting, Lydia had been unpleasantly surprised by the savage look on her landscape-gardener's face as he returned the polite salutation.

"Don't you like Mr. Elliot?" she had ventured to inquire, after the second disagreeable incident of the sort.

Jim Dodge had treated her to one of

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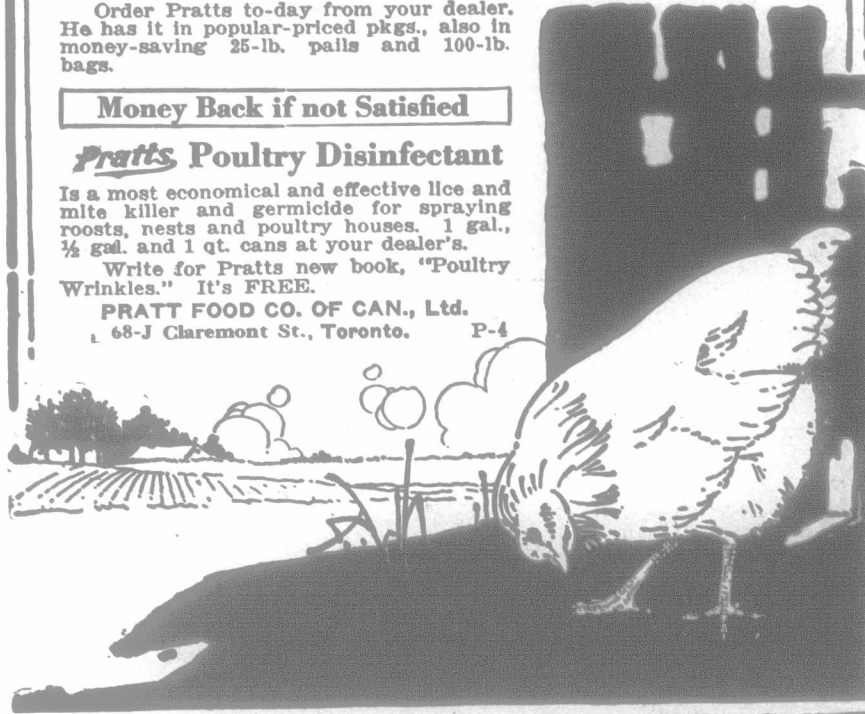
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Direct from producer and save middlemen's profit. These oats won first prize in field crop competition of 1917. Inspected by the Government and sealed before leaving my granary. Test 97% germination. Price \$1.50 per bus. Freight paid in Ont. on orders over 20 bus. Bags free.

W. B. FERGUSON, Strathroy, Ont., R.R. No. 2.



MAIL CONTRACT

SEALED TENDERS, addressed to the Postmaster General, will be received at Ottawa until noon, on Friday, the eighth day of March, 1918, for the conveyance of His Majesty's Mails, on a proposed contract for four years, six times per week on the Strathroy No. 3 Rural Route, from the 1st of April, 1918.

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 Office of Strathroy, and at the office of the Post Office Inspector, London.

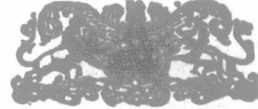
CHAS. E. H. FISHER,
Post Office Inspector,
Post Office Department, Canada, Mail Service
Branch, Ottawa, January 25th, 1918.

SEED CORN

(ESSEX GROWN)

Having only a small quantity of seed, old and prospective customers should order at once. I sell only first-class seed of standard varieties.

ED. MATHER, Leamington, Ontario



MAIL CONTRACT

SEALED TENDERS, addressed to the Postmaster-General, will be received at Ottawa until noon, on Friday, the eighth day of March, 1918, for the conveyance of His Majesty's mails, on a proposed contract for four years, six times per week on the Dorchester Station No. 6 Rural Route, from the 1st of April, 1918.

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 Office of Dorchester Station and at the office of the Post Office Inspector, London.

CHAS. E. H. FISHER,
Post Office Inspector,
Post Office Department, Canada, Mail Service
Branch, Ottawa, January 25th, 1918.

Wanted—Cord Wood


Soft or hard, loaded on cars.

Write or 'phone us.

Beachville White Lime Co.
Beachville, Ontario

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

Royal Purple Poultry Specific
Is the big link between few eggs and a full basket.



It Increases the Egg Yield

Feed Royal Purple Poultry Specific to your fowls daily in a hot or cold mash. It will keep your hens active and healthy by assisting them digest and assimilate the food eaten.

If you feed our Poultry Specific according to directions to fowls which are properly housed you will get nearly as many eggs during the winter months as you ordinarily get in the summer. It will pay for itself many times over. Read the following letter from Robt. Cameron, Hensall, Ont.

"I have been using your Royal Purple Poultry Specific for the past year and it pays for itself many times over in the extra production of eggs, and it makes my hens lay in the winter when the price of eggs is high."

Sold in large and small packages.

80 PAGE BOOK SENT FREE

Send for this valuable book which describes the common diseases of poultry and stock. It tells how to build and remodel poultry houses and how to raise calves without milk. Write for a copy now.

W. A. Jenkins Mfg. Co. Ltd., London, Canada

POULTRY AND EGGS

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

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

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

CLARK'S ORPINGTONS AND O.A.C. ROCKS;
50 Buff and White Orpington Cockerels, vigorous, good color and type, \$3 to \$5 each; 50 females good laying strains, 15 O.A.C. Laying Strain Rock Cockerels \$2.50 and \$3.00. Setting eggs in season. Order from an old and reliable breeder; satisfaction guaranteed. J. W. Clark, Cedar Row Farm, Cainsville, Ont.

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

30c. for Chickens
25c. for Old Hens

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

POULTRY BARGAIN SALE

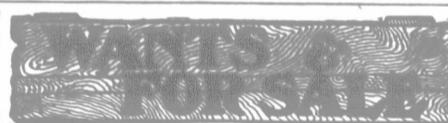
Breeding pens or single birds, S.-C. Buff, Brown, and White Leghorns; Buff and White Orpingtons; S.-C. and R.-C. Rhode Island Reds; White, Silver, and Golden faced Wyandottes; Silver Crested Polands; S.-C. Anconas; White and Barred P. Rocks. Hens two and three dollars each, Cocks and Cockerels three and five dollars each. Eggs from the above breeds, in season, two and three dollars per fifteen. The Idlewild Poultry Yards, Burlington, Ont. C. F. Coleman, Proprietor.

TRY A PACKAGE OF CRISP

McCormick's
JERSEY CREAM
Sodas
Sold Fresh Everywhere

WANTED

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



COLLIE PUPS FOR SALE—GUARANTEED
good workers, \$4 cash. Write Geo. Lind, R. No. 1, Wilton Grove, Ont.

EXPERIENCED FARMER (MARRIED)
requires position as working manager or foreman. Apply Box H, Farmer's Advocate, London, Ont.

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

GOOD FARM FOR SALE, FIRST-CLASS
100-acre farm, new brick house, bank barn, drive house, silo, never-failing spring, good stone road, about three miles to Hamilton. On Dundas Street, 1/2 mile west of Clappison's Corners, Township of West Flamboro, Wentworth County. Apply to Percy Lyons, Executor, Phone—Waterdown, 37 R. 4. P.O. Address: Dundas R. R. No. 2, or on premises, Phone 38 R. 6.

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

WANTED—CAPABLE MANAGER 3,000-ACRE
wheat and cattle ranch (Western Canada) buildings and all conveniences. High salary or interest in farm. A. Pierce, 90 St. Peter Street, Montreal.

WANTED—WORKING FOREMAN AND
wife for pure bred stock farm in Western Ontario; man to be thoroughly good general farmer and capable manager; wife to be good housekeeper and able and willing to do usual work of farmer's wife. Apply to T. M., Farmer's Advocate, London, Ont.

Have You Reached a Limit?

Can you make more of your farm, your business, your interests locally, vital to the core, in these times; or can you improve production, income, ... anything, by locating elsewhere?

Are you interested—prepared—willing to be shown—to travel and see—what your opportunities are along ten thousand miles of new Railroad? Test the

Canadian Northern Railway

the road of a thousand wonders and opportunities

Write for booklets, information and rates. State what you want—what you are interested in—any agent of the Company or General Passenger Dept., C. N. Railway, Toronto, Montreal or Winnipeg.

his dark-browed, incisive glances before replying.

"I'm afraid I can't answer that question satisfactorily, Miss Orr," was what he said.

And Lydia, wondering, desisted from further question.

"That middle one looks some like one of the young ladies that was here this morning," observed Martha, with the privileged familiarity of an old servant.

"She must have dropped it," said Lydia, slowly.

"The young ladies here has very bad manners," commented Martha, puckering her lips primly, "I wouldn't put myself out for them, if I was you, mem."

Lydia turned the picture over and gazed abstractedly at the three words there: "Lest we forget!" Beneath this pertinent quotation appeared the initials "W. E."

"If it was for me to say," went on Martha, in an injured tone, "I'd not be for feedin' up every man, woman and child that shows their face inside the grounds. Why, they don't appreciate it no more than—"

The woman's eloquent gesture appeared to include the blue-bottle fly buzzing noisily on the window-pane:

"Goodness gracious! if these flies ain't enough to drive a body crazy—what with the new paint and all."

To be continued.

The Dollar Chain

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

Contributions from Jan. 18 to Jan. 25: James M. Dickson, Atwood, Ont., \$1; Jas. H. Wilson, Owen Sound, Ont., \$3; Jas. R. Bain, Loring, Ont., \$3.50; Ella Buskin, Markdale, Ont., \$1; Jas. Rathwill, Almonte, Ont., \$1; "Teaholme", 35 cents; "Toronto", \$2; A. Bingle, Grimsby, Ont., \$1.50; Andrew R. McQuat, Lachute, Que., \$1; A. K. S., Lambeth, Ont., \$1; "In as much", \$2; Mrs. F. W. McConnell, R. 4, Brighton, Ont., \$2; Mrs. F. Wilson, Tupperville, Ont., \$5.

Previously acknowledged\$5,116.05

Total to Jan. 25th\$5,140.40

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

Current Events

Comedy films for moving pictures have been banned in Manitoba as tending to make the public too frivolous.

Hon. W. J. Hanna has resigned his position as Food Controller, and is succeeded by Mr. H. B. Thomson of Vancouver.

Ninety-eight men lost their lives in the explosion in the Allan Shaft of the collieries near near Stellarton, N. S.

The German submarine menace is being steadily reduced.

In a naval engagement which took place between the British and Turks off the Dardanelles, the British lost the monitor "Raglan" and the small monitor M-28, while the Turkish warships, "Sultan Selim" and "Midullu", formerly the German vessels "Goeben" and "Breslau", were driven into a mine-field, and subsequently completely destroyed by bombs dropped by British airmen.

Sir Edward Carson has resigned from the British War Cabinet because of differences in regard to Ireland.

The Bolshevik delegates at Brest-Litovsk have rejected the Teuton peace proposals, and, while they still hold the upper hand at Petrograd, where Premier Lenine rules by force, a critical point in Russia appears to have been reached.

In Vienna 200,000 men are still out on strike, and in Austria generally there is great unrest, with repeated reports of fraternizings between the Austrian and Russian troops, and insistent demands for peace and bread. In the meantime the Austrian troops in Northern Italy have once more retired on a considerable

front west of the Piave. . . Upon the whole the war news for the week is quite the reverse of discouraging.

Sale Dates.

Jan. 29, 1918.—Victoria County purebred Stock Association, Lindsay, Ont.—Shorthorns and Herefords.

Jan.—30, 1918.—Alex. Hastings, Crosshill, Ont.—Shorthorns, Leicester Sheep and Hampshire Hogs.

Feb. 20, 1918.—Neil McElheren, Chatsworth, Ont.—Clydesdales.

Feb. 20, 1918.—A. Stevncson, Atwood, Ont.—Shorthorns and Yorkshires.

Feb. 21, 1918.—Wm. A. Rife, Hespeler, Ont.—Holsteins.

Feb. 23, 1918.—W. A. Dryden, Brooklyn, Ont.—Shorthorns.

March 5, 1918.—J. M. Van Patter & Sons, R. 1, Aylmer, Ont.—Holsteins.

March 5, 1918.—E. C. Chambers and Sons, Burford, G. T. R. or Scotland, Ont. L. H. & B.—Holsteins.

March 5, 1918.—Montgomery Bros., Lanark, Scotland.—Clydesdales.

March 6, 1918.—G. F. Mahon, Woodstock, Ont.—Holsteins.

March 7, 1918.—L. K. Weber, Hawkesville, Ont.—Shorthorns.

March 13, 1918.—Perth District, Holstein Breeders' Club, Stratford, Ont.

March 15, 1918.—H. Clark Hanmer, Norwich, Ont.—Holsteins.

March 20, 1918.—Oxford District Holstein Breeders' Club Consignment Sale, Woodstock, Ont.—Holsteins.

March 21, 1918.—Henry Arkell & Son, R. 2, Guelph, Ont.—Oxford Ewes and Ewe Lambs, Horses, Implements, etc.

Clydesdales in Scotland.

William Montgomery of Kirkcubright, Scotland, purposes selling a number of choice Clydesdale stallions, three years old and upwards, on March 5, at Lanark Scotland. For particulars consult the advertisement in this issue, or write Laurie & Symington, Lanark, Scotland, for a catalogue giving the description and pedigree of the animals, mentioning the Farmer's Advocate.

Markets

Continued from page 169.

to \$15.50 for No. 2 hay; \$13.50 to \$14.50 for No. 3, and \$10 to \$12 for clover-mixed, ex-track.

Seeds.—The situation was about the same as the previous week. Prices offered by dealers at country points were 18c. to 21c. per lb. for alsike; 27c. to 30c. for red clover and 7c. to 10c. for timothy. The latter is almost unobtainable in Canada.

Hides.—There was no change in the market for hides last week. Beef hides, 14c., 16c. and 20c. per lb. for Nos. 3, 2 and 1, respectively, Montreal inspection. Calf skins were 18c. to 20c. for grassers and 28c. to 30c. for veals. Lamb skins were \$4.50 to \$4.65 each, and horse hides \$5 to \$6 each. Tallow was 3 1/2c. per lb. for scrap fat, and 8c. for abattoir fat. Rendered tallow was 16c. per lb.

Questions and Answers.

1st—Questions asked by bona-fide subscribers to "The Farmer's Advocate" are answered in this department free.

2nd—Questions should be clearly stated and plainly written on one side of the paper only, and must be accompanied by the full name and address of the writer.

3rd—In veterinary questions, the symptoms especially must be fully and clearly stated, otherwise satisfactory replies cannot be given.

4th—When a reply by mail is required to urgent veterinary or legal enquiries, \$1.00 must be enclosed.

Miscellaneous.

Tuberculosis in Fowl.

I killed a year old rooster the other day, and upon dressing it found that the liver was diseased. It had white spots all over and through it, also liver was enlarged. Do you suppose that it had tuberculosis, or if not would bird be fit to eat, otherwise it looked healthy. Also two or three pullets in flock kind of sickly, just sit around all the time.

Ans.—The bird had tuberculosis. You had better kill and destroy all birds showing clinical symptoms of the disease and clean out and disinfect your poultry houses.

Municipal and School Offices.

Can a man be Municipal Councillor, School Trustee and Sec.-Treasurer at the same time?

Ontario.
Ans.—Yes.

Heaves

AND HOW TO CURE
—A Standard treatment with years of success back of it to guarantee results in
Fleming's Tonic Heave Remedy
Use it on any case—No matter what else has been tried—and if three boxes fail to relieve, we will refund full amount paid. Further details in
Fleming's Vest Pocket Veterinary Adviser
Write us for a Free Copy
BEST EVER USED
Dear Sir—Enclosed find \$1.00 for 1 package of Tonic Heave Remedy. I used a package last year and completely cured a case of Heaves of some 3 years' standing.
H. B. BURKHOLDER, Lillooet, B.C.
Per Box, \$1.00; 3 for \$2.50
FLEMING BROS., Chemists
75 Church St. Toronto



Telephone Wire

and all materials for constructing rural telephone systems supplied. Guaranteed A1 quality. Write for prices.
Canadian Independent Telephone Co. Limited
261 Adelaide St. West
TORONTO

For Sale
SEED OATS
Pure and clean. Grown from selected and graded seed; hand weeded while growing. O. A. C. 72, Imp. Am. Banner and O. A. C. No. 3, three of the best and most popular varieties ever grown in Canada, all heavy yielders of first-class quality. Samples, prices and further particulars on application to the growers.
A. & W. D. FORSTER, Markham, Ont.

Great Sale of World-Famed Clydesdales

The Montgomerys, of Netherhall, Kirkcudbright, Scotland, having dissolved partnership, William Montgomery, the senior partner, who is retiring from business, will sell at
Lanark, Scotland, March 5
all the stallions, three years old and upwards, falling to his share after equal division. Purchasers of horses hired for current season must fulfill these engagements. Get catalogue from Laurie & Symington, Auctioneers, Lanark, Scotland.

DR. PAGE'S ENGLISH 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-spavins, thick pastern joints; cures lameness in tendons, most powerful absorbent known: guaranteed, or money refunded. Mailed to any address Price \$1.00.
Canadian Agents:
J. A. JOHNSTON & CO., DRUGGISTS
171 King St. East, Toronto, Ont.



MESSRS. A. J. HICKMAN & CO., (late Hickman & Scruby), Court Lodge, Egerton Kent, England, Exporters of
PEDIGREED LIVE STOCK
of all descriptions. Specialty made of draft horses, beef and dairy breeds of cattle, show and field sheep. Illustrated catalogues and testimonials on application. All enquiries answered with pleasure. Now is the time to import. Prospects were never better, and insurance against all war risks can be covered by payment of an extra 1% only.

MORE HORSEPOWER
if your teams are equipped with
Vetrolin
These pads prevent Sore Shoulders and cure Gail Sores. Your dealer will supply you, or write:
BURLINGTON BLANKET CO., LIMITED
793 King Street, West, Toronto, Canada.

For Sale, Clydesdale stallion, Invergowrie (Imp.) [11468], foaled 1907, sired by Marmion and passed in Form 1. A sure foal-getter. Was on the same route for seven years. Will be priced right. Come and see him and his colts. **MICHAEL GRAF, Formosa, Ont.** (Nearest R. R. Sta., Mildmay)

Gossip.

Manitoba Shorthorn Breeders' Organize.

A big boost was started for Shorthorns in Manitoba during the Live Stock Breeders' meetings at Brandon on Jan. 9th, when breeders of Manitoba formed the Manitoba Shorthorn Breeders' Club for the promotion of their interests. Immediate steps were taken to prepare for the holding of a sale of select bulls and females late next fall. This sale will include the choicest lot of cattle ever put up at auction in Manitoba and will go far towards setting prices for private sales. The holding of sales, the encouragement of the exhibition of superior animals, the encouragement of community breeding, co-operation in publicity and everything possible to acquaint the public with the superior merits of the great Shorthorn breed will be carried on. There was a large enthusiastic attendance for the first meeting. Officers and directors were chosen to serve until the Manitoba Winter Fair at Brandon in March. The officers were as follows: President, Andrew Graham, Pomeroy, Man.; Vice-President, J. G. Washington, Ninge, Man.; Secretary-Treasurer, J. Davidson, Myrtle, Man. A constitution and bylaws are being prepared which will be laid before the meeting in March at which a special program will be arranged and a definite policy of work outlined. The membership fee was set at \$2. All the officers and directors are giving their time absolutely free for the promotion of the Shorthorn breed and are asking the loyal support of all breeders of Reds and Roans in Manitoba.

Holsteins at Hamilton Hospital.

Among Canada's pure-bred dairy cattle breeders there is no stronger advocate for long-time milk and butter records than Dr. English, Superintendent of the Hospital for the Insane, at Hamilton, Ont. It is in long-distance records, and not seven or thirty-day tests, in which the Doctor places his faith in a real dairy cow. This accounts for the absence of 30-lb. and 700-lb., seven-day butter and milk records in the Hospital herd. However, there are individuals with semi-official tests which run as high as 17,500 lbs., which is a much stronger certificate of the real ability of the entire herd towards production. On the Hospital farm is also a splendid herd of Holstein grades. There cannot be found perhaps in all Ontario a higher producing herd of grade dairy cattle than the one which has been built up on the Hospital farm since it came under the management of Dr. English. The grading up, by use of a pure-bred sire, is producing splendid results. Thirteen one- and two-year-old heifers, sired by Sir Korndyke Wayne De Kol, have recently been sent to the Brockville Hospital Farms, and, quoting the herdsman at the Hamilton farm "They were one of the nicest lots of heifers ever seen together." The present senior sire, Sir Aaggie Dutchland of Hickory, is as good an individual as can be found among Ontario's best sires to-day, and his dam, Aaggie Burke DeKol, has 12,771 pounds of over four per cent. milk in the R. O. P. as a three-year-old. The junior sire is King Korndyke Mercena, a grandson of King Segis Pontiac Alcartra. His dam has a 14.25-lb. record as a two-year-old. He is a youngster of strong show calibre and has already been used on about a score of the young daughters of the senior sire. Those requiring young Holstein bulls should write or visit the Hospital farm. It is not often that a herd will be found where two-year-olds run around 8,000 and 9,000 lbs. of 4 per cent. milk in a year. Address all correspondence to Dr. English, Hospital for Insane, Hamilton.

A group of soldiers were telling stories round the table of a Y. M. C. A. hut. The turn of a Colonial came round. "I have at home," he said, "a pet rattlesnake. I saved its life once, and it seems to realize it. One night I was awakened by my wife, who had heard a noise downstairs. I gripped my revolver and stole down. I heard a struggle going on in the dining-room. Imagine my surprise when in the dim light from the street I saw my rattlesnake with its body tightly wound around a burglar, and its tail sticking out of the window rattling for a policeman!"

Hard, Dry Soil Can't "Stick" You

This New PETER HAMILTON Stiff Tooth Cultivator works in any kind of soil, no matter how hard or dry. For weed killing and growing big crops, you need the help of a

New PETER HAMILTON Stiff Tooth Cultivator

Surpasses all other implements for Summer-fallow work. Built with extraordinary strength all through, to stand the heaviest work of deep cultivation. Has many special features of improvement, including new relief spring. Write to-day for illustrated circular.

The Peter Hamilton Co., Limited,
PETERBOROUGH, ONT.



Agents wanted in open territory

Why Europe Makes Bigger Crops Than the United States

Average Production of European Crops is as Follows:		Average Production of American Crops is as Follows:	
Wheat	33 bushels per acre	Wheat	14 bushels per acre
Oats	45 " "	Oats	40 " "
Potatoes	199.84 " "	Potatoes	97.15 " "
Cotton in Egypt	400 pounds	Cotton	185 pounds

Europe uses a Home-Mixed Nitrate Fertilizer containing 8 per cent of Phosphoric Acid and 4 1/2 per cent of Nitrate Nitrogen. America uses a Fertilizer containing 8 per cent of Phosphoric Acid and 2 per cent of Nitrogen which is mostly unavailable.

The difference in yields is largely due to larger amount of Nitrate Nitrogen used in Europe per acre as Nitrate of Soda. Our small American acre yields are due to failure to appreciate this necessity.

Write for "What Nitrate Has Done in the Farmer's Own Hands"

Dr. WM. S. MYERS Chilean Nitrate Committee 25 Madison Ave., New York

Imported and Canadian Bred Clydesdales

COLUMBUS STABLES
We have on hand at present one of the strongest selections of imported and Canadian bred stallions we have had in the stables in years. A strong combination of size, quality and breeding. We also have 15 in-foal mares, all to the service of horses we are offering.
Smith & Richardson, Myrtle, C.P.R., Oshawa, G.N.R., Oshawa, G.T.R., Columbus, Ont.

Sundrum Clydesdales

Several choice imported and Canadian-bred mares, safe in foal. Also several prize-winning fillies and stallions, and a few show geldings, 2 and 3 years of age.
W. A. McNIVEN, R. R. No. 4, HAMILTON, ONTARIO

Aberdeen-Angus

We have a splendid selection of last spring's bull calves to offer, sired by our noted herd bulls and from our choice home-bred and imported cows. Inspection invited. Berkshire Boars and Sows.
LARKIN FARMS (MENTION FARMER'S ADVOCATE) QUEENSTON, ONTARIO

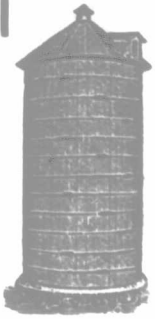
BROOKDALE FARM HEREFORDS

Herd headed by Bonnie Ingleside 7th, the Canadian-bred champion bull at Toronto, 1914-1915. We are offering several young bulls that were Toronto and Ottawa winners this year, all sired by the herd bull, as well as a few females in calf to him. Come and see our herd or write us for anything in Herefords.
W. READHEAD BROOKDALE FARM MILTON, ONT.
When writing advertisers will you kindly mention The Farmer's Advocate.

A Gold Mine on Your Farm

You can double your profits by storing up good green feed in a

BISSELL SILO



"Summer Food All Winter Long"

Scientifically built to keep silage fresh, sweet and good to the last. Built of selected timber, treated with wood preservatives that prevent decay.

THE BISSELL SILO has strong, rigid walls, air-tight doors, hoops of heavy steel. Sold by dealers, or address us direct. Get free folder. Write Dept. W.

T. E. BISSELL CO., LTD.
Elora, Ont.

Some Reasons Why

Aberdeen-Angus Cattle are Growing Popular

At Guelph Winter Fair and Toronto Fat Stock Show, 1915 and 1916, the grand champions were Aberdeen Angus. At Chicago International, out of 15 grand championships and 15 reserves, the Aberdeen-Angus have won 10 grand championships and 9 reserves. Out of 15 grand championships for carloads, Aberdeen-Angus have won 12 times. Out of 15 grand championships for Carcass Contest, Aberdeen-Angus won 14 times.

For free information, write:

W. I. Smale, Secretary,
Aberdeen-Angus Association,
BRANDON, MANITOBA
Jas. D. McGregor, President, Brandon, Manitoba

**SUNNY ACRES
ABERDEEN-ANGUS**

Bulls of serviceable age and females not akin.

WM. CHANNON & SON
P. O. and Phone - Oakwood, Ont.
Stations—Lindsay, G.T.R. and C.P.R.

Alloway Lodge Stock Farm

Angus - Southdowns - Collies
SHOW FLOCKS

Rams and ewes. Heifers in calf to Queen's Edward, 1st prize, Indiana State Fair.

Robt. McEwen, R. R. 4, London, Ont.



SUNNY SIDE HEREFORDS

Big values in young cows and heifers. If in need of a good bull, or a carload, look ours over before buying.

ARTHUR F. O'NEILL & SONS
R. R. No. 2 - DENFIELD, ONT.

Aberdeen-Angus Cattle

Suffolk Down Sheep

The greatest breeds for producing highest quality of beef and mutton. They are both hardy and prolific. We have bulls, females, rams and ewes for sale.

JAMES BOWMAN, Elm Park, Guelph, Ont.

Keep Your Live Stock Healthy

and in prime condition by supplementing the feed with
LINSEED OIL CAKE "Maple Leaf Brand"
With a trial ton order, we will send you, free, "The Veterinarian," a valuable book about the diseases of cattle.

THE CANADA LINSEED OIL MILLS, Ltd.
Toronto and Montreal

Dr Bell's Veterinary Medical Wonder. 10,000 \$1.00 bottles FREE to horsemen who give the Wonder a trial. Guaranteed for Colic, Inflammation of Lungs, Bowels, Kidneys; Fevers and Distempers, etc. Send 25c. for mailing, packing, etc. Agents wanted. Write address plainly.
Dr. Bell, V. S., Kingston, Ont.

Aberdeen-Angus

Alonzo Matthews, Manager, Forest, Ontario
H. Fraleigh, Proprietor, Forest, Ontario

Beaver Hill ABERDEEN-ANGUS

Cows with calves at foot. Bulls of serviceable age and females all ages.
ALEX McKINNEY, R. R. No. 1, Erin, Ontario

Kennelworth Farm Aberdeen-Angus

A grand lot of calves for sale; ages in the neighborhood of 7 months. Victor of Glenora at head of herd.
PETER A. THOMSON, HILLSBURG, 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, FERGUS, ONT.

Gossip.

Glengow Shorthorns and Cotswolds.

Shorthorn breeders throughout Canada, as well as those in many of the States across the border, have long recognized the quality and breeding of the Glengow herd, owned by William Smith, M. P., of Columbus, Ont. It is one of the most stable herds of the Dominion. The sires kept have always been of the best and the herd of breeding females has never been allowed to drop below standard. High prices have at times been refused in order to retain the best breeding cows in the herd and no doubt this is in a great measure responsible for the quality of the young things in the herd, all of which we had the pleasure of seeing at the farm recently. The 1917 crop of heifers and four young bulls, around twelve months, were sired by the present stock bull, Prince Sultan. The bulls are well grown and are good enough individuals to head the strongest herds. Their sire is got by the great Lavender-bred show bull, Lavender Sultan, while on the dam's side he is a straight Orange Blossom. The families represented in the herd are practically confined to five in number, which are: Wedding Gifts, Strathallans, Crimson Flowers, Kiblean Beautys and Lavenders. All are of straight Scotch breeding and the Crimson Flowers are exceptionally good milkers.

Cotswold sheep have always been a specialty of Mr. Smith's. Sales recently have been exceptionally heavy and the ten ram lambs by the former stock ram, Randolph Murray, are the only things which can be spared at present. There are fifty breeding ewes in the flock, mostly bred from imported rams.

A. G. Farrow's Shorthorns.

Imported and Canadian-bred Shorthorns of the right stamp and breeding have no closer friend than A. G. Farrow of Oakville, Ont. Mr. Farrow is a Shorthorn enthusiast and his own herd, while not large, has the appearance of being one of the most select breeding propositions we have seen for some time. The animals are not in high fit, but every female of breeding age is breeding and is a good individual. Nearly every fashionable Scotch family is included in the lot. The Cruickshank Victorias are represented by the four-year-old, American-bred Victoria Princess 8th, sired by the great bull Superb, the sire of the Chicago junior champion. The Kinellar Clementinas include the big, six-year-old show cow, Clementina 17th (imp.), which has an eleven-months-old heifer in the herd. This cow is again close to freshening. The Clippers are represented by the imported cow, Glen Buel Clipper 2nd, which traces back to Sittyton Clipper 2nd, one of Mr. Duthie's greatest breeding cows. The Rosewoods include, besides a twelve-months-old show heifer, several of the best breeding cows in the herd. The Floras are all of straight Marr breeding; the Rose Girls have six and seven Duthie-bred dams appearing on their pedigrees; the Nonpareils are only one in number; this being the three-year-old heifer, Maple Shade Nonpareil by Sittyton Favorite. She is in calf to a son of the noted sire, Uppermill Omega. The two-year-old heifer, Missie 80th, represents the Missie family. She is got by the breeding sire, Sittyton Selection, and is in calf to Mr. Farrow's young herd sire, Pride of Escana. This is perhaps one of the most promising young sires in the country to-day. He is got by that noted sire, Right Sort, Imp. His dam was by Newton Crystal and his second dam was sired by Baron Lavender, which traces to Mr. Duthie's herd sire, Silver Plate. With breeding such as this, backed by great individuality, it is but reasonable to expect that choice stock would be produced. There are several young bulls in the stable which are listed for sale. The oldest, a thick, well-made, twelve-months-old youngster, is from the Victoria cow mentioned above, and his sire is Royal Silver, a grandson of Whitehall Sultan. There are two ten-months-old bulls; one an imported calf. Those in search of young sires of quality and breeding, or those even who are only admirers of the breed, would benefit by spending a day at the farm with Mr. Farrow, who welcomes breeders and correspondence at all times.



THE NEW DE LAVAL CREAM SEPARATOR

Will Give You
Greater Capacity, Longer Wear,
Better Service, Bigger Value

THE bowl of the New De Laval has greater capacity for a given size and a given speed than any other. The experience of thousands and thousands of users has proved that a De Laval will outlast and outwear any other make.

Look well to service when you buy a cream separator. That means more than anything else. That should include not only a good working and reliable machine, but the right sort of attention and interest on the part of the seller, not only at the time the machine is set up but as long as you continue to use it. De Laval service is well known. You can depend upon it.

Value depends upon the amount and quality of service the separator gives you—what you get out of it. You get more value for your money when you buy a De Laval, because it will give you more and better service than any other separator.

Order your De Laval now and let it begin saving cream for you right away. Remember that a De Laval may be bought for cash or on such liberal terms as to save its own cost. See the local De Laval agent, or if you don't know him, write to the nearest De Laval office as below

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

SPRING VALLEY SHORTHORNS

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

ESCANA FARM SHORTHORNS

For Sale—2 herd-headers of serviceable age; one a Cruickshank Orange Blossom by Right Sort Imp. and one a Jilt, by Raphael (Imp.); also one good farmer's bull. Can also spare a half-dozen females. J. F. MITCHELL, BURLINGTON, ONT. Farm, ¼ mile from Burlington Junction

FIFTY IMPORTED SHORTHORNS

I have fifty head of newly imported Shorthorns (42 females, 8 bulls) which are acknowledged to be one of the strongest lots that have left Britain this season. You should see these if you are wanting something choice. George Isaac, (All Railroads; Bell Phone) Cobourg, Ontario.

Wm. D. Dyer, R. 3, Oshawa, Ont. Brooklin, G.T.R., C.N.R., Myrtle, C.P.R.

SHORTHORNS. Pure Scotch or Scotch topped, beef type, yet good milkers. 3 young bulls and a few young cows and heifers for sale.

SHROPSHIRE. Type and quality. A few ram lambs still left.

CLYDESDALES. Stallion, 1 year old, rich in Baron Pride blood, promises size and quality combined

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, C.P.R., G.T.R.—Salem, Ont

OAKLAND—60 SHORTHORNS

Present offering is 7 bulls from 10 to 20 months of age; also a few cows with calves at foot, all choicely bred dual-purpose animals, and priced below their value. Crown Jewel 42nd still heads this herd. JOHN ELDER & SONS, HENSALL, ONTARIO

The Notice You Have Been Looking For!

ANNOUNCING THE GREAT DRYDEN-MILLER
SALE OF

IMPORTED SHORTHORNS

SELLING AT THE UNION STOCK YARDS

TORONTO, ONT., SATURDAY, FEBRUARY 23rd, 1918

90 Head

80 Females

The Most Promising
Lot of
Breeding Shorthorns
Ever Consigned to a
Canadian Sale Ring.

Mr. Dryden's contribution will number 60 head—50 newly-imported ones and 10 from his Maple Shade Herd. The imported cattle will include 25 cows that have calves at foot to British service. The 10 home-bred cattle are choice selections from the Maple Shade herd, and nearly all are sired by the great sire and show bull, Archer's Hope (Imp.).

John Miller, Jr., of Ashburn, Ont., strengthens the offering with 30 choice selections. 25 of the total number in this consignment are also imported. Like the former offering, the majority of the breeding cows will sell with calves by their sides. In fact, it is doubtful if any other sale in years, in either the United States or Canada, has brought forward such a high percentage of cows who will also have their calves in the sale ring. Mr. Miller's home-bred females also include some of the strongest show material that will go through any sale ring this year.

10 BULLS. The bulls in this sale are rather limited in number (10 only being catalogued), but with three exceptions are all imported, and among these are prospects for not only sires of sterling worth, but youngsters that have exceptional promise for the coming shows. It will be noted that with the exception of the two-year-bull, Cluny Nonpareil Brigadier (Imp.) 107624, who is the sire of a number of calves in the sale. All bulls catalogued are around 12 months of age.

Breeders of international reputation have openly pronounced these cattle to be one of the strongest importations the American continent has seen in years. This refers to individuality as well as breeding. Among them are bulls and females that are at present strong prospects for the show rings of the coming season, and drawn as they were from such herds as those owned by Sylvester Campbell, Lady Cathcart, A. T. Gordon, A. Campbell, Lord Lovatt, Jas. Durno and others who are contributing to the best of the breed in Britain, it would be quite disappointing if this offering on February 23rd was not a little above the ordinary. We think they are—and, just once more, count up the number of females that will have calves by their side on sale day. Not one breeder of Shorthorn cattle—from British Columbia to Nova Scotia—should miss this sale.

WRITE FOR CATALOGUE. IT IS ONE OF THE MOST IMPORTANT ONES ISSUED IN YEARS

Mention the Advocate when writing. Address:

W. A. DRYDEN, Brooklin, Ont. : : : : JOHN MILLER, JR., Ashburn, Ont.

Questions and Answers.

Veterinary.

Open Joint.

Three weeks ago we noticed that one of our horses was very lame, could not put one hind foot to the ground. When moving he went on three legs. His hock was badly swollen, and upon examination we noticed a hole, like a prick by a fork, right into the joint, and from it was exuding yellowish, oily stuff which caked up like jelly. We have been treating him ever since without results.

Ans.—This is called "open joint." The fluid escaping is synovia or joint-oil. Unless very promptly and intelligently treated such cases usually prove fatal. He will probably be dead before you see this. If still alive put him in slings. Do not sling him high enough to prevent him from putting his weight upon the three sound legs. Arrange the slings sufficiently tight that when he eases on his hind legs it will suspend him, but when he again wishes to stand he can do so. Make a lotion of 1/2 oz. each of acetate of lead and sulphate of zinc in 4 tablespoonfuls of water. To this add 1 oz. each of glycerine and tincture of iron. Saturate some absorbent cotton with this and keep it to the wound. Keep this constantly moist with the lotion, and apply fresh cotton frequently. Keep hot poultices to the other parts of the joint and feed liberally on laxative, easily-digested food, as good hay, rolled oats, bran and linseed meal, and a few raw roots.

Miscellaneous.

Bronchitis.

We have a bunch of pigs which are not thriving. They have a cough. What is the trouble?
Ans.—From the meagre account of the symptoms given we are inclined to think

PURE SCOTCH SHORTHORNS

of exceptional merit. The young things we are offering this year are something extra, especially the bulls. Come and see them if you want something choice. GEO GIER & SON, WALDEMAR, ONT.

Blairgowrie Shorthorns and Shropshires

20 imported cattle, cows and heifers; all have calves at foot or are in calf to British service. Bulls for breeders wanting herd headers. Also home-bred bulls and females. Prices right. Rams and ewes in any numbers. JOHN MILLER, Myrtle Station, C. P. R., G. T. R., ASHBURN, ONTARIO

IRVINEDALE SHORTHORNS

Herd headed by Marquis Supreme 116022. For sale at present, 9 granddaughters of (Imp.) Right Sort and a good lot they are; also 2 bulls (roans), 15 months old, by Gainford Select.

JOHN WATT & SON, R. R. No. 3, Elora, Ont. G. T. R. and C. P. R.

SHORTHORN BULLS Will. A. Dryden

of my own breeding, around a year old; best families and good colors, are for sale. Also a few young, imported bulls.

Brooklin, Ontario County

Myrtle, C.P.R., Brooklin, G.T.R.

Brooklin, C.N.R.

A. G. Farrow, Oakville—SHORTHORNS

Herd headed by Proud Lancer (Imp.) and Pride of Escana, a great son of the great Right Sort Imp. I have a few bull calves of the better sort. Three imported ones left. Prices right.

Farms one mile from station. Trains every couple of hours each way.

\$500 Bull for \$325

Meadow Lawn Major is a big, growthy, 12-months-old red bull, of the Claret family. Dam, Nora 101660; sire, Escana Ringleader 95963. We are offering one red and two roan two-year-old heifers. bred in July, priced at \$250.

F. W. EWING, R. R. No. 1, ELORA, ONT.

GLENGOW SHORTHORNS

We have a choice offering in young bulls, fit for service. They are all of pure Scotch breeding, and are thick, mellow fellows, bred in the purple.

WM. SMITH, COLUMBUS, ONTARIO. Myrtle, C.P.R., Brooklin, G.T.R., Oshawa, C.N.R.

PURE SCOTCH SHORTHORN BULLS

Our present offering of young bulls, sired by our herd sire Broadhocks Star, a son of the great Newton Ringleader, Imp., are the best lot of bulls we ever had on the farm. Come and see them, or write for particulars. We also have females of the richest breeding and highest individuality.

GORDON SMITH Woodslee Sta., M. C. R., Essex County. SOUTH WOODSLEE, ONT

Robert Miller, Stouffville, Ont.

still has a few Shorthorn bulls, fit for service, and some females that are as good as can be found for the man that wants to start right in Scotch Shorthorns. They will be sold for a low price, considering the quality, and the freight will be paid.

Write for anything in Shorthorns. One hour from Toronto

FAIRVIEW SHORTHORNS AND CLYDESDALES

In Shorthorns we can offer you a choice, from 60 head, including both bulls and females, of Lavender, Missie, Augusta, Duchess of Gloster, Village Girl, Miss Ramsden and Clara breeding—the best of cattle and the best of pedigrees. In Clydesdales, write for our list of winnings at Toronto, London and Guelph 1917 shows, Canadian-bred classes. We also have a nice offering in Shropshires.

ROBERT DUFF & SONS, Myrtle Station, C.P.R. and G.T.R. MYRTLE, ONTARIO

that the pigs are suffering from bronchitis, which might be brought on by the pigs being confined in close quarters or inhaling steam. The treatment would be to fumigate by burning sulphur and forcing the patients to inhale the fumes. Very often pigs suffering from bronchitis become weak and die, although there are many cases where the pigs continue to live but remain unthrifty. Dry, comfortable quarters and nourishing feed should be given the pigs, and care should be taken that the pens and yards are sanitary.

Gossip.

Dual-Purpose Shorthorns.

Breeders desiring dual-purpose Shorthorns will have an opportunity of securing the same at H. Stevenson's auction sale, at Atwood, on February 20. The animals for sale are good individuals and are well bred. A number of choice Yorkshires are also advertised. For further particulars look up the advertisement in another column of this issue, and write Mr. Stevenson for a catalogue.

In the advertisement published in these columns in recent issues by Jacob Mogk & Son of Tavistock, Ont., who have a choice Holstein bull for sale, the record of the dam of the bull should have read a 487.5-lb. two-year-old in R. O. P. and her dam an 825.8-lb. four-year-old. Owing to a typographical error the former figure read 4,875 and the latter 8,258.

Hawkins, to his daughter—My dear, did you not say there were accidentals in that music? Daughter—Yes, there are a great many. Hawkins—Well, it's a great comfort to know that you were not doing it all on purpose.

BE YOUR OWN BLACK SMITH

FARMERS! SAVE REPAIR BILLS & VALUABLE TIME. ONE OF OUR BLACK SMITHING OUT-FITS WILL PAY FOR ITSELF. CATALOG FREE

THE HALLIDAY COMPANY, LTD. HAMILTON FACTORY DISTRIBUTORS CANADA

Cream Wanted

Ship your cream to us. We pay all express charges. We supply cans. We remit daily. We guarantee highest market price.

Ontario Creameries, Limited
London, Ontario

CREAM

We are open to buy cream both for churning and for table use. ASK ANY SHIPPER about our service and prompt returns. Ask for Prices

The figures of yesterday may be TOO LOW for to-morrow. We furnish cans.

The Toronto Creamery Co., Limited
Church Street, Toronto

F E E D S

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

If it is in the Feed Line, we have it. Write or phone for prices.

We are also buyers of Buckwheat, Oats, Goose Wheat, Barley, Peas, Beans, etc., both for feed and seed. Also Hay, Straw, Potatoes, Cabbages, Onions, Shallots, and Dutch Sets, etc.

SEND SAMPLE AND STATE QUANTITY

CRAMPSEY AND KELLY
DOVERCOURT ROAD, TORONTO

Mardella Shorthorns

Dual-purpose bulls, 20 young cows and heifers—bred, some calves by side. Size type, quality; some full of Scotch. The great massive Duke—dam gave 13,599 lbs. milk, 474 lbs. butter-fat—at the head

Thomas Graham, Port Perry, R.3, Ont.

R. O. P. SHORTHORNS THE EVERGREEN HILL HERD

Present Offering—Four young bulls from R. O. P. dams, and each tracing to three R. O. P. sires. Could also spare a couple of R.O.P. cows.

S. W. Jackson R. R. 4, Woodstock, Ont.

Glenfoyle Dual-Purpose Shorthorns

Herd bull College Duke 4th, 95430, big, thick, young cows and heifers for sale; 8 young bulls, some herd headers. Also a yearling Clyde stallion.

STEWART M. GRAHAM, LINDSAY, ONT.

MAPLE LEAF FARM

Shorthorns, some good young bulls and females. Shropshires, 50 lambs. Our flock leading winners on Eastern show circuit.

John Baker, Hampton, R. No. 1, Ont.

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.

Shorthorns—Pail-fillers for sale. Young bull and heifers out of high record cows. A few young cows and bulls with extra good breeding and quality.

PETER CHRISTIE & SON
Manchester P. O. Port Perry, Ont. Co.

For Sale The following Scotch Shorthorns. A year-old Imp. Augustus bull, Augustine =107804s. Two good cows with their calves and two heifers; also five bulls ready for service. Will be sold right away. Inspection invited.

John Senn & Son, Caledonia R. R. No. 3, Haldimand Co.

Questions and Answers. Miscellaneous.

Flax-seed for Cattle.

Is flax-seed meal good for cattle? How much should be fed to each head when feeding silage and straw? When feeding shorts to hogs, which are about three months old, how much flax-seed meal should I mix with the shorts? C. L.

Ans.—Flax-seed meal is certainly good feed for stock. It tends to put them in a good thrifty condition. The amount to feed will depend a good deal on the class of cattle. For cows giving a fairly large flow of milk, or for fattening cattle, upwards of a pound a day might be fed. For young cattle some cheaper concentrates should be found to feed with silage and straw. A handful of flax-seed meal given to the animals at each feed would tend to keep them in good condition, if fed along with some other concentrates. It is not common practice to feed much flax-seed meal to hogs, although some have found it economical to put a couple of handfuls of flax-seed to a pail of chop or shorts and soak it a feed ahead.

Rebuilding Barn.

1. We have purchased a frame barn which is resting on an 8-foot cement wall. We purpose moving it by tearing it down and rebuilding. The threshing floor is a ground floor but is situated a little to one end of the barn, leaving the short row 18 feet wide while the other one is 42 feet wide and has 18-foot posts. Would it be practicable to move this barn and put it on an 8-foot wall, or build a 4-foot cement wall and mortise 4-foot posts on to the main posts so as to make an 8-foot stable wall?

2. Which makes the best all-round stable wall, hollow cement blocks or brick blocks?

3. How much gravel and cement will it take for a 4-foot wall, 1 foot thick for the building mentioned?

4. How much gravel and cement will it require to floor 42 by 36 feet of the building with the floor 4 inches thick?

5. How many shingles will it take to re-shingle the barn; rafters are 23 feet long, 5 inches to the weather?

6. How many shingle nails will it take? Would you advise wire or cut nails?

7. How many 8-penny nails would it take to put the siding on? G. F.

Ans.—1. If care is exercised in tearing down the barn there should be little difficulty in re-erecting it on an 8-foot wall. It is also quite feasible to mortise timber on to the ends of the main posts so as to get the height in the stable. Unless you have to move the barn a long distance, it is quite possible to move it intact, thus saving the trouble of wrecking it. We have known of large barns being moved a considerable distance and then raised on to a stone or cement foundation. In tearing a barn down, the siding and roofing are more or less damaged. Of course, if the roof is about done anyway, the loss of material in removing the roof would not be great.

2. Brick makes a very good wall, so does the hollow cement block. It would largely be a matter of which would be the more economical. This would depend somewhat on the material at hand or the distance it would have to be drawn.

3. It will require about 33 cubic yards of gravel, and if the concrete is mixed in the proportion of one of cement to eight of gravel it will require about 28 barrels of cement.

4. It will require about 19 cubic yards of gravel and 16 barrels of cement.

5. It will require about 24 squares of shingles.

6 and 7. Some prefer wire and some cut nails; both last fairly well, but we are inclined to believe the cut nails will last the longer. We advise you to consult your carpenter regarding the number of nails required, as some carpenters use a considerably larger quantity of nails than others.

Satisfactorily Explained.—Mrs. Youngbride: "Our cook says those eggs you sent yesterday were quite old."

Goose: "Very sorry, ma'am. They were the best we could get. You see, all the young chickens were killed off for the holiday trade, so the old hens are the only ones left to do the laying."

Mrs. Youngbride: "Oh, to be sure! I hadn't thought of that."—Omaha News.

Royal Purple Stock Specific

This concentrate stock tonic, blood purifier and food digester is made from pure ingredients and contains no filler. It aids digestion to such an extent that food which would otherwise be voided and lost is turned into muscle, fat or milk, as the case may be. Try Royal Purple Stock Specific on your poorest, most rundown animal. It will give you surprising results.

This Great Animal Conditioner

will enable you to fatten a horse very rapidly, because all the nourishment is liberated from the food. DAIRY COWS give 2 to 5 pounds more milk each daily when fed Royal Purple Stock Specific. It also improves their physical condition.

Mrs. Fred Bush, Wainfleet, Ont., writes us as follows: "I have tried Royal Purple Stock Specific in feeding cows. Weighed one cow's milk, and find a great gain in ten days' time, also a great improvement in cow's condition. Order Royal Purple from your feedman. It is sold in large and small packages."

FREE BOOK We will gladly send you our 80-page book, describing the common diseases of stock and poultry. It tells how to build poultry houses and feed calves without milk. Write for your copy.

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

Dual Purpose Shorthorns

Herd Headed By DOMINATOR No. 106224

whose grandam on his mother's side has an R.O.P. record of 13,535 lbs. milk, testing 3.99; and whose dam has an R.O.P. record of 10,689 lbs. milk, testing 3.88.

The cows in our herd are large and strictly dual-purpose in type and performance, many of them have high milk records.

A few cows, heifers and young bulls for sale, three of the latter are out of cows in the herd which have given between 10,000 and 11,000 lbs. of milk each in one lactation period.

Weldwood Farm Farmer's Advocate, London, Ontario

With this issue Mr. A. Stevenson wishes to announce that having sold his farm, he is selling by Public Auction his entire herd of

Registered Dual-Purpose Shorthorns

AT THE FARM, NEAR
ATWOOD, ONT., WEDNESDAY, FEBRUARY 20, 1918

In addition to the Shorthorns, there will also be sold Mr. Stevenson's prize-winning herd of pure-bred Yorkshires; everything going without reserve. Write for catalogue and watch these columns for further advertisements.

A. STEVENSON - Mention the Advocate - ATWOOD, ONTARIO
G.T.R. trains will stop at farm on day of sale, 10.50 a. m. and 4 p. m. Buy ticket to Henfrey.

SHORTHORNS--T.L. Mercer, Markdale, Ont.

ROSEWOOD CHAMPION, by Nonpareil Archer, Imp., at the head of the herd. I have almost 100 Shorthorns in my stables at present. Marr Missies, Campbell-bred Clarets, Nonpareils, Minas, Rosemarys, etc.—the best of breeding and the best of cattle; bulls or females; also have a few Herefords

SALEM SHORTHORNS

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

J. A. WATT, ELORA, ONT.

SEVENTY-THREE HEAD OF SHORTHORNS

Ten young bulls of serviceable age, Nonpareil Ramsden =101081=, and Royal Red Blood =77521=, at the head of the herd. The ten young bulls range in age from 8 to 15 months, and are for immediate sale. They are out of good dams which will bear inspection. Our cows and heifers will please, and you'll like the bulls.

JAMES McPHERSON & SONS, DUNDALK, ONTARIO.

PLEASANT VALLEY FARMS

Herd headed by (Imp.) Newton Grand Champion and Belmont Beau. We have for sale a goodly number of real good young bulls that will suit the most exacting; also females. Inspection invited.

Geo. Amos & Sons C. P. R., 11 miles east of Guelph Moffat, Ontario

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.

CLYDESDALES AND SHORTHORNS

I have on hand a number of real choice young mares and fillies. Eight excellent young bulls, from 9 to 12 months, of Right Sort and Royal Blood breeding; also a number of females. Inspection invited.

J. B. CALDER, R.R. 3, GLANFORD STATION, ONTARIO

IMPORTED SHORTHORN BULLS

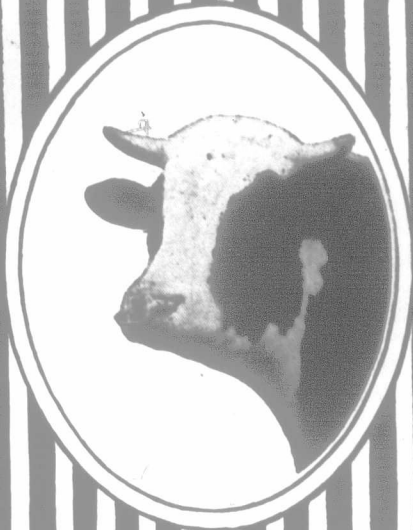
We have several newly-imported bulls of serviceable age — Cruikshank, Marr and Duthie breeding, as well as a number of choice, home-bred young steers, got by our noted herd sire, Proud Monarch, by Royal Blood. Get our prices before buying elsewhere.

RICHARDSON BROS., Columbus, 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.



MANOR FARM HOLSTEINS

Announcing the First Offering in Females

My stables are getting too crowded and I must make room. No matter whether they are the mature cows I have been trying to retain, or even daughters of my own herd sires, freshening with their first calves, some will have to go to make room for the youngsters now coming. The price asked on a limited number of cows should clear, and clear them quick. If you are in the market, don't delay.

I also have sons of both my junior and senior sires, King Korndyke Sadie Keyes and King Segis Pontiac Posch.

Gordon S. Gooderham, Clarkson, Ont.

FOR QUICK SALE Royalton Korndyke King

This tried and proven pure-bred Holstein sire, a three-quarter brother of Red Apple Korndyke 8th, the \$25,000 header of Mr. Cabana's great herd, is offered. He is right in breeding and individuality. Dam, Royalton De Kol Violet, at ten years old, made 23,000 lbs. of milk and 1,000 lbs. butter in eight months, and in one year, 29,963.3 lbs. milk and 1,300.4 lbs. butter. She is a world's champion ten-year-old. Her best day's milk was 119 lbs., and 8 months after freshening she gave in 7 days, 611.6 lbs. milk and 25.6 lbs. butter. Her combined milk and butter records are excelled by only one cow in the world. Royalton Korndyke King is one of the highest yearly record sires in Canada, and is young and right in every way. Ninety per cent. of his calves are heifers and they are very promising. Selling to avoid inbreeding. Prospective purchasers will be met at Ingersoll during the next two weeks. If interested, write at once to

BYRON G. JENVEY, INGERSOLL, ONTARIO

LLENROC STOCK FARM

On the Boulevard of the Beautiful Niagara River
A few well-bred young Holstein bulls for sale; also a Belgian stallion, weight about a ton. Address:
W. C. HOUCK, R. R. No. 1, CHIPPAWA, ONT.

WILLOWBANKS HOLSTEIN-FRIESIANS

Herd headed by King Walker Pride (C. H. B., 17362), (A. H. B., 207261) who is a son of the famous King Walker and the great show cow, Pride Hengerveld Lennox, 30.12, who is a granddaughter of Blanche Lyons De Kol, 33.31 and King Segis, who is a grandsire of world-champion cow, also of the two highest-priced bulls of the breed. Young stock for sale.

C. V. Robbins Bell Phone Wellandport, Ontario

RECORD OF PERFORMANCE HOLSTEINS

Present Offering—One bull, 3 years old, large, strong, and a fine individual. Sire, King Lyons Colantha, whose six nearest dams average 30.10 lbs. butter in 7 days. Dam, a 487.5-lb. 2-year-old in R.O.P., her dam at 4 years made 825.8 lbs. butter from 17,474 lbs. milk. Write at once if interested. Priced reasonable. We also have several bull calves to offer. Write us your wants, or better come and see them.

J. Mogk & Son,
R. R. No. 1,
Tavistock, Ontario.

Questions and Answers.

Miscellaneous.

Lump on Leg.

I have a four-year-old cow with a lump on her front foot, a little above the knee. It is about the size of a teacup and is growing larger. Would tying a silk thread around it remove it? A. H. T.

Ans.—Unless the lump had a constricted neck the silk thread would not be practicable; in fact, in a case of this nature we do not think it could be used. If the lump is of the nature of a tumor and is on the surface only, it may be dissected out and then the wound treated with antiseptics until it heals. It is possible that the lump is due to a bruise which has caused slight inflammation and the forming of pus. In this case it would be sore. Bathing would bring it to a head so that it could be lanced. If it is a hard lump and does not contain pus, applying a liniment made of 4 drams each of iodine and iodide of potassium and 4 ounces each of alcohol and glycerine, may remove it. If the lump is growing from the bone, it is advisable to have your veterinarian examine it and advise treatment.

Mixed Grains.

I would like to have some information regarding the sowing of mixed grains; what varieties are best to use and the quantity of seed to sow? A. A. M.

Ans.—Numerous experiments carried on have proven that a mixture of 1 bushel of oats and 1 bushel of barley gives the heaviest yield. Increasing or decreasing the quantity of either of these grains causes a slight falling off in yield. An early oat, such as the Daubeny or O. A. C. No. 3, sown with No. 21 barley gives excellent satisfaction. According to Bulletin No. 228, "Farm Crops", by Dr. C. A. Zavitz, "experiments have shown that a combination of the best variety of oats and best variety of barley grown together will produce on an average fully 200 pounds more per acre than either one when grown alone." Some use a late oat and mix wheat with it, but very often the wheat in the mixture is a failure. The trouble with sowing peas with oats is that there is a tendency for them to pull the oats down. One peck of small peas or two pecks of large peas added to the usual quantity of oats sown per acre makes a fairly good mixture. When growing oats and peas for green feed, a half bushel of peas is used to a bushel of oats.

HIGHLAND LAKE FARMS

Herd sire, AVONDALE PONTIAC ECHO, (under lease), a son of MAY ECHO SYLVIA, the world's record cow. Only one other 41-lb. bull in Canada.
We have young bulls for sale whose two nearest dams (both Canadian champions) average as high as 35.62 lbs. butter in seven days; another whose two nearest dams are both 100-lb cows; and one ready for service, from a 41-lb. sire and an 18,000-lb. two-year-old dam. SEND FOR OUR BOOK OF BULLS A few females for sale. Satisfaction guaranteed.

R. W. E. BURNABY (Farm at Stop, 55, Yonge St. Radial) JEFFERSON, ONT.

Hospital for Insane, Hamilton, Ont.

Present offerings are 4 grandsons of Dutchland Colantha Sir Mona, and high-testing, large-producing R. of P. dams of Korndyke and Aaggie DeKol breeding. Born during April and May, 1917. Apply to Superintendent.

Roycroft Farm Holstein-Friesians

Our 30-lb. bulls have all been sold, but we still have several sons of Pontiac Korndyke of Het Loo, that are just nearing serviceable age. Get one of these for your next herd sire, have a brother of Het Loo Pieterje, the world's greatest junior two-year-old at the head of your herd. We also have a 9 months, 27.78-lb. son of King Segis Alcartra; and one other, same age, by Dutchland Colantha Sir Mona. See them at once or write early.

W. L. Shaw, Roycroft Farm (Take Yonge Street Radial Cars from N. Toronto) Newmarket, Ont.

SUMMER HILL HOLSTEINS

A number of choicely-bred bulls. One a real show bull, beautifully marked, dam a 30.76 junior four-year-old; sire's dam 34.60. The three nearest dams average over 100 lbs. milk a day. Can spare a few good heifers and cows.

D. C. FLATT & SON, R. R. 2, HAMILTON, ONT.

MAPLE SOIL STOCK FARM OF HOLSTEINS

I am offering a few choice heifers sired by King Segis Pieterje that have just been bred to FINDERNE King May Fayne; also some heifers and cows due to freshen all the way from February until April. All bred to FINDERNE King May Fayne, a few heifer calves sired by FINDERNE King; get some good ones.

H. C. HOLTBY, R. R. No. 1, GLANWORTH, ONTARIO

KING SEGIS WALKER'S DAUGHTERS

STILL MAKING LARGE RECORDS

If you want a young bull let me send you some photos and pedigrees. A few females left.

A. A. FAREWELL,
OSHAWA, ONT.

CLOVER BAR HOLSTEINS

We are now offering a number of young bulls, sired by our senior herd-header, Francy 3rd's Hartog 2nd, the noted son of the famous old Francy 3rd and Canary Mercedes Hartog; also a few females, all choice individuals.

DUMFRIES FARM HOLSTEINS

Present Offering—A few bull calves.

S. G. & ERLE KITCHEN, ST. GEORGE, ONT

HOMESTEAD HOLSTEIN STOCK FARM

I must sell 12 or 15 young cows, due to freshen in March or April in order to make room for young stock, also a few young bulls. For further particulars, write

B. R. BARR, Harrietsville Station, C.P.R. Phone Connection, MOSSLEY, R. 1

When writing please mention Farmer's Advocate

Potatoes for Seed.

How many bushels of potatoes are used to the acre for seed?

2. What would you advise sowing in a field of light clay loam, which is infested with twitch grass. The field was in hoed crop last year, but we were unable to hoe it.

Ans.—The number of bushels to plant depends somewhat on the quality and size of the seed. It is necessary to have one eye to each set and it would be better if there were two. Consequently, varieties of potatoes which have but few eyes require a larger quantity for seed. Twelve to fifteen bushels should plant an acre, although some use as high as eighteen bushels.

2. A field which is badly infested with twitch grass is rather an unsatisfactory proposition for a hoed crop, but it might be summer-fallowed up to the first of July and then rape sown in rows, so that it could be cultivated. We have known of twitch grass being cleaned from a field by this treatment. The rape makes excellent pasture for stock in the fall. Corn sown in hills so that it could be cultivated each way might do all right, but if the season were unfavorable for regular cultivation the twitch grass would get ahead of the corn.

Veterinary.

High-Colored Urine.

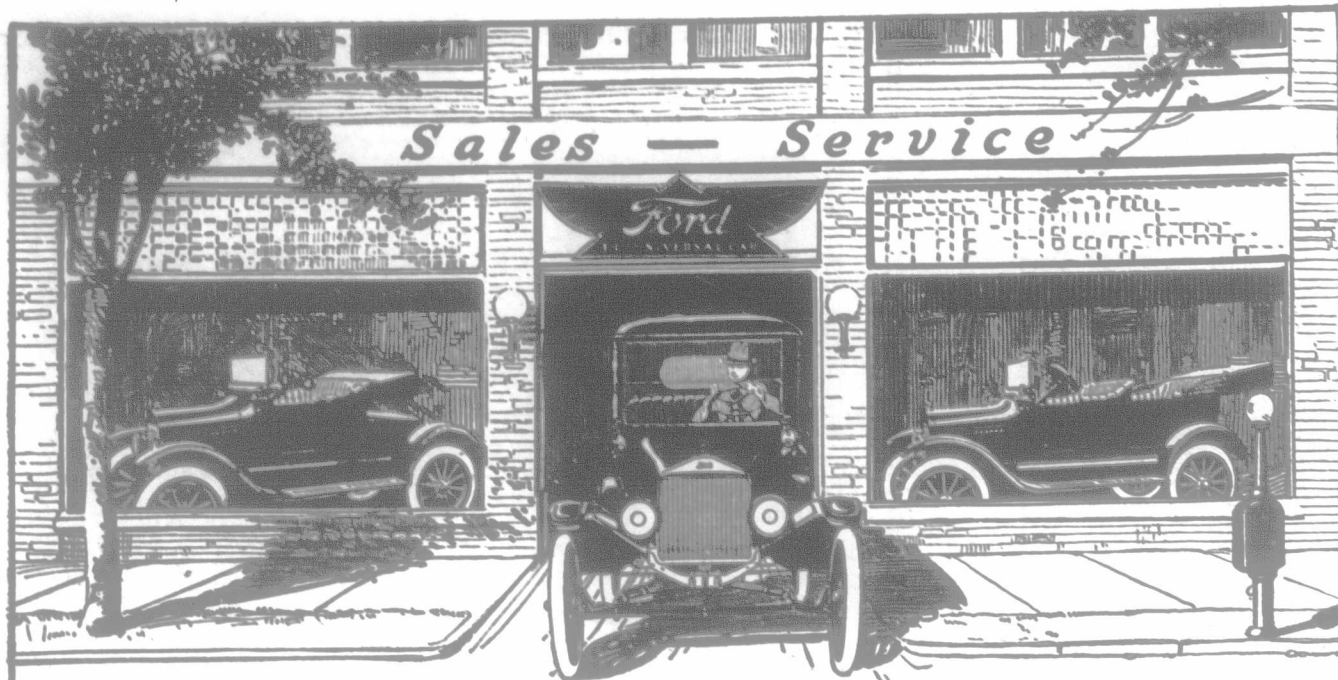
Two-year-old filly passes high-colored urine. She did the same last year and seemed to be partially paralyzed. Is this azoturia?

Ans.—It is not azoturia. Purge her with 1 pint raw linseed oil. When the bowels have regained their normal condition give 3 drams nitrate of potassium twice daily for three days and follow up with 1 dram nux vomica three times daily.

Unthrifty Calves.

Spring calves are fed on hay and oat straw, and some whole oats and pulped turnips. They are not thriving well, do not chew their cuds properly and have not proper use of their hind legs. W. C. D.

Ans.—Feed on good clover hay if possible, if not give good timothy. Give sufficient hay to obviate the need of straw. Get the oats chopped and feed reasonable quantities, continue feeding pulped turnips. Mix equal parts of powdered gentian, ginger, nux vomica and bicarbonate of soda, and give a teaspoonful to each three times daily. Add to the milk or water given one-quarter of its bulk of lime water.



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COURTEOUS attention to your needs wherever you may travel is something you appreciate, and being a Ford owner you can get it. You are always "among friends".

There are more than 700 Ford Dealer Service Stations throughout Canada. These are always within easy reach of Ford owners—for gasoline, oil, tires, repairs, accessories, expert advice or motor adjustments.

The cost of Ford Service is as remarkably low as the cost of the car itself. Nineteen of the most called for parts cost only \$5.40. Just compare this with the cost of spare parts for other cars and you will realize the advantage of owning a Ford.

The Ford	Runabout - -	\$475
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	Coupe - -	\$770
	Sedan - - -	\$970

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F. O. B. FORD, ONT.

Ford Motor Company of Canada, Limited
Ford, Ontario

Sunnyhill Offering:

Holstein bulls and heifers.
Shropshire ram lambs.
Yorkshire pigs, both sexes, all ages.

WRITE TO
WM. MANNING & SONS
WOODVILLE, ONT.

For Milk, Butter, Cheese, Veal Holstein Cows Stand Supreme

If you try just one animal you will very soon want more.

WRITE THE
HOLSTEIN-FRIESIAN ASSOCIATION
W. A. Clemons, Sec'y, - St. George, Ont.

Holstein Bulls

of serviceable age and younger; from dams with records of 30 lbs. down.

Write for prices.
R. M. HOLTBY, R. R. 4, Port Perry, Ont.

EVERGREEN STOCK FARM HOLSTEIN-FRIESIANS

Our unparalleled success at the Toronto and London Exhibitions during the past five years places Evergreen Holsteins in a class by themselves. The strong combination of size and type found in our individuals makes record producers. Your next herd bull should be carefully selected. See our offering before buying elsewhere.

Record Breeding and Great Individuality are combined in the now offering from daughters of Lewis Prilly Rouble Hartog, and sired by Baron Colantha Fayne. They will improve most herds. Several are of serviceable age. See these.

T. W. McQUEEN, OXFORD COUNTY, TILLSONBURG, ONTARIO.

Pioneer Farm Holstein Herd With big yearly records and high average butter-fat test, and headed by Canary Hartog, grandson of Royalton Violet, at 10 years, 30.39 lbs. butter, 735 lbs. milk in 7 days; 29.963 lbs. milk, 1,300 lbs. butter in 1 year. Sire's dam, Royalton De Kol Fern, 34.60 lbs. butter in 7 days, 116 lbs. milk in 1 day. Bull calves for sale born after Jan. 25th, 1917; dams over 11,000 lbs. milk up to nearly 16,000 lbs. milk in 1 year. at 2 years old. Walburn Rivers, R.R. No. 5, Ingersoll, Ontario. Phone 343L, Ingersoll Independent Line.

Riverside Holsteins Offer Inducements

A choice young bull from a 32-lb. dam, and a sire with a 38-lb. sister. Born last March. A beauty. Fifteen other young bulls with strong R.O.M. backing.

J. W. RICHARDSON, CALEDONIA, ONTARIO

LOW BANKS HIGH-RECORD HOLSTEINS. Only one bull left of last season's entire crop of calves. He is a beauty—straight as a string. Dark colored. His dam, "Hester Pietje Netherland", record, 30.14 lbs. butter in 7 days, and her first two daughters have each made over 19 lbs. butter in 7 days as junior 2-year-olds. Remember—his sire is a son of Pontiac Korndyke, and his ten first daughters tested average 19.64 lbs. butter and 436 lbs. milk at an average age of 2 years and 17 days. He won't be here long. Write for pedigree and price. **K. M. Daigleish, Kenmore, Ont.**

HOLSTEINS

Present Offering—Only a few young bull calves. None of serviceable age.
M. H. HALEY, SPRINGFORD, ONTARIO

Questions and Answers. Miscellaneous.

Weak Back.

I have a dog that has been badly crippled for about four months. He appears to be weak in the small of his back, sometimes he can hardly walk around. E. P.

Ans.—The symptoms are rather indefinite. It may be partial paralysis. Give a purgative, follow with three grains nux vomica, twice daily. It is possible that the muscles of the back have become strained or weak. Applying a blister or strong stimulant liniment may give relief.

Scratches.

I have a six-year-old horse which has a bad attack of scratches. What is a good cure for the same? K. J.

Ans.—Give a purgative of 8 drams aloes and 2 drams ginger, and follow up with 1½ ounces Fowler's solution of arsenic twice daily for a week. Apply hot linseed poultices to the affected parts for two days and then dress the parts three times daily with a lotion made of one ounce each of acetate of lead and sulphate of zinc to a pint of water. Do not wash the legs. If the parts get wet or muddy, rub well until dry. Pregnant mares should not be given the purgative.

Share Farming Agreement.

A had a farm on shares with B in 1916, from February until December of the same year. The agreement was for that many months. Could B compel A to leave the same quantity of feed and grain on the place February 1, 1918, as was on the place when A took it over in 1917 without having any agreement for the year 1917? M. C.

Ans.—It would depend a good deal on the wording of the agreement. It would naturally be expected that the same quantity of feed would be left on the place as was there at the beginning of the term. It is unfortunate that no agreement was made for 1917, and shows a laxity of business principles. However, if nothing was said to the contrary, the agreement of 1916 would be continued in 1917. The fact that the farm was worked on shares in 1917 without any agreement having been made would indicate that the agreement of 1916 would be lived up to.

Bitter Milk.

I have two cows standing together in the stable; one is 11 years old, the other 6. They feed from the same manger, on exactly the same kind of fodder—corn, clover hay and turnips make up the ration. The older cow is due to freshen on April 2, and the younger one early in March. The milk from the older cow has a bad taste and there is an odor to it, while that from the younger cow is perfectly good. Can you suggest a cause? W. A.

Ans.—This sometimes happens as a cow nears the end of her lactation period and very little can be done for it. If the milk goes bitter after it stands for a while, it may be due to a development of bacteria which may be present in the air or water used in washing the pails. If the latter is the cause, the remedy is quite simple, but were this the cause the milk from both cows would be the same. It is advisable to dry the cow and no doubt the milk will be all right when she freshens again.

Feeding Calves.

The first week each calf gets all the new milk it would drink out of the pail. From one week to four weeks it gets 2 quarts of whole milk, 2 quarts of lukewarm water with 3 ounces of cooked oil-cake meal and finely-ground oatmeal mixed in night and morning. The second month each calf gets 1½ quarts of milk and 2½ quarts of lukewarm water, with 3 ounces of oil-cake and oatmeal porridge twice a day. The third month the milk is reduced to one quart night and morning and the fourth and fifth months each calf gets one-half quart of milk along with the oil-cake and oatmeal porridge. As soon as the calf will eat, oats and a little shorts are fed it, and it gets all the clover hay it will eat. Are our calves fed satisfactorily? Should the quantity of milk be increased, or what feed could you recommend? J. E. S.

Ans.—Your calves are fed a great deal better than many and they should be growthy and thrifty on such treatment. Instead of feeding shorts we would use bran.

17
SEPA

A SOLID PRO... well ma... perfect skinn... only \$17.50. Cl... or cold milk. M... cream. Bowl... easily cleaned... picture, which... capacity mach...

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Shipments ma... Winnipeg, M... and St. John... dairy is large... handsome fro... payment plan... AMERICAN... Box 3200

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We have b... Champions... We bred a... champion B... improvement... and prices.

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FULLY GUARANTEED
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A SOLID PROPOSITION to send new, well made, easy running, perfect skimming separator for only \$17.95. Closely skims warm or cold milk. Makes heavy or light cream. Bowl a sanitary material, easily cleaned. Different from picture, which illustrates larger capacity machines. See our easy Monthly Payment Plan. Shipments made promptly from Winnipeg, Man., Toronto, Ont. and St. John, N. B. Whether dairy is large or small, write for handsome free catalog and easy payment plan. **AMERICAN SEPARATOR CO.** Box 3200 Bainbridge, N. Y.

LIFT YOUR CORNS OFF WITH FINGERS

Tells How to Loosen a Tender Corn or Callus so it Lifts Out Without Pain.

A noted Cincinnati chemist discovered a new ether compound and called it **Freezone**, and it now can be had in tiny bottles as hereshown for a few cents from any drug store.

You simply apply a few drops of Freezone upon a tender corn or painful callus and instantly the soreness disappears, then shortly you will find the corn or callus so loose that you can just lift it off with the fingers.

No pain, not a bit of soreness, either when applying Freezone or afterward, and it doesn't even irritate the skin.

Hard corns, soft corns, or corns between the toes, also toughened calluses, just shrivel up and lift off so easy. It is wonderful! Seems magical! It works like a charm! Your druggist has Freezone. Ask him!



Questions and Answers.
Miscellaneous.

Handling Wool—Killing Woodchucks.

1. Is there an association in Ontario for handling wool? if so, how may I get in touch with them?

2. What is the name of the chemical that is used to smother groundhogs, gophers, etc. in their dens?

Ans.—The Ontario Sheep Breeders' Association handled 270,000 lbs. of wool last year. Write the secretary, R. W. Wade, Parliament Bldgs., Toronto.

2. Carbon bisulphide.

Votes for Women—School Trustees.

Would you please print qualifications for women voters at the different elections? Some women seem to think that because they voted at the Dominion election, that they can vote at all the lesser ones.

In view of a provincial election coming on it would just be as well for people to know, in case their name had to be put on the assessment roll. Also for municipal elections, and the school boards.

Do women need to have property to vote at such, and do they need to be assessed? Also if a woman has property jointly with her husband, do they both need to be assessed to have votes? What are the qualifications for a woman to be put on as school trustee?

Ontario. **ONE INTERESTED.**

Ans.—Generally speaking, every woman who is a British subject, is 21 years of age or over, and resident in Canada for 12 months, and in the Electoral District for 3 months, is entitled to be put on the voters' list for the subdivision in which she resides and vote at the election for the Provincial Legislative Assembly. Property qualification is not requisite. For a woman to be entitled to vote at a Municipal election, she must be either unmarried or a widow, at least 21 years old, a British subject, and sufficiently rated on the last revised Assessment Roll of the Municipality in respect of either land or income. The amount varies according as the municipality is a township, village, town or city. To be qualified to vote at an election for public school trustees a woman must be 21 years old or over, a ratepayer, and assessed as public school supporter. To be legally qualified to be elected a public school trustee a woman must be a British subject, of the full age of 21 years and a resident ratepayer.

A Hydraulic Ram.

I have a running spring 1,000 feet away from the buildings, and 50 or 60 feet lower than buildings. Could I have the water forced from the spring to the buildings by means of a hydraulic ram? If so, how much fall would I need to have to force the water to that height and distance? What size of piping would I need? Which is better, iron or galvanized piping? As there isn't a great deal of fall away from the spring, I was wondering if there is some make of hydraulic ram that would work with less fall than others. As I do not know very much about this kind of waterworks, I will appreciate any information you can give me on how to go about the construction of the same.

R. W. M.

Ans.—Hydraulic rams vary in their proportions, they will lift water from 6 to 30 ft. for every foot of fall according to the size and style of the ram. Thus to lift water 60 ft. with certain style of ram you would need a 10ft. of fall while with other makes you would require only 2 ft. of fall. Some of the following firms should be able to provide a ram suitable for your purposes: R. McDougal Co., Galt, Ont.; Goulds Manufacturing Co., Seneca Falls, N. Y.; F. E. Myers Bros., Ashland, Ohio; Montgomery-Ward & Co., Chicago, Ill.; Niagara Hydraulic Engine Co., New York; Power Speciality Co., New York; Rumsey Co., Seneca Falls, N. Y.; Rifle Engine Manufacturing Co., New York; Sears-Roebuck & Co., Chicago, Illinois.

The size of piping cannot be stated until one knows the amount of water you have and the size and style of ram you would install. The details of piping you will get from the makers. Galvanized iron piping will last very much longer than black iron, probably two or three times as long anyway.

W. H. D.

The Feed for Hungry Calves



Conserve the milk and help the nation. You do not need to feed milk to your calves if you use **Royal Purple Calf Meal**. It is a perfect substitute for milk. It is partially cooked, and the pure ingredients are so combined that the meal will not injure or derange the digestive organs of even the youngest calf. If you want rapid development and healthy calves, feed

Royal Purple Calf Meal

Let the following unsolicited testimonial letters convince you of the sterling qualities of our calf meal.

John D. Hamilton, Port Hope, Ont., writes:
"I have used Royal Purple Calf Meal and find it perfectly satisfactory, and I am recommending to my friends. I might add that I find no trouble with the calves scouring while using this meal. I have tried many other Calf meals, but never found one that proved satisfactory until I got Royal Purple."

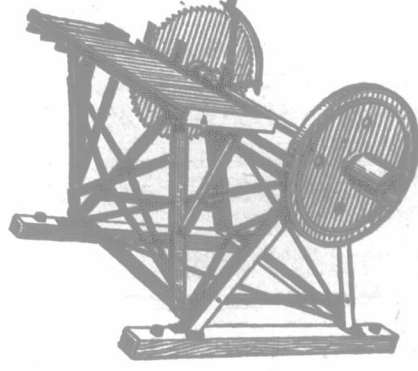
S. M. Osborne, Maxwell, Ont., writes:
"We have a pretty good calf which is now four months old and weighs 400 lbs. I think your calf meal is fine. I have never fed anything that will make a calf grow as fast as this meal."

Order Royal Purple from your feedman. It is sold in 25, 50 and 100-lb. bags.

W. A. Jenkins Mfg. Co., Limited
London, Canada

FREE BOOK
Send for our 80-page book which tells how to raise calves without milk. It also describes fully the common diseases of stock and poultry.

A Wood Saw That Won't Wear Out



The Page Wood Saw will outlast any similar machine on the market. The Steel Frame is the most rigid and strongest of its style—and it is the only one to which there is no shake when in operation. It is built to run and last a life-time.

Shaft of 4-foot, 4-inch cold-rolled steel.

Shaft-boxes dust-proof and non-heating.

Tilting Table has roller at one end to facilitate handling of long poles.

PRICE—as low as we can get it—\$25.00, not including saw blades, delivered to any point in Old Ontario.

We can supply saw blades with any size of hole. In ordering blades for other makes of frames, be sure to mention the size of hole wanted.

SAW BLADE PRICES

20-inch	\$ 5.00
22-inch	5.75
24-inch	6.60
26-inch	7.75
28-inch	9.00
30-inch	10.00

THE PAGE WIRE FENCE COMPANY
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WALKERVILLE, ONTARIO

CANADA'S MOST BEAUTIFUL JERSEY HERD

We announce the arrival at Woodview, direct from the Island of Jersey of one of the most famous sires of the breed

Imported Champion Rower (9746)

He is nine years old, won first prize over the Island of Jersey, with his daughters, in 1914, second in 1916 and again first in 1917. He will be bred to all the imported Record of Performance cows at Woodview (and no herd of its size on the continent has so many good ones) and in view of his proven worth as a breeder on the Island, should make Jersey history in Canada. He has been valued by Edmund Butler Esq., Mount Kisco, N.Y., out of the most prominent importers of Jerseys in the United States, at \$5,000. One of his daughters, Rowers Charm, now owned by Woodview, won first prize as a two-year-old at the National Dairy Show at Springfield, Mass., in 1916, first at Toronto and London in 1917, and grand championship at the latter. Ten of his daughters are to be sold by auction at the Cooper, Butler and Spann sales, May, 1918.

WE WORK OUR SHOW COWS AND SHOW OUR WORK COWS

The Woodview Farm
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.**

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, Ont.**

JERSEY MEETING

The annual meeting of the C. J. C. C. will be held in Toronto, February 5th, 1918. All Jersey fanciers are invited to visit the Brampton Herd the days before or following the meeting. The farm is 20 miles from Toronto, with good train service.

B. H. BULL & SON, BRAMPTON, ONT.

RAVENSDALE AYRSHIRES

We have a number of exceptionally good bulls, as well as a choice lot of young heifers that we can offer at present. They are all sired by Auchenbrain Sea Foam (Imp.) or Cherry Bank Fair Trade 44413. We can also spare a few young cows with the best of type and breeding. Come and see the Ravensdale herd. Correspondence solicited.

W. F. KAY, PHILIPSBURG, QUE. St. Armand Station, C.P.R.

SPRING BANK R.O.P. AYRSHIRES

Herd Sires: Netherton King Theodore Imp., and Humeshaugh Invincible. Grand Champion, London, 1917. Our herd at present holds the Canadian records for both milk and butter in the two-year, the three-year and the mature classes. Let us tell you about the daughters of Netherton King Theodore. We have sons of both bulls for sale—all have R.O.P. dams. Visitors met at Hamilton by appointment.

A. S. Turner & Son (3 miles from Hamilton) **Ryckman's Corners, Ont**

TREES & SHRUBS
BROWN BROTHERS CO.
BROWNS NURSERIES, ONT.

Twenty-Five Years Breeding Registered
Jerseys and Berkshires

We have bred over one half the world's Jersey Champions for large yearly production at the pail. We bred and have in service the two grand champion Berkshire boars. If you need a sire for improvement, write us for literature, description and prices.

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Questions and Answers. Miscellaneous.

Warts.

I have a two-year-old heifer which has a number of warts on her body. Otherwise she is perfectly healthy. What is a good treatment? S. W.

Ans.—Those which have constricted necks may be clipped off with a pair of shears, and the flat ones treated with butter of antimony, which should be applied once daily with a feather. The very large ones may have to be dissected out.

Meat for Hens.

I wish to keep a large number of hens this coming summer. At present I have a large quantity of fresh meat for them. Owing to the price of beef scrap being so high, I would like to preserve this meat for use next summer. Is there any method by which this can be done? D. C.

Ans.—If it were practicable the meat might be preserved similar to the way it is kept for home use, and then the brine soaked out before it is fed to the hens in the summer. We are not sure whether this would prove satisfactory or not. If you had the appliances, the meat might be ground and dried similar to beef scrap. It would require considerable drying to drive out the moisture so that it would keep. It is a difficult matter to keep the meat once warm weather sets in.

Feeding Ducks.

Last year we hatched a large number of ducks but had considerable trouble in raising them. We fed them on shorts. When about a month old and until they feathered out a large number sickened and died. Sometimes as many as seven would drop off in a day. They had plenty of water and shade. Was the mash of shorts too strong a food for them? What feed would you advise for raising ducks? J. R. H.

Ans.—Shorts are not a particularly good feed for ducks to be fed alone. They are more or less of a heavy nature. Equal parts cornmeal and bran, with plenty of green feed, makes a very good ration for ducklings. Poultrymen who make a practice of rearing a large flock of ducks prefer confining them in small yards rather than allowing them on free range. They supply water to them three or four times a day. Some claim that it is difficult to grow and fit ducks for market in a reasonable time when they have an unlimited water supply. In order to obtain the greatest profit, ducks should be fed so that they will be ready for market when ten weeks old. If fed longer than this the profit is usually materially decreased.

Crops for Light Soil—Engine Trouble.

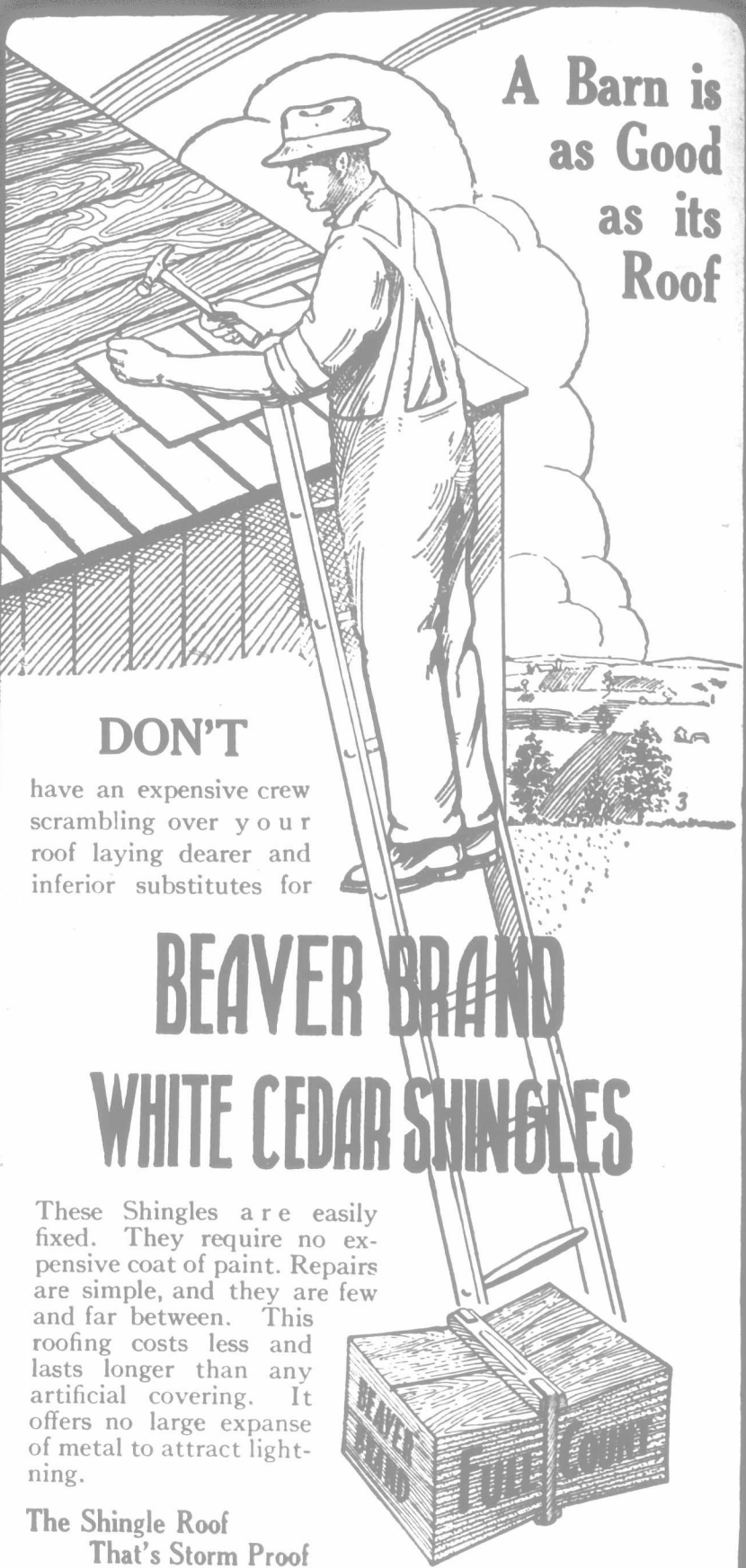
1. I have a field with light soil which I purposed sowing rye on last fall but I failed to get it in. What could I sow this spring?
2. What seeds should be sown for hay and pasture on sandy soil? Is orchard grass satisfactory?
3. I have a gasoline engine which runs all right when empty but lacks power when put to work. What is the cause? W. H. D.

Ans.—1. It will depend considerably on the fertility of the soil and what crop was grown last year. The spring cereals should do very well, provided there is enough moisture. However, if it happened to set in dry, there might be a short crop. If you have a little manure to apply on it, or some commercial fertilizer, corn or potatoes might give a very good yield, as cultivation would tend to conserve moisture. Not knowing more about the quality of the soil, it is hard to state what crop would give the best results, as there are a number of circumstances which would have to be taken into consideration.

2. For hay and pasture crops there is nothing much better than clover and a little timothy. Orchard grass would give a very good yield, but it would have to be cut for hay at a certain stage of maturity, else it would become so coarse that the stock would not eat it.

3. The loss of power may be due to the spark being retarded too far, to a weak spark, weak batteries, dirty magnets, or poor compression, which might be due to a leak in the cylinder.

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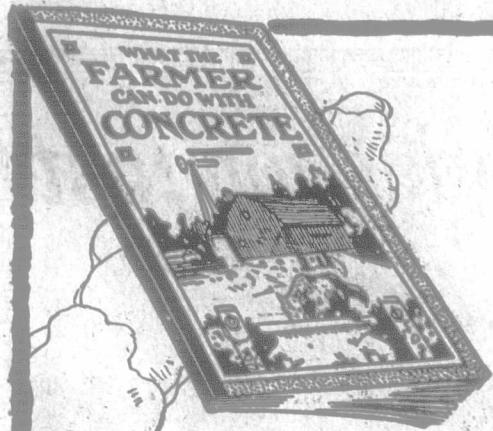
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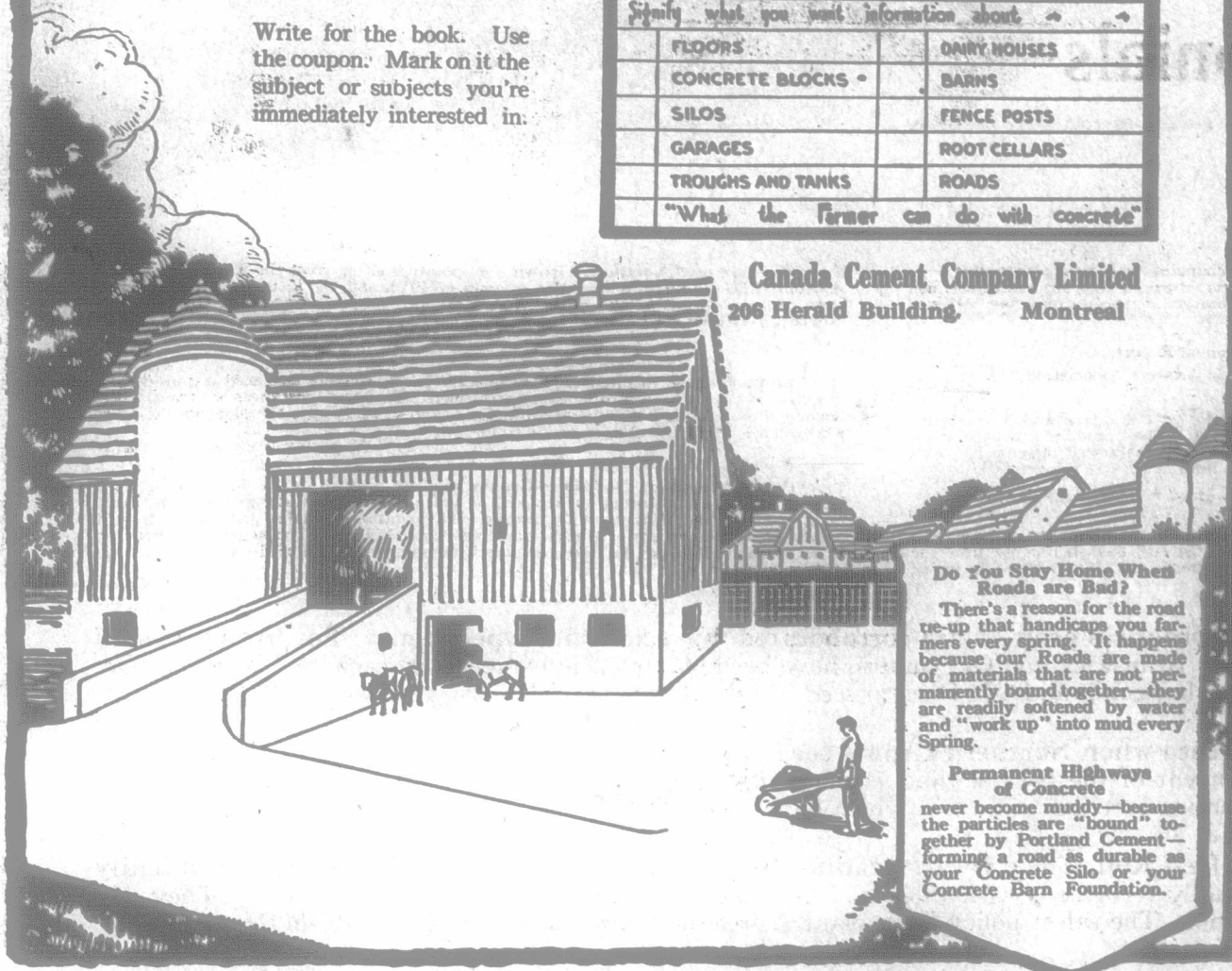
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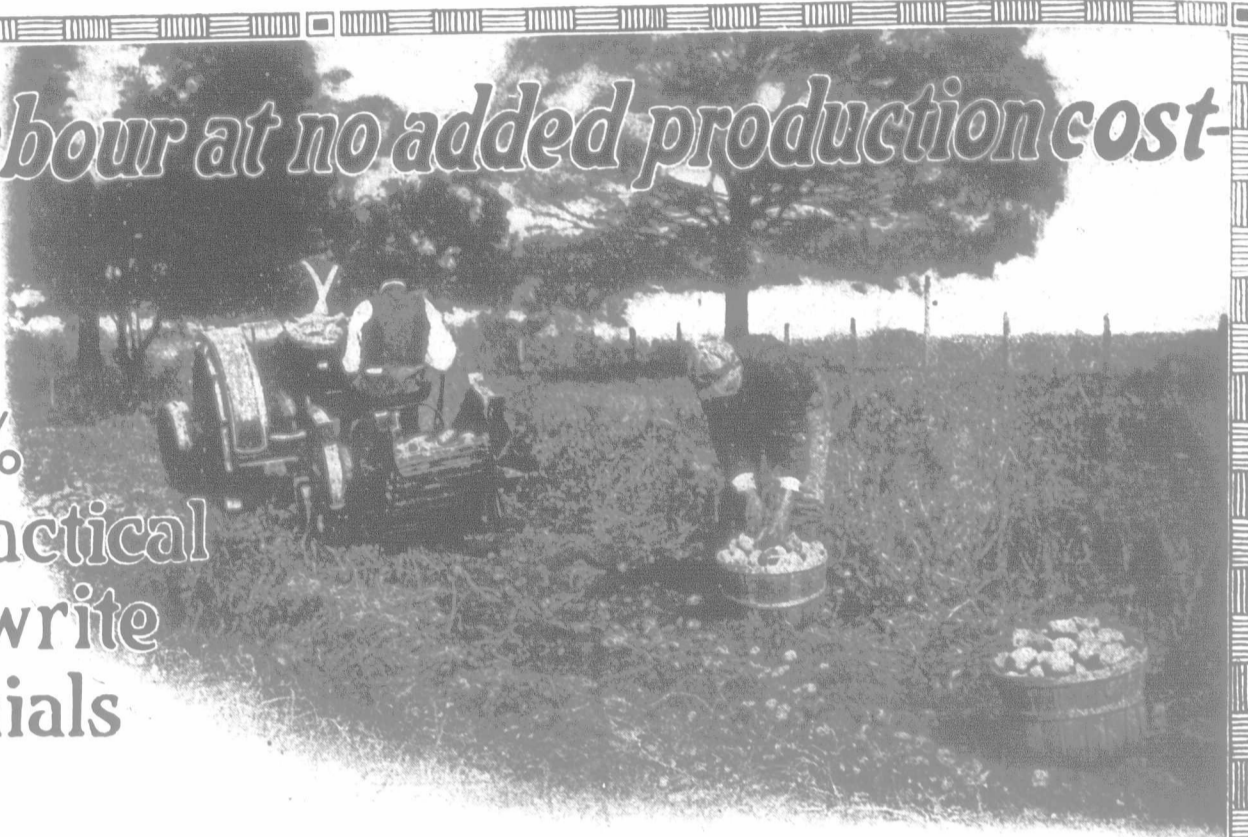
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"I have used Northern-Grown seed potatoes for several years, and have always found them to do much better than home-grown seed. They produce a heavier crop, sprout earlier and have stronger vitality. I am confident the actual increase in yields caused by the planting of Northern-Grown seed has been at least 20 per cent."

HENRY BROUGHTON, Sarnia, Ont.

"G. A. Williams, R. R. 5, Peterborough, Ontario, planted Northern-Grown seed potatoes last year beside some home-grown seed. He got 484 bushels per acre from the former and 347 bushels per acre from the latter—a difference of 137 bushels. This spring he is planting Northern-Grown seed entirely."

"We have used Northern-Grown seed potatoes either from the Red River District or from Northern Ontario since the summer of 1912, and the increased yield has more than paid for the cost of the seed. We sell all our own potatoes and plant nothing but Northern-Grown seed."

G. BRIDGER & SONS, R. R. 1, Sarnia, Ont.

"Last season we planted New Brunswick Irish Cobblers and sold a considerable quantity of the same seed to neighboring farmers. In several instances we saw the product of this seed dug beside home-grown seed, and in every case the Northern-Grown seed yielded full 25 per cent. more."

W. J. OKE, Peterborough, Ont.

"Potato crops from Northern-Grown seed are very profitable in our experience. Northern-grown seed sprout earlier with a much heavier and stronger sprout. After planting they come up more evenly in rows. The potatoes when dug give a more uniform potato, which finds ready sale with sometimes higher prices. I am satisfied we get from 20 to 25 per cent. more potatoes per acre with northern-grown seed—and we are using nothing else next year."

GUTHRIE BROS., R. R. 3, Sarnia, Ont.

These results secured by practical growers are corroborated by scientific experiment. For five years seed potatoes from Northern Ontario, New Brunswick and Old Ontario have been planted side by side. In each year Northern Ontario seed has led with New Brunswick second, and Old Ontario seed in last place; the yields last year were 350, 318 and 220 bushels, respectively.

The reasons for this increase when Northern-Grown seed is planted are: (1) The climate in the North is better suited to the normal development of the potato, thus, engendering superior vitality. (2) The seed is immature, hence better for seeding purposes. (3) Serious hereditary diseases which have become prevalent in Old Ontario are, because of climatic conditions, hardly established at all.

These diseases—Mosaic, Leaf Roll, Curly Dwarf—cannot be treated nor yet controlled by selection in badly affected districts. They are not readily recognized without special training, but they steadily decrease crops. They are widely spread throughout Old Ontario. The safest policy is to plant Northern-Grown seed, preferably from New Ontario; failing that from the Maritime Provinces.

We Will Help Growers Locate Certified Seed

To encourage the growing of Northern-Grown seed potatoes in Old Ontario is now the definite policy of the Ontario Department of Agriculture. Not much seed, unfortunately, can be secured from Northern Ontario for next spring's planting, but an ample supply is being provided for 1919.

Arrangements have been made, however, to put farmers and farmers' associations in touch with sellers of New Brunswick certified seed. This seed was inspected by Federal Government inspectors during the summer while in field condition, again in December in the bin, and will be inspected before loading. It is guaranteed to be reasonably free from disease and true to variety. It will be shipped when danger of frost injury in unheated cars is past. It may be purchased at the farmers' selling price in New Brunswick plus a flat commission of 10 cents per bag and freight charges.

Orders Will Be Received for Carload Lots Only Any wishing to avail themselves of this opportunity to buy the best Northern-Grown seed at present available are advised to do so at once.

Write the office of the Commissioner, Ontario Department of Agriculture, Parliament Buildings, Toronto.

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If so, let us know. It is expected that returned soldiers with some capital will wish to buy good farms in Old Ontario, conveniently located and at a reasonable price.

If you wish to sell your own farm kindly forward a complete description of it—the location, township, concession and lot numbers; distance from church, school, post office, and other points of interest; and the condition of the roads, nature and condition of soil, amount of crops raised, and required, kind and condition of fences, number of acres and how cropped, and any other particulars, complete description of buildings and source and condition of well water, and the reasons for which you will sell.

Write to the office of the Commissioner of Agriculture, Parliament Buildings, Toronto.

Ontario Department of Agriculture

Parliament Buildings, Toronto

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