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# THE FARMER'S ADVOCATE

AND HOME MAGAZINE

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SUCCEED  
FOUNDED 1875

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

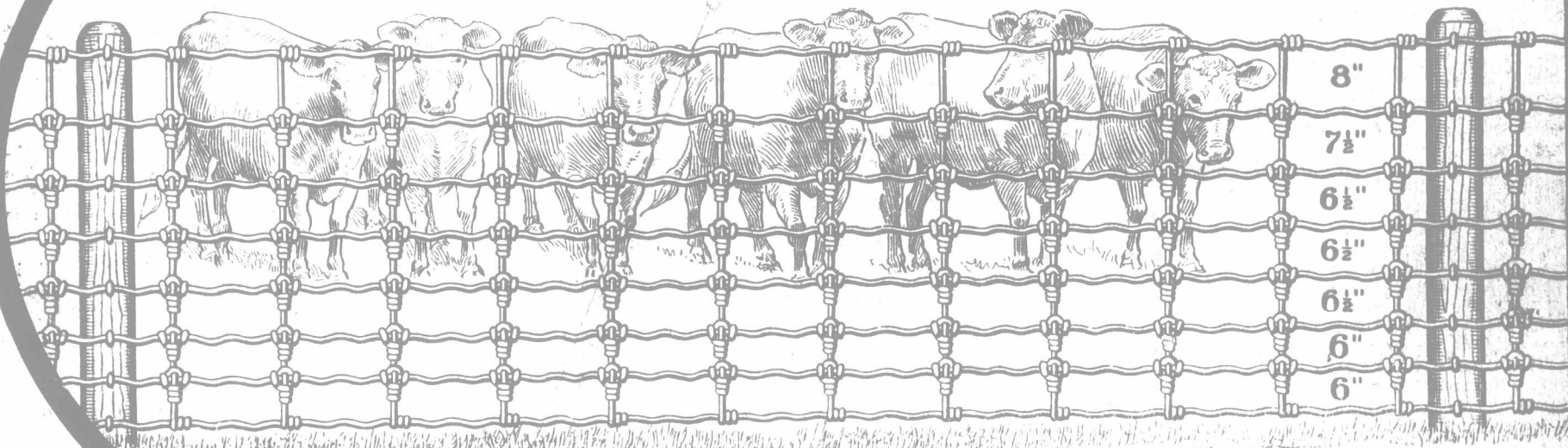
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Vol. XLVI.

LONDON, ONTARIO, DECEMBER 28, 1911.

No. 1005

## "Frost" Fence



### How Much Would a Good-Looking Fence Like This Increase the Value of Your Farm?

No article requires closer inspection than wire fence; it represents a lot of money. If at the same outlay you make a choice that will give you from eight to ten extra years of good service, it is worth something, isn't it? Some folks imagine that because it is made of wire it's fence, and that's all there is to the fence question. But the careful, good-thinking farmer sees differently. He knows a good fence means protection to his crops and stock, and is, in the end, a wise investment. When you buy FROST FENCE you have a coiled or elastic fence, one that can not only be stretched tight in the beginning, but is made from the right material to hold its shape, with numberless gives and takes in reserve for rough usage and abuse. A secure lock without a kink in the horizontal permits of tighter stretching. Those little short kinks, common in so many fences, generally result in broken laterals with the first test they are put to. Insist upon getting this good-looking, durably-made FROST FENCE. It will give more years of service and add greatly to your valuation. Look for the tight lock, neat bundles, with straight and evenly-placed stays. **There are many styles to select from.** FROST FENCE is made with eight, ten, twelve or sixteen stays to the rod, and in all suitable heights. There is no reasonable demand that the FROST dealer cannot meet and fully satisfy. Other FROST products are Galvanized Gates (plain and fancy), FROST Coiled Wire, Barb Wire, Bale Ties for Hay, Stays and Locks for Field-built Fences, Iron Posts for Farm and Fancy Fences—all sold through dealers who make a business of building their fences, or through leading hardware dealers, who will supply you with stretching tools.

We make and galvanize all of our own wire.

We sold 786,000 rods in the 1911 season, because the 678,000 rods we sold last year were found so satisfactory.

There is some choice territory where dealers have not been established. Write for particulars.

We have a New Two-Color Catalogue fully illustrating and describing FROST products. Write for it.

**FROST WIRE FENCE COMPANY, LIMITED, Hamilton, Ontario**



**For Sure Shooting**

UNFORTUNATE indeed is the crow, hawk, fox, weasel or ground hog that visits a farm where there is a Tobin Gun. It is absolutely reliable, and with proper care will last a lifetime. Light enough and simple enough for a boy to handle with safety. For solid satisfaction, insist on getting a



Made right here in Canada—every bit of it, from the muzzle to the butt plate—it leads all others, and we give you this added advantage; because we know what goes into the making of a Tobin Gun. We guarantee it with a positive "money-back" guarantee. It places us under an obligation to return you the full purchase price, if we cannot give you satisfaction in every way. Priced from \$20.00 to \$210.00. Let us send you our new catalogue. It contains information about the construction of good shot-guns that will interest you.



The Tobin Arms Mfg. Co., Limited  
Woodstock Ontario

**This Cylinder Shows Why The "EUREKA" Root Cutter**



is the best on the market. See how it is designed. Grooved knives, with the grooves on one blade opposite the teeth on the next. Instead of slicing or pulping, the "Eureka" turns out roots in shreds—thin narrow strips—

suitable for any kind of feeding. The "Eureka" shreds from one to two bushels a minute, and turns so easily that a child can operate it.

In the "Eureka" the feed is kept free from dirt, the feeder bottom being made with iron rods, thus allowing all dirt to drop out before it can reach the shredding cylinder.

The sloping form of the cylinder makes the machine a self-cleaner. Write for catalogue which explains fully.

The Eureka Planter Co. Limited  
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**WINTER TOURS**  
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AT LOW RATES  
The Grand Trunk is the Popular Route.

The Attractive Route to WINNIPEG and WESTERN CANADA is via Chicago.

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**ONE GOOD OR EVERY FEATURE GOOD WHICH?**

As long as a cream separator skims close, it is a good investment. But one good feature or a few good features do not make a separator that will skim close for any length of time.

A good separator is one in which the minor parts have been just as carefully designed and just as well made as the most important parts. A defect in a minor part will, by throwing the entire machine out of adjustment, offset all the perfection attained in any other part of the machine. In the

**I H C Cream Harvesters Dairymaid and Bluebell**

one feature does not overtop all others because the same I H C standard of quality in design, material, and workmanship is maintained throughout.

They are the only separators with dust-proof and milk-proof gears which are easily accessible. The frame is entirely protected from wear by phosphor bronze bushings. These separators have large shafts, bushings, and bearings; the flexible top-bearing is the strongest and most effective found in any separator. The patented dirt-arrester removes the finest particles of dirt from the milk before the milk is separated. I H C Cream Harvesters are made in two styles—Dairymaid, chain drive, and Bluebell, gear drive—each in four sizes.

The I H C local agent will be glad to let you examine one of these separators, or, write nearest branch house for catalogues and other information.



CANADIAN BRANCHES: International Harvester Company of America at Brandon, Calgary, Edmonton, Hamilton, Lethbridge, London, Montreal, North Battleford, Ottawa, Regina, Saskatoon, St. John, Weyburn, Winnipeg, Yorkton.  
International Harvester Company of America  
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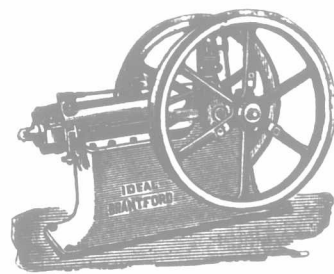
**I H C Service Bureau**  
The Bureau is a clearing house for Agricultural data. It aims to learn the best ways of doing things on the farm, and then distribute the information. Your individual experience may help others. Send your problems to the I H C Service Bureau.



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1 1/2 TO 50 HORSE-POWER

- Windmills
- Grain Grinders
- Pumps
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- Water Boxes
- Concrete Mixers
- Etc., Etc.

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AND THE BEST VALUE FOR THE MONEY OF THEM ALL IS TOLTON'S

**NO. 1 DOUBLE ROOT CUTTER**

2 Being Machines in 1



Better than the best single machines on the market, and is especially adapted to handle beets and mangold wortzels. To change from pulping to slicing is but the work of a moment.

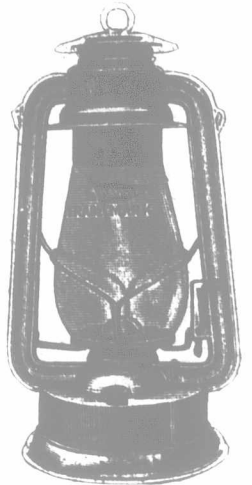
THE ONLY DOUBLE ROOT CUTTER MANUFACTURED. Fitted with Roller Bearings Steel Shafting, and all that is latest and best in principle, material and construction. SEND FOR DESCRIPTIVE CIRCULAR AND PRICES.

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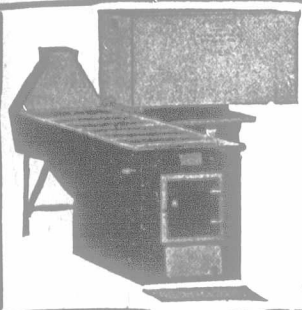
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**TO HAY SAND TRAPPERS**

Having orders to fill and considering the advance in market prices, we are now paying from 20% to 25% above the quotations given in our September price list for Raccoon, Hunk and Rats. Ship your full orders and get the full benefit of this advance.

**A. S. E. & CO.**  
500 St. Paul St. Montreal, P. Q.  
The Largest Raw Material Dealers in Canada.

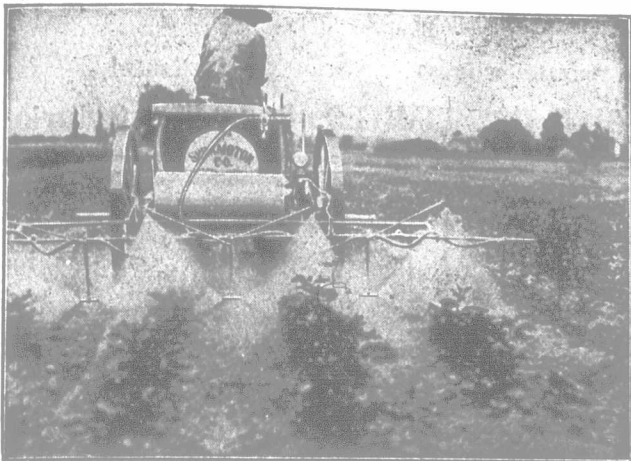




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Price low—quality high—product the best possible—the kind you like syrup—it retains its maple taste—all unnecessary expense and middlemen's profits cut out. Sold at a price the poorest man can buy. Every one guaranteed. Write for pamphlets and recommends. Do it now.

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Does the work with the Horse-Power SPRAY-MOTOR, and does it well. Four rows, three nozzles to a row, adjustable up to 40 inch rows. Nozzles will not clog. 12-gal. air tank, automatic and hand-controlled. Guaranteed pressure of 125 pounds with all 12 nozzles working. Agitator clear-out, pressure relief into tank, nozzle protector under driver's seat. For 1 or 2 horses. Adjustable for vineyards, row crops or orchards. Write for free treatise on crop diseases. AGENTS WANTED.

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Shirt-comfort and ease for the workman—and long wear as well. Roomy patterns, cut with lots of cloth; amply big around body, good length, wide sleeves, full-shaped shoulders, Neat, well-fitting collars and cuffs—NOT A THING SKIMPED ABOUT THEM. Don't buy any other working shirt but



**CLARKE'S Working Shirts**

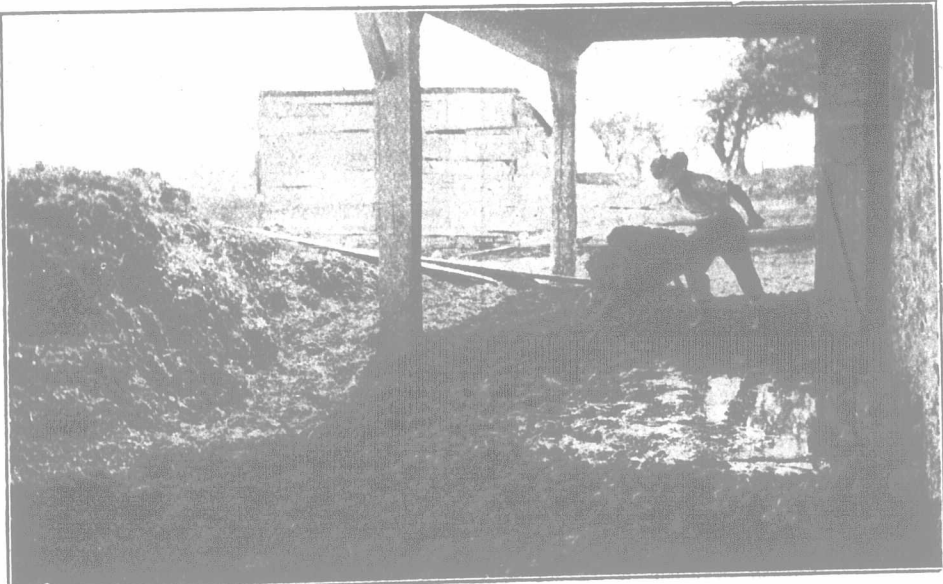
Double-stitched—rip-roof. Gussets re-inforced—tear-proof. Bar-Tacked NO-BREAK buttonholes—and buttons sewed on with linen thread so THEY WON'T COME OFF. Just the loose-fitting, neat-looking long-wearing shirt you have always wanted. LOOK FOR THE LABEL as above—inside collar. The price is right

**A. R. CLARKE & Co., Ltd. TORONTO**

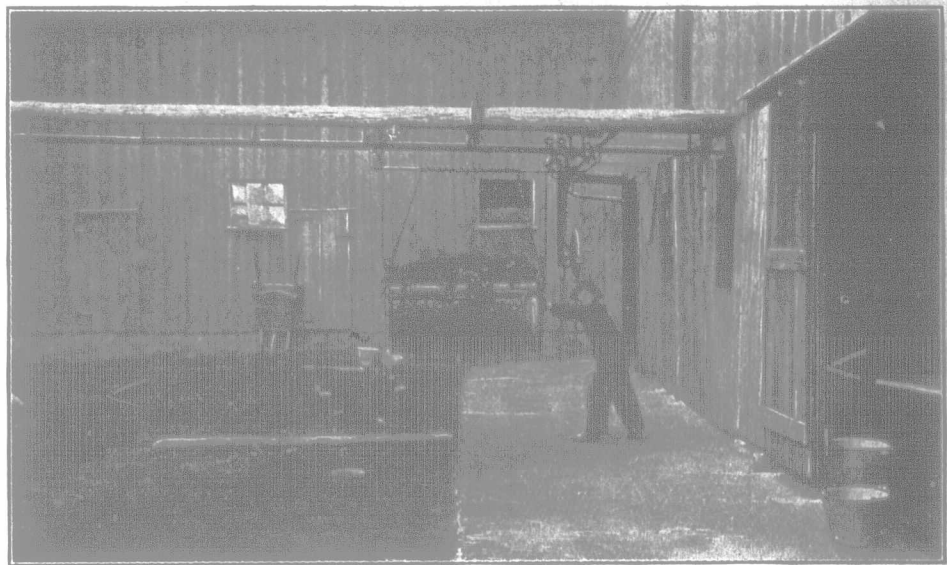
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When Writing Advertisers, Please Mention "The Farmer's Advocate."

**WHICH DO YOU PREFER?**



200 lbs. is mighty hard work on a slippery plank for a man. Note the condition of the barnyard caused by the manure being piled near the barn. It makes disagreeable yard and an unsanitary, bad-smelling stable.



1,000 lbs. is easy work for a boy when it is in a BT Litter Carrier. On a strong level overhead steel track it is easy to run the manure a good distance away from the barn, where it can be dumped either on a pile or directly into a wagon.

Cleaning out stables is one of the hardest and most disagreeable jobs on the farm. With a BT Litter Carrier you can take five times as much manure at a trip as with a barrow, and the Carrier is so easily handled that a boy can do the work. Surely that is better than making five trips through the mud and snow. No planks to lay—no paths to shovel—you have always a solid overhead track to run on. Decide now to have a BT Litter Carrier to help you. You will appreciate it every day. No other machine on the farm is used so many days in the year.

**A GOOD PAYING INVESTMENT**

A Litter Carrier is a permanent investment. Running as it does on a level overhead track, there is nothing whatever to go wrong with it. We guarantee the BT Litter Carrier absolutely for five years. Other farm machinery is guaranteed for one year only. The BT Litter Carrier will last for 50 years. If there are any defects, they should develop in five years, and we guarantee our Carrier absolutely for this length of time. With no other Litter Carrier is such a guarantee given. In fact, most of the firms change their Carrier every year, and they will have to keep on changing, for they simply cannot possibly get around the patented points on the BT Litter Carrier. Get our Catalogue and see why the BT Litter Carrier is such a success. When you understand the different styles, you would not take any other Litter Carrier at any price.

**BUY A BT LITTER CARRIER**

More BT LITTER CARRIERS were sold last year in Canada than all other makes combined. Here are some of the reasons why:

The BT Litter Carrier is the simplest in construction and more heavily built. It weighs 50 lbs. more than the next heaviest. It has no gearing, cogs or ratchet.

Double purchase is used in lifting. It goes up easily. There are no worm gears to wear out. Large wheels on double roller arms run on the track, which mean steady and easy running.

The Carrier is windlassed by a crank wheel. There is no noise and rattle as with a chain lift.

The crank wheel never comes in contact with the box, so that it always remains clean for windlassing and also to shove the Carrier along the track by.

The bucket is made of 18-gauge galvanized steel—four gauges heavier than others.

The track is 2 inches in depth—next deepest is only 1½ inches. The BT Litter Carrier Track will carry a much bigger load than any other. It is also easier to erect, as the hangers will suit any style of ceiling.

It costs no more than others.

Write and get our prices, as now is the best time for installing a Litter Carrier, and we make you a special proposition at the present time.

It will pay you to write us now. Fill out the coupon before you forget. You will be surprised how cheaply you can put in a BT Litter Carrier.

We also build Steel Stalls and Cow Stanchions and all kinds of Hay Carrier Goods

**BEATTY BROS., FERGUS, CANADA**

Fill out the coupon below at once and get our book describing the BT Litter Carrier and our prices. The book tells how a Carrier should be erected.

**BEATTY BROS.**

**Fergus, 1016 Canada**

Kindly send me (free) your book on Litter Carriers and prices.

I will need about.....ft. of track.

And expect to put in a Litter Carrier about.....

Will you need any steel stalls or stanchions this year?.....

If you indicate that you will need stanchions we will be pleased to send you (free) our catalogue and prices on them.

Name.....

Post Office.....

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THE MOST SATISFACTORY ORGANS FOR HOME USE

IN BUYING A

## Bell Organ

you secure one with the charming tone of a pipe organ, and at a price that will please you. Buy a Bell and get the best made. We are the only makers of the patent Pipe Tone Reed Coils. Send for free catalogue No. 40.

The BELL Piano & Organ Co. GUELPH, (Limited.) ONTARIO

Largest Makers of Pianos, Organs and Playerpianos in Canada.

### YOU WILL NEED THIS COMMON SENSE ARTICLE OF CLOTHING



For the cold winters of the Northwest this is the greatest article of clothing you can wear. It is made of flannel, having double transparent Pyralin goggles making a small air space between the two, preventing the moisture from gathering and freezing, allowing you to see as through a window. You can face any storm in perfect comfort. You are sure to need one this winter. Write to-day for it.

Price - \$1.00

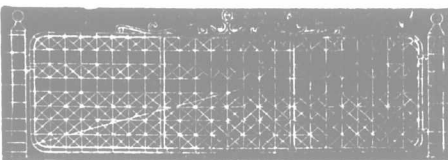
Send name and address for my catalogue.

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Choice stock, grain and fruit farms for sale. We specialize in high-class properties, and aim at offering good value only. We have a special department devoted to listing and selling Ontario farms. Write for list.

UNION TRUST CO., LTD.  
Real-estate Department,  
201 Temple Building, Toronto.



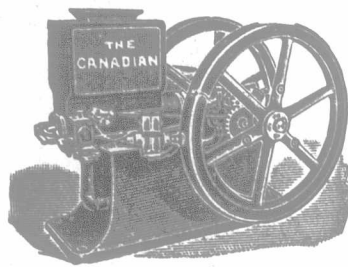
### The Gate That Lasts

The frame of the Peerless Gate is made of steel tubing, electrically welded into one solid piece. It is strong and rigid and will not sag nor get out of order.

### Peerless Farm and Ornamental Gates

are built to stand. They will save you money because they never need repair. We also make lawn, farm and poultry fence that stands the test of time. Agents wanted. Write for full particulars.

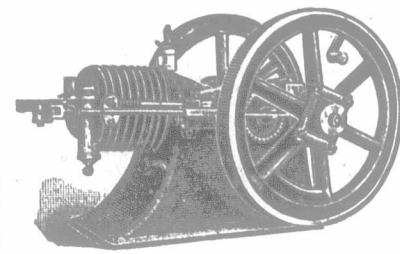
THE SANWELL WOXIE WIRE FENCE CO., Ltd.,  
Dept. B, Winthrop, Man. Hamilton, Ont.



HOPPER COOLED ENGINE

## THE Value of a Gasoline Engine is Measured by the Service Performed and Satisfaction Secured

The Canadian Engine will give you full measure of value above all others.



AIR COOLED ENGINE

A Canadian Engine will perform with greater ease, simplicity and economy what is required of it than other engines. Write for catalogue. Agents wanted to represent us in your territory.

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### A Popped Question

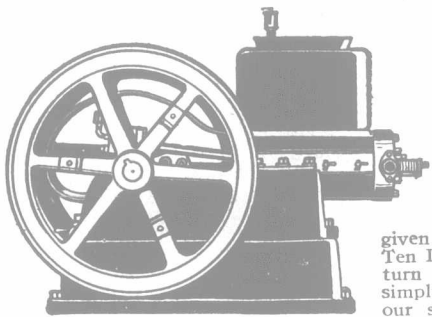
Will you Buy a DE LAVAL CREAM SEPARATOR or do with a poor imitation?

Why do practically all competing machines imitate, if not infringe, the De Laval patents?

Send for Catalog.

The De Laval Separator Co.  
173-177 William St.  
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## THIS ENGINE IS YOURS



FOR \$15 down and balance in easy instalments without interest.

IT IS EASY TO OWN the famous Gilson "Goes Like Sixty" Gasoline Engine on the above plan. A positive Guarantee is given with every Engine. You can have it for Ten Days' Trial—if not satisfactory we will return every cent of your first payment—you simply advise us and hold the engine subject to our shipping instructions. Can anything be fairer than this offer? This Engine is made in Canada, therefore there is no duty. Ask your banker about our reliability. The Gilson has over 30,000 pleased users, proving it to be a tried and tested Engine. It is powerful, simple, durable, dependable; it is the cheapest running, easiest to operate of any engine made. Let us know what work you want an engine to do, and we will send you price and terms for the necessary horse-power. All sizes. Send for our free illustrated catalogue and our special proposition. GILSON MFG. CO., LIMITED, 130 York St., Guelph, Ontario, Canada.

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WILL BE HELD AT  
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EXHIBITS CONSIST OF

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PRACTICAL LECTURES will be given on subjects relating to the various classes of live stock; also to seeds, poultry and alfalfa. Single fare rates on the railways. For programme of judging and lectures, apply to the Secretary.

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## Dairymen's Association of Western Ontario

Attend 45TH ANNUAL CONVENTION AND WINTER DAIRY EXHIBITION  
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REDUCED RATES ON ALL RAILROADS

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Loading carriers with asphalt at Trinidad Lake

## Genasco

the Trinidad-Lake-Asphalt Roofing has the life that only natural asphalt can give roofing to make it lastingly resist all kinds of weather.

The Kant-leak Kleet makes the roof-seams watertight without cement, and prevents nail-leaks. Ask your dealer for Genasco with Kant-leak Kleets packed in the roll.



### The Barber Asphalt Paving Company

Largest producers of asphalt, and largest manufacturers of ready roofing in the world.

### Philadelphia

New York. San Francisco. Chicago.

D. H. Howden & Co., Ltd., 200 York St., London, Ont.

Caverhill, Learmont & Company, Montreal, Que.

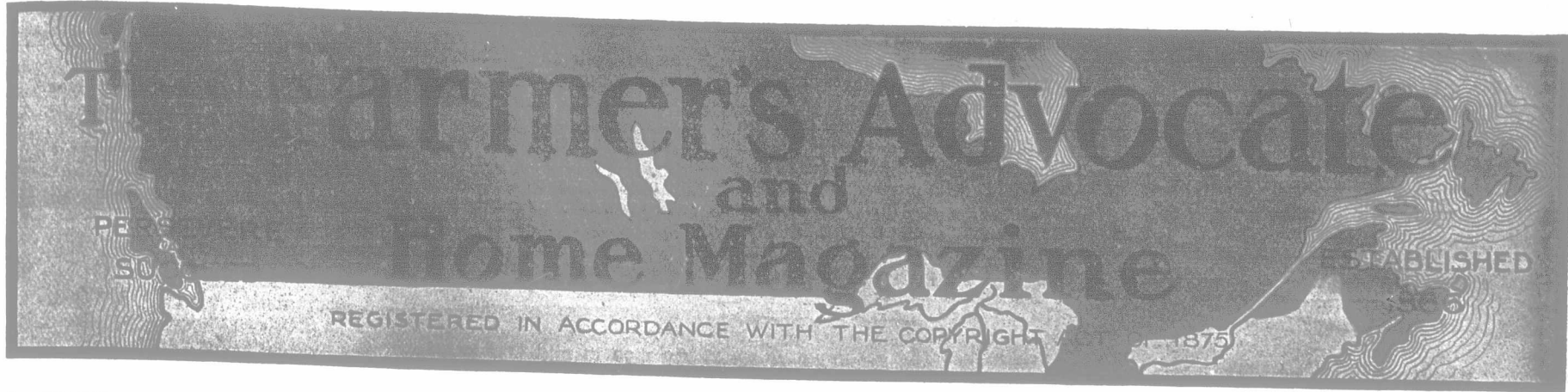


Don't Throw It Away

USE MENDETS

They mend all leaks in all utensils—tin, brass, copper, graniteware, hot water bags, etc. No solder, cement or rivet. Anyone can use them; fit any surface, two million in use. Send for sample pkg., 10c. COMPLETE PACKAGE ASSORTED SIZES, 25c. POSTPAID. Agents wanted. Collette Mfg. Co., Dept. K, Collierville, Ont.





Vol. XLVI.

LONDON, ONTARIO, DECEMBER 28, 1911

No. 1005

## EDITORIAL.

You cannot turn back the clock of time.

Now is the winter of our opportunity.

Mental tillage is the best of preparation for soil tillage.

A better farm and a better home in 1912. Why not?

To the farmers of Canada "The Farmer's Advocate" tenders its best wishes and its best service for the new coming year.

From the results of the recent students' judging competition at Chicago, where, out of ten teams competing, Canadian Agricultural Colleges were represented in first, second and fourth places, "The Farmer's Advocate," of Winnipeg, justifiably deduces that Canada is a land of good stock and better stockmen.

Usually, men talk more about the weather than any other current topic, but give climate, on which weather largely depends, little consideration, even in such important matters as the choice of a farm. Climatically, Eastern Canada holds an undisputed vantage-ground, owing to its usually ample moisture supply and freedom from violent extremes of heat and cold, with their accompaniments of drouth and frost, so destructive to field and fruit crops in less salubrious areas.

The reception accorded the Christmas Number of "The Farmer's Advocate and Home Magazine," not only by its readers, but by the press of the country, has been most gratifying. Irrespective of political leanings, creeds or localities, the expressions of appreciation from editors have been uniformly such as to encourage still stronger efforts on behalf of the interests of the farm during 1912 than ever before. To the press our acknowledgments are therefore tendered for what we esteem as among the best rewards of effort, and to all who in any way have furthered our endeavors gratitude is tendered, and congratulations that on all sides and for all classes in the country the new year seems to come with auspicious concomitants.

"The Farmer's Advocate," cannot too strongly impress upon its readers the economy of the cash system," remarked an extensive miller, in conversation with us the other day. "There are several country store-keepers with whom we deal who are going out of business," he added, "because they simply cannot finance themselves. Their customers go to the city when they have cash, because city merchants will not give credit; and when short of cash, they go to the country store-keeper. This is hardly fair to the local man. It does not give him a chance. Moreover, it is seldom to the interest of the farmer. Cash purchases are usually the cheapest, and the cash system saves many a worry and many a sacrifice to meet obligations." Mortgage your farm, if necessary, but keep clear of credit accounts and floating debts.

### Plant Quality.

Every one of the hundreds or perhaps thousands of readers who are thinking of planting apple orchards should read closely the series of correspondence solicited by "The Farmer's Advocate" from experienced orchardists all over Eastern Canada. They discuss practical questions which every planter is up against when he comes to fill out his order. Indeed, some of them should be considered in advance of this step. An orchard is planted for a lifetime—often for the lives of two or three generations. It is of the utmost importance to plant on the best possible site, to choose thrifty stock, and, above everything else, to plant profitable varieties. Mistakes made on this score are costly and hard to remedy. A friend confessed to us lately that he had made the mistake of planting four hundred trees of Baldwins and Spies in separate blocks, with early fruit between. Convenience in spraying and culture was his object, but he has since learned that his Spies will probably bear poorly for lack of thorough pollination, unless steps are taken to repair the mistake. The rows of Baldwins and Spies should have been alternated.

How much to plant on a hundred-acre farm, is a question answered with recommendations varying from five to ninety-five acres. On the hundred and fifteen-acre farm, "Weldwood," we purpose to plant five or six acres this spring, and if the land were lighter we might plant more. The fear of a possible overproduction is also a factor in limiting the acreage.

In a commercial orchard plant few varieties, but not too few. As one extensive orchardist points out, the work of spraying and harvesting is better spread out if one has a reasonable succession of kinds. This is a very important point, as a person will find who has several hundred barrels to pick, with day labor hardly to be had for love or money.

One point we would strongly emphasize. Plant only varieties of superior quality. We believe the day of the Ben Davis is about past. Pumpkins can be more profitably grown on vines. More and more consumers demand quality, which, even in long-distance shipment, commands a premium since box-packing and refrigeration have come into vogue. In our three years' demonstration orchard work we have made more money out of the sixty trees of Spies than from all the rest of the 147 trees comprising orchard No. 1; and this autumn, when apples were not very quick sale in London, tons of fine Fall Pippins going for cider prices, No. 1 Spies could be sold readily at \$3.25 a barrel or \$1.25 per box. Nearly everyone wanted Spies, and all preferred No. 1's at \$3.25 to a good grade of 2's at \$2.50. The lesson is plain. We believe the Spy is pre-eminently the staple apple for conditions such as ours. Even for sections where it is not a long-keeper, we would grow it as an early-winter apple, and expect to make money on it right along. Of course the tree is slow in coming to bearing age, but it is worth while when you get it. There are, however, other good kinds. The heavy-yielding, good-keeping Baldwin, where free from Baldwin spot, is not to be despised, nor yet the Greening, though its rare merits as a cooking, and especially as a pie apple, are not fully appreciated by consumers. In some sections big money is being made from such fancy dessert apples as McIntosh Red and Snow, but these should be grown, handled and packed with much the same care as tender fruits. Among

early apples, the Duchess is strongly recommended by Mr. McNeill, while St. Lawrence, Wagner and Wealthy have backers. There are scores of varieties recommended by experienced orchardists, and to attempt to satisfy everyone with a dissertation on this question is to invite madness. But plant for quality every time. Locality is important. Study your neighbor's experience. For a commercial orchard half a dozen varieties are plenty. For home use, include a tree or two of Early Harvest, Yellow Transparent, Astrachan, Duchess, Wealthy, Gravenstein, Snow, McIntosh, Golden Russett, and perhaps Spitzenburg. A succession of first-class dessert and cooking apples is one of the choicest luxuries of the farm home.

### Classification of Animals in Stalls

The foremost consideration that should occupy the minds of the officers and directors of our livestock exhibitions is to make these exhibitions as educative as possible. To do this, every department of the show must be carefully studied, and its weak features remedied. One of the greatest needs of the Ontario Provincial Winter Fair is more and better-situated seating capacity around the judging-ring. The seats should begin much nearer the ground, and should encircle the entire ring, in order that spectators may see the judging to advantage. Such an arena is provided at the great International Exposition, held in Chicago. The people attending this event may witness the judging in comfort, and yet, according to J. J. Cridlan, the English judge of the fat classes at this year's International, the management of that great exhibition have still plenty of opportunity for improvement. Mr. Cridlan, writing in The Breeders' Gazette, suggested that all the animals of the various classes should be stalled in a row, side by side, in place of the present general custom of each individual breeder stabling his cattle in a bunch, regardless of age. At the great Smithfield show, in England, the animals stand in their stalls in the same order in which they stand in the judging-ring. There is no doubt but that, from an educational point of view, this would be a great improvement upon the present plan of stabling at our large exhibitions. It is impossible for all those in attendance at a large fair to see the animals actually being placed by the judges, but were these animals stalled in a row such as Mr. Cridlan suggests, all would have an opportunity of handling and examining the animals to their own satisfaction, and, by reason of their chance to get close to them and study them carefully, would be in a position to gain much more valuable knowledge of what is desired in the various breeds and classes. The greatest drawback to such a system would be the inconvenience to exhibitors and herdsmen in feeding and caring for the animals; yet, if this work could be done with any degree of ease, there certainly would be much to be gained by stabling the animals of each particular class together, and our fair boards would do well to consider the matter carefully, and, if possible, provide for its inception at an early date.

The conviction of the enlightened thought of the world is daily gaining strength that war is wrong and foolish, and the terrific burden of armaments unjustifiable. The Christian Guardian is right in declaring that one of the greatest tasks before present-day statesmen is to rid the world of this wrong.



## 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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### Not the Man for the Job.

One of the speakers at the Ontario Corn-growers' Association is quoted as saying, regarding the farmer who would retire: "Would not that man be better off if he were to take a corner on the old farm, build a cottage for himself and a little stable, and keep one good horse and a good cutter and buggy, and call his time his own, and help the boy in the harvest season, and help him whenever he needs him most, and stop when he feels like it? He would be an honored member of the community in which he was brought up, and he would be at leisure to be selected school trustee, or roadmaster, or to the county council or township council, or a member of the Legislature; and, with all the experience he has had on the farm, he would be of value to his own neighborhood."

While the sentiment of the opening sentences of this quotation are open to criticism, the opinion that the retired farmer is a fit and proper person to be selected to public office, is surely altogether erroneous. Any man who has "had his day," and has retired, usually lives in the past, rather than in the present with a view to the needs of the future. Such men are rarely inclined to give new ideas a kindly reception. Their standards are likely to be the standards of bygone days, standards which, while they served well under other circumstances, are not at all likely to cope successfully with present needs. The present-day problems are best solved by men who are contemporary with those problems. The man who has children at school has the strongest incentive for keeping the school at its highest point of efficiency. What such a younger man lacks in knowledge gleaned from the past, he makes up by his acquaintance with present necessities. His interest is to get the best school, and the progress or lack of progress made by his own children serves as a fairly accurate gauge of the educational conditions obtaining in the section.

And what is true of the retired farmer in relation to the school is equally true of his relations to municipal and provincial and federal politics. It is the men who are in actual contact with conditions of the living present who are, as a rule, best fitted to make the laws regulating those conditions. For instance, the retired farmer, with his cutter and buggy, is in a favorable position to choose the kind of roads upon which he trav-

els. There is no sharp spur of necessity urging him to do teaming when the weather conditions are execrable. Hence his probably unwillingness to further a good roads scheme. The same principle obtains as to his attitude towards libraries, bridges, and matters affecting the public welfare. It is the man who is actually facing existing conditions, and who is doing the township's work, or the country's work, and who is actually producing the wherewithal by which the country's bills are paid who should make the country's or the township's legislation. True, there are some men at seventy who are more alert and progressive than some men are at fifty, but the rule is that progress is the accompaniment of the men in middle life, who usually are the men who keep the balance true between thought and action, and these are the only men to be entrusted with the responsibilities of public leadership. At any rate, young men will not come to their own till they have won the inestimable privilege of making their own mistakes. The way to teach pups to swim is to chuck them in. J. K. York Co., Ont.

### In the Evolution of Agriculture.

Editor "The Farmer's Advocate":

The Christmas "Advocate," just to hand, is certainly a "thing of beauty," and a joy to all the household. With its wealth of illustration and its inspiring articles on agricultural subjects, as well as its excellent literary department, it occupies the proud position of being the oldest and the best of the agricultural publications of Canada. It must be a great source of satisfaction to editors and publishers to look back over the great agricultural progress of Canada during the last half century, with the feeling that, during almost all of that period "The Farmer's Advocate" has been one of the greatest factors in evolution of the advanced system of agriculture that is practiced to-day. While all of your writers have done exceedingly well, we were specially interested in the appreciations you give of those two great leaders in agricultural thought, Dr. L. H. Bailey, and our own, Dr. J. W. Robertson, whose writings and teachings have been such an inspiration and education to farmers, and who have done so much to place agriculture in its proper position as one of the greatest of the arts and sciences. WALTER SIMPSON, Prince Edward Island.

## HORSES.

### Judging Draft Horses.

In judging draft horses, said Robert B. Smith, one of the firm of Smith & Richardson, Columbus, Ont., speaking at the Guelph Winter Fair, we must first fix in our minds an ideal horse, and then, in comparing other horses with this ideal, it will not be difficult to notice their defects. Mr. Smith believes that there is one and only one place to begin to examine a horse, namely, the head, for, in so doing, one is not so likely to miss any of the important points. The head not only denotes character and temperament, but should also show masculinity in a stallion, and the opposite in a female. Then, coming down to finer points, the ear, he said, must be of medium length, set well up, and pointed; the face not too wide and flat; the eye—a very important part—should be bright, full and prominent, not dull and sluggish. The nose must be straight, the muzzle full and strong, denoting good breathing power. The lips must be trim and neat, for a lip hanging down denotes sluggishness, and the teeth must meet in front, because either over- or under-shot teeth make grazing extremely difficult. The jaws should be wide apart and well muscled. The throat must be neither too coarse nor too light, must be of good length, and should blend well into the shoulder. A short neck in a gelding is very objectionable. The shoulder must be oblique, which will not only give length to the neck, but is also better suited for heavy drawing. The crest should be well arched, but not heavy enough to lop over. The withers, which should be broad and well muscled, should be in line with the neck, and blend well into the back. The back should be short and nicely coupled, the loin broad and well muscled, the croup thick but not drooping, the dock set well on and covered with fine hair.

The chest should show good girth, giving the animal plenty of constitution. The ribs should be long and well arched, for a flat-ribbed horse is invariably a poor feeder. The front legs must be well set under the body, neither too wide nor too close, for either extreme will usually be accompanied by faulty action. The forearm should be well muscled and of good length, the knee broad, flat, and not puffy, and the cannon free from meatiness. The fetlocks must be clean and free from enlargements, the pasterns of medium length and oblique to prevent concussion on hard roads. The hoof should be well rounded and full, but not

flinty. In the hind legs, the stifle should be well set under the body, and strong, and the gaskin well muscled, showing good drawing power. The hock, which is the seat of many ailments, must be clean, free from puffiness, flat and angular. The tendons in the legs must be clean, and should stand out well. The pastern behind should show more obliquity than in front, and the hoofs usually are a trifle more oblong. The horse should toe out behind just a little, so that he will travel close at the hocks, while in front he should go perfectly straight. The feathering on the legs must be of a fine, silky texture, and should be straight. "Spats," or that hair which falls loosely over the hoof, gives a flashy appearance to the Clydesdales and Shires, but is undesirable in the other breeds. The gait must be straight and true, free from rolling or paddling, and the feet both before and behind, should be well picked up, so that the bottom of the foot can be seen when travelling. Color in draft horses is not important, but, above all, a horse must be symmetrical. G.

### Winter Care of Horses.

Editor "The Farmer's Advocate":

From now on, till spring, on many farms there will be little work for horses. As a result, just as many as will be required for work will be kept in condition, while the remainder will be allowed to run idle. It is the progressive farmer's aim to winter such horses as cheaply as possible, and at the same time not allow them to become too much reduced in condition. One very important point to be carefully observed is not to make too violent a change in food. This is a point very often neglected, and, as a result, the veterinarian reaps a harvest. This is especially the case in a season when hay and grain are scarce or a high price. Whenever a radical change in diet is contemplated, do it gradually. Feed a little straw and considerable hay at first; increase the quantity of straw and decrease that of hay correspondingly each day, until, in a few days, a full ration of straw may be safely given. By following this plan, the digestive organs of the horse become gradually accustomed to the change, and no bad effects ensue. These precautions should be observed not only at the present time, but also in the spring, when the change will be from straw to hay.

It is a mistake, however, to try to winter idle horses too cheaply, on food that is of little value on the market. In doing this, there is a danger of so reducing the animals in flesh and constitution that it will be difficult and expensive to fit them for work in the spring. The object in wintering them should be to keep them in fair condition, and not allow the muscular system to lose tone to too great an extent. They should be given a regular but not necessarily large grain ration, oats being by far the best. The bulky food may be anything that is not of high marketable value, but be sure that it is of good quality. It is extremely dangerous to feed any animal, and especially horses, on food of poor quality, such as poorly-saved or overripe hay, dusty or musty food of any kind. Such foods, on account of their indigestibility, are very liable to cause disease of the digestive organs, and are one of the main causes of heaves. The safest ration is clean wheat or oat straw, preferably wheat; and, where machinery for the purpose is available, it is well to cut the straw. A little hay cut with it makes it all the better. To improve this ration still further, add a little chopped oats and bran, a few pulped turnips or a little silage. These all tend to make it more palatable. Wheat straw, although not always obtainable, is by far the best, and wheat chaff is still better. However, clean straw of any kind, except barley, makes good food. The latter, on account of the beards, is not satisfactory.

Besides good food, the horses should always have plenty of good water and exercise. They should spend a few hours every day in the yard or paddock, but, unless they have comfortable quarters into which they can go at will, they should be stabled at night, for, if exposed in severe weather, they will certainly become depleted. Their feet also require attention, and, except in a few cases, where the feet are very brittle, the shoes should be removed in the fall, and the animals allowed to go barefooted until the spring. In the winter, the feet should be cleaned out occasionally, and carefully watched. If they are breaking up too much, light shoes should be put on, while, if they are growing too large and of an abnormal shape, they should be trimmed with rasp and file to the proper form and shape. If any of the horses are tender or sore-footed, blister their coronets repeatedly, say, once monthly. This encourages the growth of horn, enlarges the foot in all directions, and thereby relieves pressure on the internal structure, and lessens or very often cures the lameness.

The working team should receive special care, and be kept in a hearty, vigorous condition by liberal feeding. Oats are the best food obtain-



able, but a cheaper food that I have found to be just as good is a mixture of corn, oats and bran, mixed in the proportion of 50 pounds corn, 50 pounds oats, and 25 pounds bran. This, for hard-working teams, gives excellent results, and costs much less than the oats alone. I feed in the proportion of one pound of the mixture for every hundred pounds they weigh, and about three-quarters pound hay per day to each hundred weight of horses, giving the bulk of the hay at night.

I take special care to have my team comfortable, and keep the stalls dry and well bedded every night with clean straw. I groom my horses night and morning, usually, or, if from any cause I have to limit the cleaning to once a day, I do it at night, so that all the dirt and sweat from the day's work may be removed.

Harnessing the horses is another important point that the majority of farmers neglect. Take note of the next harnessed team you meet, and see if the harness is clean or gray and grimy-looking; if the blinders on the bridle are where they should be or so that the horse can look over them. See if the harness is well fitted to the collar, the back-band in its place, and every strap properly tucked in its keeper. Nine times out of ten the harness will be open to criticism. Every little item in connection with the harnessing of a team adds to their attractiveness, as well as to their comfort. Once every year I take my harness apart, wash it thoroughly and oil it before it is quite dry. This makes the leather soft and pliable, and adds much to the appearance and wearing quality of the harness. For the rest of the year I give it an occasional lathering with a good harness soap, which I wipe off with a damp rag, thus removing all dirt and making the harness look like new again. A little metal polish, used on any mountings of the harness, will add greatly to the general appearance of the harness, and any of these little touches may be given in the spare moments which every teamster has. Whatever other care you take of the harness, though, be sure you have it fitting right.

Carleton Co., Ont. A READER.

**Care of the Pregnant Mare.**

In his address on the above subject at the Provincial Winter Fair, at Guelph, John Gardhouse, of Highfield, Ont., pointed out that, if a breeder is going to obtain the best results from his brood mares, he should see to it that they are in good condition at the time of service. If the mare is not on grass at the time, it is better to feed a little laxative food, and then allow her to pasture for a short time after being bred. If suckling a colt, hard work should be avoided, and it is good practice to bring the mare in about the middle of the forenoon and water and feed her a few oats. Careful handling goes a long way towards success.

It is in the fall, however, that most mistakes are made, said Mr. Garhouse. The colts are weaned suddenly, the mare is pressed into service to do the fall plowing, the feed is increased rapidly, and then, when it freezes up, all the work stops suddenly, and the mare is allowed to stand idle in a dull, dark stable. A sudden change like this frequently causes abortion. The feed in such cases should be reduced gradually, and plenty of fresh air and exercise given, where there is no winter work to do. If allowed to run out every day, the mare will not suffer from the cold, and half of each fine day will be well spent in the paddock or barnyard. Plenty of exercise, fresh air, good water, and a liberal supply of oats, bran and mixed hay will usually be all the medicine a brood mare requires. The following were a few "Don't's" cited by Mr. Gardhouse:

1. Don't expect a mare to do a hard week's work one week and nothing the next.
2. Don't expect a good colt from a poor mare and a good horse.
3. Don't expect a good colt from an over-worked mare.
4. Don't expect a good colt from poor handling.
5. Don't allow abuse.
6. Don't expect a full day's work in the spring if the mare is idle all winter.
7. Don't hitch the infoal mare to a heavy load if there is any backing to be done.
8. Don't drive her if the ground is frozen and slippery, unless she is well shod.

But—

1. Give her a fair chance.
2. Give her a fair amount of work.
3. Give her a fair amount of clean, wholesome feed.
4. Give her pure water at all times.
5. Give her salt at all times.
6. Give her a clean, bright stable, box stall preferred, with plenty of bedding.
7. Let her out in the yard, if not working.
8. Use the best stallion.
9. Avoid all extremes.
10. Expect a good colt from a good mare, properly mated.

**LIVE STOCK.**

**Economical Feeding of Beef Cattle**

An address given by J. A. Grisdale to Stock Feeders in attendance at the Winter Fair.

The question of producing and handling beef cheaply is one of exceedingly great importance to not only the Canadian farmer, but to the Canadian citizen at large. As matters stand to-day, it costs the farmer anywhere from six to ten cents a pound live weight to produce a steer. He has to sell this to the butcher for anywhere from four to, at the very highest, eight cents a pound, live weight. The butcher kills the steer, looks at it, and retails to the consumer at anywhere from six to twenty-five cents a pound, dead weight. The difference of from two to three cents a pound that the steer not infrequently costs the farmer more than it brings him, is usually disputed, and, unfortunately, the farmer rarely knows positively what the animal really does cost him when ready for the market. The fact that the steer consumes a large amount of coarse forage that would otherwise, in part, at least, go to waste or have to be sold off the farm at great loss, and while consuming this feed, produces at the same time a large quantity of most valuable manure, and requires comparatively a small amount of labor for care and feeding, accounts for the business being looked upon otherwise than as a luxury to be indulged in only by the gentleman farmer or the show man.

It is possible, however, in spite of the above statements, to produce beef at a profit under Canadian conditions, provided always that proper

ferent lines fill quite a volume. My remarks will indicate in a general way the results of our work.

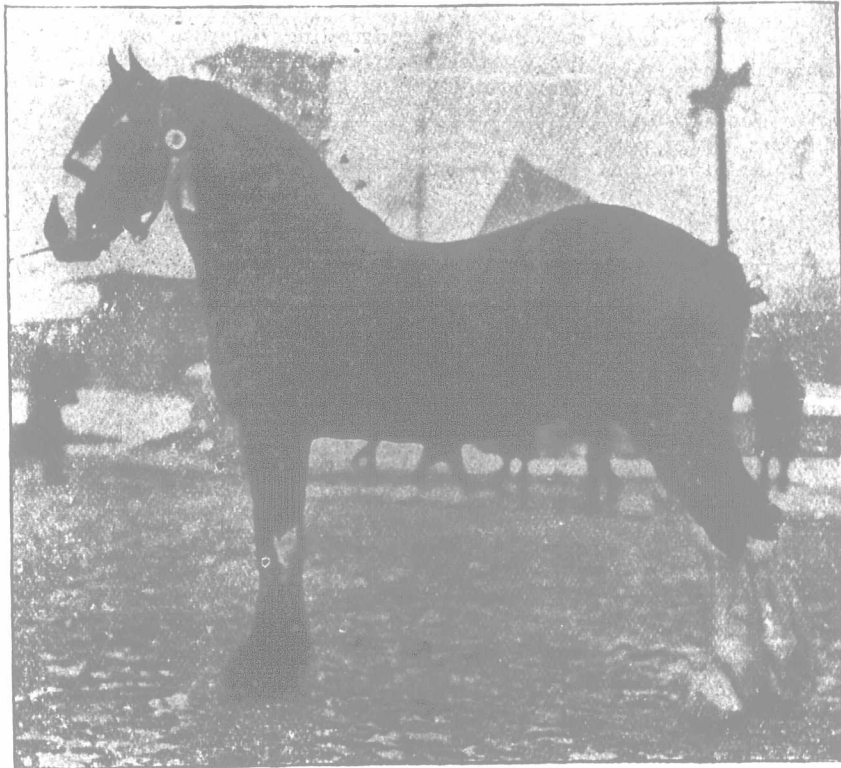
Dealing only with those points which are likely to be of interest to the Ontario feeder, one might begin by asking the question, "What aged stockers should be bought by the farmer desirous of getting the best results for feed consumed?" Our experiments along this line indicate that, of the three classes commonly fed—yearlings, two-year-olds, and three-year-olds—the two-year-old is likely to give the best returns for feed consumed and to command the highest price on the market the following spring. The yearling frequently costs a little too much to begin with, and is not quite big enough at the end of the feeding period. However, under average conditions, the gain is put on just as cheaply, if not at lower cost, than in the case of the two-year-old. The three-year-old gains (depending, of course, upon the condition of flesh when bought) about as rapidly as the two-year-old, but costs, as a rule, something more per pound of increased live weight; and, unless very fat, in the spring brings very little, if any, more than the well-finished two-year-old. Of course, a bunch of three-year-olds weighing around 1,400 pounds, and being of the right type, will command the very top price for the best export trade. Hence, once in a while, three-year-olds may be expected to do better than two-year-olds for feeding. When I speak of "yearlings," I mean really eighteen months old when starting to feed, and so on with the other ages.

The next consideration might be as to whether the farmer should prepare to feed in open shed and small corral, or housing in a warm stable. Where buildings already exist, or where moderately cheap constructions can be put up, the probabilities are that it will pay to feed inside. In fact, in Ontario, it is probable that inside feeding would practically always be more advantageous than outside feeding, although our experiments indicate that very cheap shelters prove quite satisfactory for steer-feeding operations.

When feeding inside, two methods of handling may be followed; that is, the steers may run loose or be fed tied. On this point our experiments are quite definite, the results in every case pointing to the advisability of letting steers run loose in moderately roomy boxes, with eight to ten in a box. Steers running loose consume more per diem and make greater gains, at lower cost per pound, by anywhere from 10 to 30 per cent. than similar steers fed tied and given similar feed, while the attention necessary is less in the case of the loose steers by anywhere from 20 per cent. to 50 per

cent., and the quantity and quality of the manure likely to be produced under the different conditions is very much in favor of the steers fed loose. Hence, it would appear that feeding loose eight to ten in a box, with, say, from 50 to 60 square feet of space per steer, would be the best method.

After methods of housing, length of time of feeding might be considered. Six months is a common feeding period, though four months, provided conditions are right, is likely to be more profitable; but length of time must largely be controlled by condition of steers in coming in and character of feed available, and market demands in the spring. The thin steer getting lots of roughage gives good returns and fair profit when fed for six or eight months; whereas, to get the best returns from well-fleshed steers, a shorter feeding period of say from three to four months, where the ration included less roughage and considerably more meal of high feeding value, would be the right thing. The method of feeding will depend upon the feeds available, but experience indicates the great importance of a fairly plentiful supply of succulent feed, if the best gains, at the least cost, and with the least danger of cattle going off feed or suffering in health, are desired. Such feed usually cheapens the product, and very certainly improves the quality. The question of the meal ration to feed will depend upon the length of time the feeding period is to cover. Generally speaking, start with a light ration and gradually work up a heavy; but, for short-feed steers, it is usually necessary to start with a fair quantity of meal, and rapidly raise to heavy feeding. An-



Bydand (imp.).

Champion Clydesdale stallion, Ontario Provincial Winter Fair, 1911. Sired by Baron of Buchlyvie. Exhibited by the Graham-Renfrew Co., Bedford Park.

local conditions maintain, that the right class of animals are fed, proper feeds used, and the animals handled in the right way. To the man who wishes to go into beef production, a number of lines of operation present themselves. He may produce the calf and feed until ready for the block, which will necessitate his handling breeding stock, and so render the business much more complicated. He may buy the calves when a few days old, and feed them forward until ready for the block, or he may buy stockers and handle them until ready for the block; that is, feed them until the right state is reached for his market requirements.

For the man who starts with the calf, experience would seem to indicate rushing the calf from two or three months old to about eighteen months old, then selling for beef, as the most profitable line; that is, the production of baby beef. The other plan, of allowing the calves to grow up and paying attention to growth, rather than fattening for a couple of years, is likely to be profitable only when cheap pasturage is conveniently available and roughage plentiful and easily handled in winter.

Leaving aside the question of methods of baby beef production, and the relative merits of baby-beef production versus feeding stockers through the winter for beefing off in the spring, or when ready for the block, we might take up the principal considerations in handling the steer along this latter and more common line.

During the past twenty years, we have fed off, on the Experimental Farms of the Dominion, some fifteen hundred steers, and the findings along dif-



other consideration is the character of meal to feed. Home-grown feeds are usually thought to be cheapest, but very often a ration compounded from home-grown feeds is not as suitable for beef production as would be a ration including, along with the home-grown grains, a certain proportion of meals richer in fat and protein than are oats, corn and barley, the common feeds of Ontario farmers. Gluten meal, cottonseed meal and oil-cake meal are the supplementary feeds most likely to give good results, and might constitute, early in the feeding period, say 10 or 15 per cent. of the meal ration, and, later on, from 30 per cent. to above 50 per cent. for the last few weeks. Whether to feed the grain whole or crushed, is not open to question, since every experiment points to the advisability of having the grain ground, even though the grinding cost considerable. Much unground grain goes through whole, and, even where grain is poorly ground, considerable loss is incurred.

Palatability and easy digestibility are factors of greater importance than the relative proportions of carbohydrates, fat and protein.

The number of times to feed is, to a certain extent, a matter of convenience, also to some extent a matter of habit to the steer; but, generally speaking, twice a day is often enough, and the meal had usually better be fed mixed with roughage.

A morning feed for a 1,200-pound steer might consist of 30 pounds of a mixture two parts corn ensilage and one part roots, two or three pounds of chopped straw: mix with it two pounds of meal mixture and about three pounds of hay. The chopped straw, roots, ensilage and meal should be mixed and fed together, the hay fed longer after the other forage is consumed. This repeated at night will make up the ration for the day, and is about what long-feed steers should be getting in January.

The breed to feed is hard to settle, but any one of our beef breeds (Shorthorn, Angus, Hereford or Galloway) is likely to give good results. The Hereford, in my experience, does better on pasture than the others, but not quite so well in a box or stall.

Stable management has much to do with success or failure in feeding operations. A sufficient and constant supply of water, salt readily accessible, fairly frequent cleaning or bushing, clipping to prevent caking with manure on hips and flanks, an abundance of good bedding and a liberal supply of light from decently-cleaned windows; good fresh air controlled by some system of ventilation, and kindly treatment, will all work together to insure good gains at a moderate cost, and practically compel profits, provided, always, the market remains normal.

## THE FARM.

### Notes from Australia.

Stallion certification at the various shows in Australia is now quite general. Some of the associations are demanding that mares shall also pass the test before being allowed to enter the arena. Not any of the state governments, however, have moved to make the examinations compulsory for horses whose services are offered to the public, but in most cases parades are held in each district every season, and certificates are granted to those which pass the tests. The public can then demand to see the certificate of any animal of which they may be in doubt. This certification campaign has done incalculable good. Hundreds of unfit horses have been condemned and rendered useless for service, so that the percentage of condemnations at the show-rings now is comparatively small. In the young stock forward there is a marked improvement, especially in heavy sorts. A judge recently stated that he never saw, in Great Britain or America, a better lot of youngsters than those forward at the late Melbourne show. The certificates are now demanded at the yard sales, and, indeed, some of the auctioneers will not accept animals which have not passed the vet. Where uncertified animals are offered, buyers will not often bid for them.

The imported starling, which is now in millions in nearly every part of inhabited Australia, is a bone of contention between different interests. The orchardist breathes unlimited curses upon the pest, because it simply ruins his crop of soft fruits in a few hours when the flock swerves his way, while the sheep-breeder declares that it is the most prolific devourer of the blow-fly maggot which has yet turned up to assist in the destruction of this great pest. There are not many districts where the two industries are combined, so that the discussion is interesting. Some pastoralists argue that, if the starling does destroy a portion of the fruit crop, they are more than compensated for this by the bird's work as an IBS (Insect) destroyer. An Australian who has just returned from a trip to Switzerland points out that the starling is an

that country once denounced as a curse, and that there was set on foot a plan of decimation. The result was that insect life multiplied so rapidly that the last state was worse than the first; so the fruit-growers there have since begun a campaign of starling production, and nests are encouraged in the orchards, and the birds are fed during the season that there is no fruit available. Australia is very short of bird life now, owing to the destruction of the indigenous, insectivorous birds through the poisoned pollard baits laid for the rabbits in the sheep districts. As a result, the blow-flies have increased so rapidly that it was estimated the loss of sheep through the maggots was fully a million in one state alone, New South Wales. This year the fly is equally as prevalent, if not more so, and promises to destroy a greater number of sheep than ever. The only precautions now taken are to crutch the sheep at certain times of the year, so that there will be less wool to soil, use a poisonous dip, and leave the tails longer than usual. These measures have an effect, but still the losses are very considerable. Autumn shearing is also being tried, with effect, in some districts. It has been recognized that the increase of bird life has become a vital necessity. To gain that end, a Bird Day has been established, to try to promote the propagation and secure the protection of the feathered friends.

Everything is now dearer in this country than ever it has been before. Prosperity is one cause. The combines see their opportunity, and are making the best use of it. The producers are, of course, singled out for attack. Wool freights, meat, fruit and hides are all charged for at higher rates in the deep-sea bottoms than ever before. It is said that the Beef Trust has got some sort of controlling influence over the companies which carry the meat, and that is how they are beginning to pinch the Australians. There is no proof of this, but it is generally understood



Joe Dandy.

Second-prize junior yearling grade Shorthorn steer at the Chicago International, and first in his class and champion beef animal at the Winter Fair, Guelph. Owned and exhibited by Jos. Stone, Saintfield, Ont.

that the trust is operating in this country under a cloak. There is a good deal of combination going on amongst the producers, but the schemes lack extent. The time must come when the men on the land will be obliged to take a stand as an united entity to fight the commercial forces which are arrayed against them.

A claim has been made that the cherry orchard owned by Jasparrizza Brothers, at Young, New South Wales, is the largest in the world. The area is 300 acres, carrying 30,000 trees. This industry is expanding in Australia, as it has been proved that, by pre-cooling and cold-storage, and special packing, cherries can be exported to the London market.

The standard of wheat, which has been fixed previously by the Chamber of Commerce in each state, is to be decided in future in some of the States by a committee upon which the growers, the millers, and the Government will each have representation. South Australia leads in this direction, for it is proposed that the grain shall be graded in three standards, instead of one, as formerly—A, representing wheat over 64 pounds in weight; B, 62 to 64 pounds (the present f.a.g.); and C, 60 to 62 pounds—such grades to be stead-

fast each year. In addition, the farmers are to establish bulk stores themselves, the Government is to undertake the shipping, and other plans are being evolved to foster the co-operative spirit.

A strange discovery, which may lead to some advance in silage production, was lately made in Queensland. A water melon was unintentionally mixed up with the contents of a silo. When it was found, four months afterwards, it was in a wonderful state of preservation. The flesh still retained its red appearance and the flavor of a ripe melon. Experiments with the preservation of pumpkins, marrows and the like are now being carried out at one of the Government State farms. Sydney, Australia. J. S. DUNNET.

The annual sheep returns from little New Zealand show the total number for 1911 to have been 23,996,126, a small decrease compared with last year, but, with that exception, the greatest for 21 years, the number in 1891 being 16,753,752. The sheep population of Canada for 1910 was only 2,598,470.

## A Study in Rural Economics.

By Prof. J. F. Snell.

### II.—LARGE VS. SMALL FARMS.

It is no uncommon thing to hear it proclaimed that we are coming to the time of smaller farms, better farmed. It is self-evident that the production per acre would be greatly increased under this system, but whether the production per unit of capital and per unit of labor would be increased, is another question.

The farmer's problem is not simply increased production. From the business standpoint, it is rather a problem of most economical production. Not how much produce a man obtains, but how much profit he realizes, is the important point to him individually. And even to the state as a whole the economy is of quite as great importance as is the volume of agriculture production.

Although census statistics are not yet available, we believe it to be the general impression in well-informed agricultural circles, that in the older-settled districts of this continent the size of the farms is increasing, rather than decreasing. This, of course, does not apply to districts where general farming is giving way to fruit farming or to market-gardening. But where farming of any type which can fairly be called general farming is the practice, we believe that the tendency is rather towards larger than towards smaller farms.

The average size of the farms in Tompkins County was found to be 107 acres. On the whole, freehold farms were smaller than tenant farms. The former averaged 103 acres, the latter 127 acres. Sixty per cent. of the freehold farms were of 100 acres or less, while of the tenant farms 53 per cent. were over 100 acres in extent.

It is asserted that the farms of the county are increasing in size, although the increase in the average size is not so great as would appear from a comparison of the above figures with those of the census of 1900, because the latter included many small holdings which were excluded from the Experiment Station's survey as not being true farms from the business standpoint.

A natural inference from this observed fact would be that farmers find the larger farms more profitable. And a comparison of actual profits shows this to be undoubtedly the case.

In the subjoined table it will be noticed that the percentage of farms yielding labor incomes of less than \$401 to their owners decreases as the size of the farms increases. And by the same token the percentage of farms yielding labor incomes of over \$1,000 increases as the size of the farms increases. There is no exception in either case. It is, therefore, undoubtedly true, for Tompkins County, N. Y., that the largest farms pay best.

Whether this would continue to be true for



farms of much over 200 acres, is another question. The group of farms of over 200 acres, the most profitable group, averages only 261 acres. Up to that limit, the rule holds absolutely true for this particular county, and there is every reason to conjecture that the same rule would hold, also, for almost all other localities where the same types of farming are practiced.

SIZE OF FARM RELATED TO PROFITS.

Acres.	Number of farms.	Per cent. of the farmers making labor incomes of less than \$401.	Per cent. of the farmers making labor incomes of over \$1,000.
30 or less	30	90%	0%
31-60	108	75	1
61-100	214	59	4
101-150	143	53	12
151-200	57	42	28
Over 200	34	29	32

Now, as to the causes of superior economy on the large farms, we make the following extracts from the bulletins:

**Why the Largest Farms are Most Profitable.**—Small farms have many disadvantages. A large part of the farm work cannot be done economically without at least two men. Many of the smaller farms do not have enough work to keep a hired man profitably employed. The cost of labor per acre is excessive on small farms, also the cost of horse labor.

**Labor.**—The area that is farmed with \$100 worth of labor is six times as great on the largest farms as on the smallest. Six times as much labor increases the receipts by only two and one-half times. With each group of farms, the farmer's labor income is about twice the value of the labor that he directs—that is, twice the value of all labor except his own.

**Horse Labor.**—The figures of acres per horse are still more striking. The small farms have not enough horses to make efficient teams, and yet they are oversupplied with horses, compared with their area. On these farms there are only 15 acres per horse. On the largest farms, one horse farms three times this area, with no resulting decrease in crop yields. When we consider the cost of keeping a horse, we see what a great advantage the larger farms have.

**The substitution of horse power for man power is the most striking feature of American agriculture.** One horse properly directed can do the work of ten men. According to the United States census, the area farmed per man has increased one third in the past twenty years. This increase has been due to the use of more horses per team. The area farmed per horse has not changed, but the farmer is using one-third more horses per man, and has increased the acreage that he could farm in the same ratio. At the same time, the crop yields of the country have increased.

**The farmers of Tompkins County are farming more acres per man than formerly, and have been increasing the size of farms to meet the situation.** Apparently, both the farmers and the State will be better off when they carry the matter farther. Corn and potatoes are yet cultivated with one horse; two-horse teams may well replace the one horse. All ordinary farm work is commonly done with two horses, although three horses are used by a considerable number of men. Plowing, harrowing and many other operations can be done much more economically with three- or four-horse teams.

**Machinery.**—The cost of producing crops on the small farms is also increased because of the lack of machinery. The small farmer must either do without much of the labor-saving machinery possible on the larger farm, or invest more money in machinery than he can afford. Machinery can be used more effectively on large farms. One mower, one hay-rake, one tedder, one hay-loader, one corn-harvester, one grain harvester, one grain drill, one manure-spreader, one potato-digger, one potato-planter, can do their work on a 250-acre farm as readily as on a small farm. Few of the small farms have half of these tools. If a small farm does have nearly all the list, it cannot use them enough to pay for the investment. The more efficient the numerous machines become, the larger our farms should be.

**Best Size of Farm.**—For greatest efficiency, a farm should be large enough to fully employ at least two men the entire year. One man is at a great disadvantage in many farm operations, and, in case of sickness or other emergencies, the disadvantage is still greater. For general farming, these figures show that a farm should contain at least 150 acres.

The twelve most successful farms averaged 223 acres. They were over twice the size of the average farm of the county (107 acres). These twelve farms had also a much larger capital than

the average farm. While the acreage was 103 per cent. above the average, the capital was 147 per cent. above the average. It follows that not merely was the total capital of the most successful farms larger, but the capital per acre was also above the average. This superiority in the matter of capitalization no doubt contributed in some degree to the success of the larger farms.

By way of further evidence of the economy of larger farms, there is cited the case of a good and well-managed, but, nevertheless, comparatively unprofitable small farm. This farm of 63 acres (47 under cultivation) gave a yield of potatoes 108 per cent. above the average. The receipts per cow from market milk were 54 per cent. above the average, and the receipts per hen from eggs 41 per cent. above the average. The farm was one of the best organized and managed in the county, yet the labor income yielded was only \$392—little more than a hired man's pay. Farmers of no greater ability were making eight times as great a labor income. For example, a neighbor with a farm of 266 acres (236 tillable), no better located, was making \$2,920 labor income on poor soil, and with poorer yields. The latter was selling the same products as his smaller neighbor (milk, potatoes and eggs), with the addition of hay and a few oats. His only advantage was the greater acreage of his farm.

experimental plant at the College. As usual, grades No. 2, 3 and 4 made larger loaves than flour from No. 1 Northern. This is a strange fact, which Prof. Harcourt thinks may be explained by the fact that the No. 1 sample is a little larger berry than the next three grades, which may therefore show a higher quality. Whether the larger berry of the No. 1 grade produces a greater quantity of flour per bushel, Prof. Harcourt has not attempted to determine, as his samples have been too small to admit of accurate comparison. Unless it does so, the No. 2, 3 and 4 grades would be better value to a miller than the No. 1, while the No. 5 would be fully as good. In his baking tests, Prof. Harcourt has taken a given weight of flour in each case. The millers are anxious that a larger plant should be installed, so that the experimenters could compare yields of flour, as well as quality. Prof. Harcourt's tests show that the flour from this year's wheat makes a finer, silkier texture, and fully as large a volume as that from last year's wheat. His samples, however, were procured from Manitoba, and a test of Saskatchewan wheat might possibly show a slightly different result. It is, of course, to be remembered that there is much of this year's western wheat crop that is unmarketable, except as feed, and large quantities which will grade lower than No. 5.

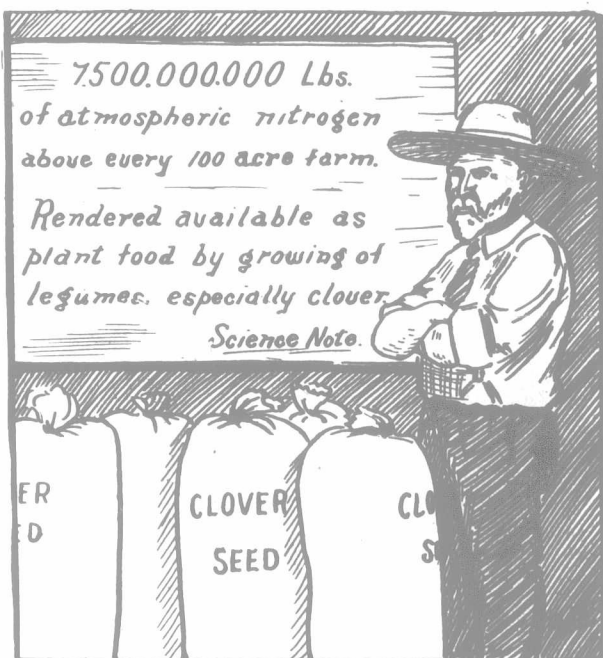
The flour of this year's Ontario wheat is superior to that made from the flour of last year's wheat, and produces a larger loaf of whiter bread, with better-textured crumb. The superiority may be due to the drouth, which decreased the size of the berry, but at the same time produced a superior quality. There are many deeply-interesting points suggested by Prof. Harcourt's work, and it is obviously a line that should be extensively followed up.

THE DAIRY.

Winter Feeding of Dairy Cows.

Buying grain to feed cows is a matter that takes considerable nerve at the present prices on the market. It is a question, too, that takes lots of thought and study. Many are the farmers I hear this fall asking their neighbors what they feed, and how much. Farmers of to-day are putting more thought and study into just such questions as feed and feeding, whereas, twenty years ago, most any way and any kind of feed would do. I keep thirty-five milk cows right along. I dairy summer and winter, and manage to have pretty nearly the same amount of milk at all seasons of the year. I sell my milk right at the farm. My milk netted me 4 cents for six months, and 3 cents for the next six months.

Farmers, as a rule, depend too much upon pastures, and do not use enough of green feed or grain. I do not depend on the pastures for more than two months any season. I feed more or less meal to my milking stock every day in the year; in fact, I do not know that it pays to feed the meal in the flush of the pastures, but my cows got so accustomed to receiving their grain ration that it would be a great disappointment to them in coming to the stables to find no meal in their boxes. It pays, you know, to please the milk cow. In flush of pasture, I only feed about a quart of meal morning and evening. When the pastures begin to dry up, I have plenty of green feed, such as peas and oats. I give this green feed in the stable, where I feed everything to my cattle. It is a great waste of both feed and manure to feed in the yard, or, in fact, in the pastures, either. I made several sowings of peas and oats, coming on at different times through the summer, and when that is eaten, I have corn in



**Farmer Wise.**—If these scientific chaps are right, I calculate there is a claim of nitrogen above my farm valued at about a billion dollars. They say that clover and alfalfa are the most effective "plants" for developing this claim. Guess I'll keep them working full time.

Good Flour from 1911 Wheat Crop.

That the flour made from Western Canada wheat this year may not be so very inferior in quality, after all, notwithstanding the adverse season, and that the flour made from Ontario winter wheat of this season's crop is better than the flour from last year's crop, were indicated by addresses given by Professor Harcourt, of the Ontario Agricultural College, to a meeting comprising members of the Dominion Millers' Association, who visited Prof. Harcourt at the College recently. Prof. Harcourt had used samples of the seven standard grades by which the Western wheat is graded, had milled these, and baked the flour in his small



The Turnip Cart. A method of sheep feeding in Scotland.



plenty. After the silos are filled, I cut the rest and shock, and feed it to my cows well into the winter.

I also store a quantity of sheaf oats, not oat hay, cut on the green side, and feed unthreshed to my horses in the winter time, when they are doing nothing. I consider well-cured sheaf oats, cut on the green side, is superior to timothy hay for horses. My winter feed largely consists of silage and clover hay. My ration for strictly fresh cows is 40 pounds of silage, 10 to 15 pounds of clover hay, and a grain ration of one part oil meal, one part cottonseed meal, four parts bran, and two parts gluten feed. About eight to ten pounds are fed to each cow per day. My cows are not phenomenal milkers, but they are a pretty good average, and are getting better every year. I dairy all the year round. I do not believe in the way many farmers manage—that is, dairy for a few months in the summer, and then quit.

New York State.

J. P. FLETCHER.

### For the Dairy Conventions.

"Crop Production," by J. H. Grisdale, and "Tile Draining," by Prof. Wm. H. Day, are the two features booked for the afternoon session of Farmer's Day at the Eastern Dairymen's Convention, in Campbellford, Ont., January 3rd to 5th. Among other items of the programme for the several sessions, we observe that the delegates are to have an opportunity of hearing the Minister of Agriculture, Hon. Martin Burrell, while Dr. C. A. Publow is down for an address on "Taking the Bull by the Horns" presumably the dairy bull. The programme of the convention, just to hand, is bright with wit, humor, suggestion and fact. Let us hope the convention will be equally spicy.

The Western Convention, at Ingersoll, follows, as usual, the next week. For the Wednesday afternoon session, arranged specially for farmers, the three features provided are the report of the dairy herd competition; an address by Dairy Commissioner Ruddick on "The Outlook for Our Cheese and Buttermaking Industries," and one by Prof. J. H. Grisdale on "Housing and Feeding the Bacon Hog in Canada." At the Wednesday evening meeting, Dr. J. A. Amyot will discuss the "Sanitary Handling of Milk," especially for towns and cities; while Geo. A. Putnam speaks on "The Average and the Possible in Agricultural Production." Thursday forenoon will be the cheesemakers' session; Thursday afternoon, buttermakers' session. For each of these good programmes are provided. The convention will conclude on Thursday evening.

## APIARY.

### Short Course in Beekeeping at Guelph.

Do you know that the annual honey crop in Ontario is worth one and a half million dollars, and that ten thousand persons, from Point Pelee to the Cobalt regions, and further north, are engaged in the business of producing it, keeping three hundred thousand hives of bees for the purpose? Even then, we venture to say, not one quarter of the nectar secreted by Ontario flowers is ever utilized. And, although honey prices are advancing every year, not one-tenth of the honey is consumed in Ontario homes that our people are capable of eating.

Now, how can this industry be developed? Mainly by the educational methods now being used by the Department of Agriculture. The successful organization work culminated last month in the biggest annual convention of beekeepers Toronto ever saw. The next event is a Bee Short Course at the Ontario Agricultural College, January 9th to 20th, 1912. This course is free to all who are interested in bees, and every session, from beginning to end, will be full of information on the care of bees and how to make money from them. During this course, Morley Pettit, Provincial Apiarist, will give a series of demonstrations and illustrated lectures covering all the main features of practical management in a way that will be helpful to experienced beekeepers, and beginners, as well. Lectures will also be given on allied subjects by other members of the teaching staff, and a few expert bee specialists will be brought in from outside to tell how they have made a success in their special lines, such as the breeding of queen bees, the production of beeswax, etc.

Special time will be devoted each day to the discussion of practical topics by members of the class, and one whole day will be set aside for a conference on foul brood.

Remember the dates, Jan. 9-20, 1912. No fees, no examination, reduced rates on railways. For programme and further information, address, G. C. Crookson, B. S. A., LL.D., President Ontario Agricultural College, Guelph, Ont.

## POULTRY.

### The Conservation of Vigor.

Abstract from address delivered by W. A. Brown, of the Live-stock Branch, Department of Agriculture, Ottawa, at Guelph Winter Fair.

The conservation of vigor is one of the great fundamental problems confronting all agriculturists interested in the development of plant and animal life. It is of particular interest to poultrymen, because more is being required of the modern hen, in proportion to her live weight, than from any other class of farm animals. There is good reason to believe that much of the infertility and low hatching powers of eggs, and weakness and high mortality among the chickens is due to the lack of vigor on the part of the breeding stock.

The topic is of interest to all poultrymen, but possibly the fanciers have realized its importance to the greatest extent, because, in contrast to the miscellaneous matings of many poultrymen, they have been striving to attain a certain ideal, the achievement of which required that the breeding stock be strong and vigorous and prepotent in the characters desired. No doubt much weak and inferior stock has been produced in instances where vigor has been disregarded. In the last analysis, it is remarkable to observe what a small proportion of our breeders have been able to conserve that vigor to the extent of retaining their position in the front row of successful exhibitors in the big shows, and who have continued to supply the rank and file of the poultry fraternity with birds of quality for a period of years.

While the farmer and utility man are no doubt working along somewhat different lines, they have much to learn in respect of vigor from the successful breeder. Too many have conceived of no ideal other than the simple reproduction of their flock, and they allow their birds, therefore, to mate up promiscuously from year to year. Too much cannot be said of the value of the ideal; it adds an incentive to selection, which, with a keen knowledge of that phase of the business, must include a very careful culling for vigor.

### SOME CONTRIBUTORY CAUSES TO LACK OF VIGOR.

These are similar, if not the same, as the causes that have brought about the failure of many poultry enterprises. As a matter of fact, the average life of many large poultry plants has been very short, indeed. The same has been true of the history of many smaller flocks. Many people are continually changing from one breed to another, or doing something, such as the introduction of a male of another breed or variety, in order to bring the stock up to the standard of production they think it ought to have. It does not seem to occur to them that the trouble is with themselves, in that they have allowed the vigor and stamina of the birds to become gradually depleted. Under ordinary care, it takes from three to five years, on the average, for this condition of affairs to become apparent.

The following are some of the causes that have tended to reduce the vigor of the stock:

1. The great prevalence of the intensive system of keeping poultry. This may work satisfactorily for laying stock, but breeding stock will not give the best results in small and closely-yarded runs, bare of green food, and where the soil has become contaminated with the accumulated droppings.

2. Lack of sanitation, and the overcrowding of the birds in the damp, dirty, ill-ventilated houses, when the consensus of experimental evidence on the matter would indicate them clean, dry, open, or curtain-front houses, with an abundance of fresh air, were necessary, on account of the peculiar anatomical structure of the fowl.

3. Faulty methods of incubation and brooding.

4. Inroads of disease, and the presence of lice and mites. It is generally recognized that diseased birds should not be bred from, but too many people overlook the fact that but very indifferent results can be obtained from stock which is infested with lice and mites.

5. Unskillful feeding. On many farms and poultry plants where a real, genuine interest has been taken in poultry, probably the vigor of the birds has been depleted as much by the excessive feeding of too rich rations as by any other single cause. Poultrymen interested in late fall and winter egg production have been rather too prone to look upon the hen as a machine; in fact, many good-laying strains have been popularly called egg-laying machines. No doubt a hen does respond for a time to the feeding of rich protein foods and other stimulants, but these can be used to excess, and often are to such an extent that the reproductive organs have lost the power to produce an egg that will hatch a chick, to say nothing of the possible death of the bird itself. It does not pay to treat a living, animate object as one would a machine.

It is not necessary that all of these causes may have been at work on any one farm or plant, but the resultant effect is the same. This effect shows itself in its most tangible form in the gradually increasing mortality among the chickens from year to year, and the resultant inability to restock the plant.

The poultry business works in a circle, and this lack of vigor is apparent on the whole circumference, for in many cases the chickens that just lived would have been better dead, for they are often worse than dead. They are weak and anemic. They do not respond to good treatment and good food. They do not thrive, they are slow to mature, remain stunted, and often, in the general scarcity of pullets, they find their way into the laying-house, and there they remain, failing to respond themselves, and casting a derogatory effect on the rest of the flock; and, if, perchance, they should get into the breeding pen, the effect of their lack of vigor will be passed on, with interest, to their progeny, if they have any.

In fact, poultrymen and others the country over do not lay sufficient stress on the individual itself. Ask a number of people congregated together in an Institute meeting or a class-room, "What is the first essential in the production of winter eggs?" It is rather surprising the number who will answer that it depends on the care, on the feeding, on the housing, or on any one of the several other things. They seem to lose sight of the fact that a hen is necessary—not an ordinary hen, but a large, healthy, vigorous, substantial, well-grown pullet that will respond to good treatment, even under rather untoward circumstances.

### THE INDICATIONS OF VIGOR.

First: In the male.

He should be strong, well-built, and of excellent type for his particular breed. He should have substance and quality, be active, sprightly in appearance, have a lordly strut, be a good fighter, have a strong, lusty crow oft repeated, attentive to the flock, sharing all dainty morsels, but not necessarily starving himself.

Examined in detail, there is an interesting correspondence of parts in a physically weak male; for instance, such a male lacks masculinity; he is likely to have a long, thin beak and head, and sunken eye; a long, thin neck; a long, thin body, with no apparent style or station, and long, thin thighs and legs.

A strong, highly-vitalized male should have a medium to large bright-red comb and wattles; a bright, clear, round eye which stands out prominently on the side of the head—the eye is the mirror of the body; it shows unmistakably indications of health or disease. The size of the tail and the way it is carried, is an indication of vigor. A strong, vigorous male has a full, flowing tail which normally is carried erect. The shanks should be strong, plump, and of the color characteristic of the breed, as contrasted with the faded, thin shanks of the male of low vitality. Cold shanks are a very common accompaniment of low vitality. It is a common symptom of disease.

Second: In the female.

She should have an active, sprightly movement peculiar to herself; should be tame, rather inclined to follow one about the yard, than excitable and nervous. The vigorous hen is the hen that is first out in the morning, the last to go to roost at night, the hen that goes to roost with a full crop, the hen that lays in the winter, and whose eggs hatch into strong, vigorous chicks in the spring.

The quantity, brilliancy and nature of the plumage are very reliable indications of vigor. The feathers of a fowl of low vitality grow slowly. They are likely to be dull and ruffled, as compared with the close-fitting, smooth, fully-developed, bright plumage of the vigorous fowl. The color pigment in the feathers of brilliantly-colored birds does not develop to perfection in the physically weak birds. They do not have the surplus fat in their bodies to supply the gland at the base of tail which oils the plumage.

It might not be well to take any single evidence of lack of vigor as conclusive, but a combination of several weak characters is absolutely reliable.

### HOW MAY VIGOR BE CONSERVED.

By selection. Selection may be practiced in two ways: First, by the individual's observation and innate appreciation of what is required, and the subsequent application of the same in the selection of the stock. Second, by keeping a systematic record of performance and breeding of the different birds, and a definite determination, by biometrical methods, of the relative vigor of those different birds. This implies that the birds in the breeding pens shall consist of only those which come up to a certain standard as regards vigor, appearance, performance, and prepotency of desired characters.

Both methods are being practiced among poultrymen at the present time, the first, of course, to the greatest extent, the fanciers, particularly



using this method. The latter is used mainly by investigators.

The ideal consists of a combination of both methods; the difficulty in the former alone may be evinced in the uncertainty of the results, indicated by the fact that no up-to-date breeder relying on that method alone depends on a single mating; he uses a greater number of matings, and then is not at all sure of what he will get. The difficulty in the second method is that, for poultry, it entails a great amount of bookkeeping, and the fact that anyone so engaged is apt to lose sight of the value of personal observation.

Selection or, rather, culling should be practiced all along the line from the time the egg is laid until the birds are dressed for the market. The exterior of an egg does not give much information concerning the vigor of the germ, but, nevertheless, it is well to discard all abnormal eggs. Extreme care should be taken in the selection and management of the hatching medium, for even the progeny of the strongest stock can be greatly injured by faulty incubation. All cripples and weaklings should be killed as soon as apparent. All poultrymen are familiar with the short, round, shrunken body; pale, thin, flat beak, short, thin down; pale, thin shanks, and that peevish, squeaky voice of the weakling, as contrasted with the large, plump, full parallelogram-shaped body that fills the hand, the active, sturdy chicken that is hard to catch and hold. The weak chicken should be destroyed. It is a constant source of annoyance and loss.

Selections should be practiced whenever a chick shows weakness. This is often apparent when they are between ten days and three weeks of age. In many weak chickens, especially those of the light-weight breeds, the wings droop and seem to grow faster than the body. As a matter of fact, it is the reverse—the growth of the body fails to keep pace with the growth of the wings.

The chick that lacks vigor frequently requires several weeks longer to complete the first plumage. Such individuals may be kept until they reach the broiler stage, when a careful selection should be made. In many instances the largest, plumpest chickens—those that reach broiler size first—are sold, and the poorer specimens allowed to mature. This, of course, is wrong, and is not practiced by the successful poultryman, who always has his eye and mind on the birds which he intends to place in the future breeding pen.

When the stock is brought in from the range in the fall, a rigid selection should be made. Not more than 75 or 80 per cent. of the pullets are fit for the laying pen, and of these, only about 10 or 15 per cent. are suitable, on the average, for the breeding pen. Only pullets and cockerels should be retained that satisfy all requirements for robust constitutional vigor.

To sum up, one might state that the crucial test of any poultryman's or poultry-woman's ability is his or her ability to show at the end of the season the highest possible percentage of strong, healthy, vigorous birds in proportion to the numbers of eggs set.

This implies that the greatest possible skill must have been used in the selection of the breeding stock, in the care of the eggs while hatching, and in the management of the young and growing stock.

**International Egg-laying Contest.**

The international egg-laying competitions, promoted by the Philadelphia North American, at the Storrs Experiment Station, Connecticut, is now in full swing. It was begun on November 1st with 23 breeds competing, representing the United States, Canada and England. There were 100 pens of five birds each and 100 substitute birds, to be used in case of any of the others falling out of the race. White Leghorns made the largest entry (33), Barred Plymouth Rocks being second with 14, White Wyandottes 9, Rhode Island Red 8, and so on down. The Canadian entries are: A. P. Hillhouse, Brown Leghorns, Bondville, Que.; Beulah Farm, Hamilton, Ont., and Harley S. Jones, King's Co., N.B., White Wyandottes; Institute Agricole, Quebec, R. I. Reds; A. B. Wilson, St. Catharines, and C. McCready, King's Co., N. B., Barred Plymouth Rocks.

In the first week only 91 eggs were laid, but this was expected, owing to the unsettled condition of the birds. The highest-scoring bird was a White Wyandotte, which laid 6 eggs in the seven days. As time passes the number of eggs laid steadily increases, but it is thought that some of the birds doing best now will fall behind at moulting time, and some of the laggards at present will pull up on the home stretch. In the sixth week of the contest the 100 pens produced 714 eggs, the largest number in any week since the start, or a total for the six weeks of 1,915. An English pen of White Leghorns captured the sixth week record with 22 eggs. A Rhode Island Red pen scored second, with 21 eggs. As far as possible individual records are kept, but some of the eggs are dropped outside the trap nests, so

that the pen only gets the credit. Close account is being kept of food and all other particulars. The contest is under control of a committee of the chief poultry experts of the continent, one of whom is Prof. F. C. Elford, recently of Macdonald Agricultural College. The competition will last for a full year.

**Some Poultry.**

Following is the poultry produced and sold by ten families along one concession road within one mile:

	Value.
No. turkeys, 537; weight, 5,825 lbs.....	\$908.13
No. geese, 90; weight, 1,030 lbs.....	108.34
No. chickens and fowl, 556 lbs.....	46.09
	\$1,072.56
Unsold turkeys, 25; value.....	25.00
Unsold geese, 10; value.....	15.00
	\$1,112.56

The turkeys were sold alive at 15c. per pound. This poultry was marketed at the farm of Chas. Tucke, at Dixon's Corners, Township Matilda, in two days, for Western market.

EDMUND H. THOMPSON.

Dundas Co., Ont.

**GARDEN & ORCHARD**

**A Laboratory Full of Nuts.**

The second annual meeting of the Northern Nut-growers' Association, which comprises 34 members, drawn from 12 States, was held at the New York State College of Agriculture, Ithaca, N.Y., on December 14th and 15th. President Dr. Robt. T. Morris, who is an enthusiastic experimenter with nuts, gave a paper on the hickories. He has made successful crosses reciprocally between the shag-bark and shell-bark hickories, and various other nuts.

J. Franklin Collins, of the Department of Agriculture, gave a paper on the chestnut-bark disease. He said: In 1910 the State of Rhode Island had less than 50 known cases of disease, while now, one year later, there are 4,000 known cases. In Pennsylvania the Legislature has appropriated \$275,000 for the control of this disease. Spraying has been found ineffective, as the disease is within the bark, where no spray material can reach it. In Massachusetts this disease has spread during the last year from four to 71 towns, showing its rapid power of increase, and that radical measures must be taken against it at once. Cutting out the affected wood proved to check it at first, but later it was found that it is almost impossible to get the entire diseased portion by this means.

Perhaps the main feature of the meeting was the exhibition of edible nuts from the Northern States, which completely filled one of the laboratories in the main building.

Dr. Morris assisted very greatly in this show, by placing notices in the leading agricultural and

nut papers previous to the meeting, that an exhibition would be held in connection with the meeting, and first and second prizes would be awarded to the best collections of 12 specimens of all species of nuts; each exhibitor being required to send with his collection a letter describing the tree and the nut. The results of this competition far exceeded all expectations, for it brought specimens from many of the Northern States, and required the judges to remain an extra day after the meeting to complete the judging. The main points used by the judges in scoring were cracking qualities, plumpness and quality of kernel, size of nut and thickness of shell.

The meeting proved a very successful one, and several new names were added to the membership list.

The old officers were re-elected:—President, Dr. Morris; Vice-President, T. P. Littlepage; Secretary and Treasurer, Dr. Demming.

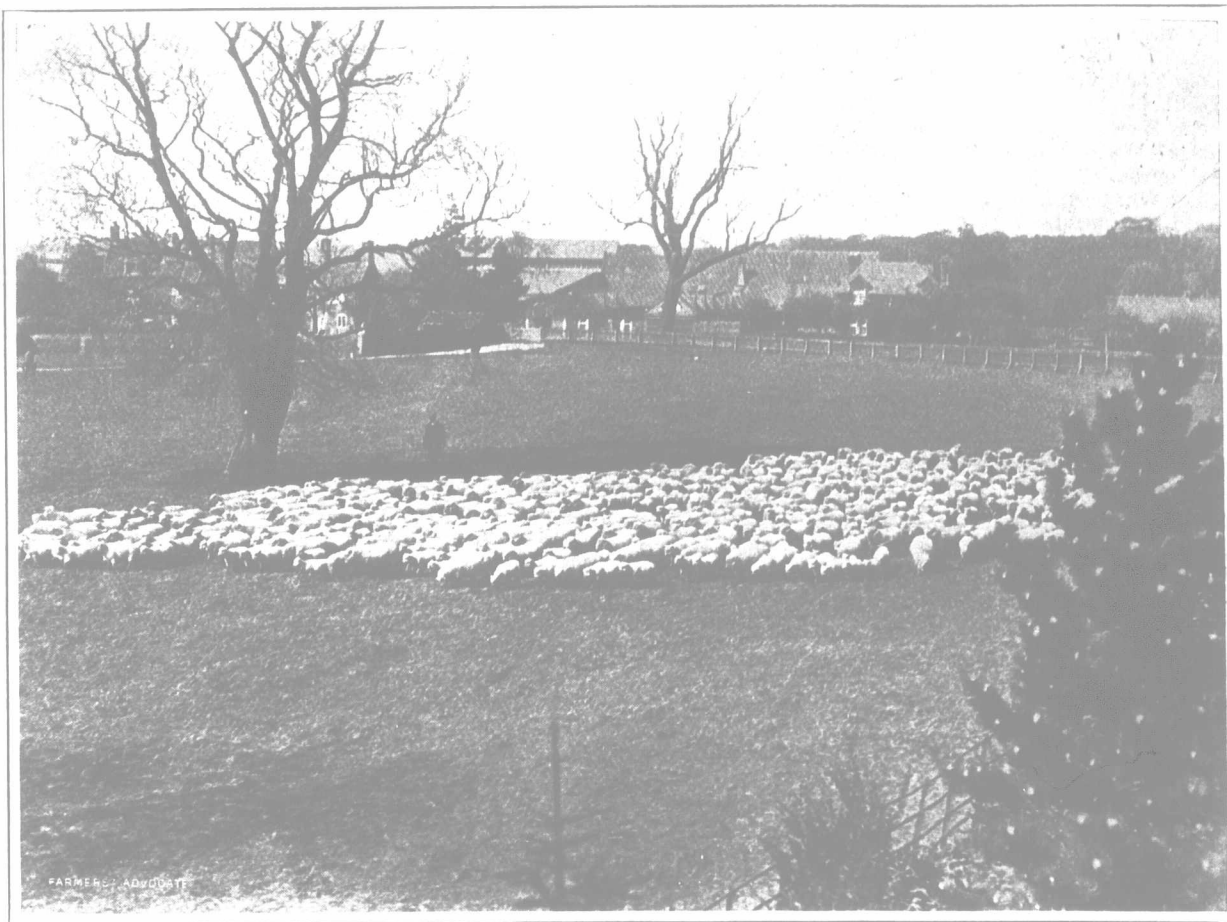
C. S. W.

**Native Canadian Medicinal Plants**

A good many people have the notion that every plant and herb that grows "is good for something, if we only knew it." This is one of the forms of expression of the selfish idea that everything in the world and out of it was made for man's service. There are, have been, and will always be, untold numbers of birds, insects and plants outside the reach of human observation and use; their Creator has His own reasons for their existence, and these are sufficient, without any reference to man's recognizable needs.

In reference to weeds and herbs, it is a comparatively small number of the thousands that have made their homes in the Canadian woods and fields that are of any possible use for human food or medicine, and any of these, such as peppermint, or hydrastis, that become highly valuable commercially, will be taken in hand by the cultivator. The newspapers told us, for example, this fall, that the largest sum of money ever paid for a single load of farm produce was turned over last October to a peppermint farmer in Michigan. In a strict sense, peppermint-raising can hardly be called farming.

For the United States Department of Agriculture, a bulletin on American Medicinal Herbs has recently been prepared by Miss Alice Henkel. It describes between thirty and forty plants native to United States territory, whose leaves or flowers are of acknowledged medicinal value, about half of them being recognized and used in the practice of regular physicians, and the others in sufficient demand to make it worth while for the drug houses to stock them either in crude form or extract. A considerable number of these plants, such as catnip, horehound and witch hazel, in marketable condition, bring only about twice the price of good hay, and hence it would not pay any able-bodied man to give up his time to collecting them, but an invalid strong enough to wander through the fields could not engage in a more delightful occupation. There are, however, exceptional circumstances, as when one happens to live near a place where one of these plants has taken



The King's Flock of Southdown Ewes and Lambs at Wolferton.



entire possession of a considerable area of ground, where anyone using the proper means of cutting and curing them could make good wages.

In the Bulletin above referred to are listed the following medicinal plants, which are pretty widely distributed in this country:

**Stramonium.**—Stramonium, otherwise known as thorn-apple, jimson weed, and datura, is easily recognized by its large, angular, ill-smelling, smooth leaves; its white or purplish, three-inch-long, trumpet-like flowers; its prickly, two-celled, globular pods, an inch or more in diameter, filled with numerous, blackish, poisonous seeds. A powerfully narcotic drug is extracted from leaves and seeds. As a home remedy, the leaves are sometimes smoked as an antispasmodic for asthma. The shade-dried leaves, collected when the plants are in flower, bring from 2 to 5 cents a pound.

**Lobelia.**—Also called Indian tobacco, asthma weed and vomit wort. The specific part of the name of this plant, *Lobelia inflata*, is derived from the inflated seed capsules, which are about the size of a pea, containing, when ripe, numerous, very minute, brown seeds. The small, pale-blue flowers are two-lipped; the upper lip has two, and the lower one three segments. The plant has a poisonous, milky sap; its seeds are also poisonous. The shade-dried leaves, tops and branchlets, collected when the lower seed-pods attain the size of peas, sells for about three cents a pound.

**Boneset.**—*Eupatorium perfoliatum*, or thoro-wort, or ague-weed, or fever-plant, was well known to many of the Canadian pioneers. It came up thickly in the new land where it was low or swampy, and still remains a conspicuous feature of the edges of low thickets and swamps. The rough, hairy, opposite leaves joined at the base, and the furry, flat-topped clusters of creamy-white flowers, make it easy to recognize. Boneset tea used to be a favorite remedy for colds, fever and ague, and indigestion. Its merit is still recognized. The market price for dried leaves is only about 2 cents per pound.

**Grindelia.**—*Grindelia*, or gum plant, is only an adventurer, yet, in the Eastern half of Canada, but when in flower it often forms a conspicuous feature of Western fields. There is no mistaking this plant, on account of the sticky resin secreted by the bracts under its yellow, sunflower-like flowers. In one species, not only the flowers, but also the foliage, exudes this gummy resin. Grin-

delia salve has some reputation as an alleviant in ivy-poisoning; physicians employ the extract for various purposes. The leaves and flowering tops, collected when the plant is coming into full bloom, and properly dried, have brought as high a price as ten cents a pound.

**Catnip.**—This well-known plant, *Nepeta cataria*, needs no description. Leaves collected when the plant comes into bloom, and carefully dried, sell for about 3 cents a pound.

**Bearberry.**—*Arctostaphylos uva-ursi* is one of the two or three plants called by the Indians kin-kinnic. This trailing shrub, with its leathery, evergreen leaves and its small clusters of bright-red, globular, nearly dry berries, adorns the sand hills of our lake shores, and grows abundantly over the thin, exposed soil of the northern spruce country. Extract of bearberry is taken for disorders of the kidneys and other organs. The leaves sell for about 3 cents a pound.

**Wintergreen.**—*Gaultheria procumbens* (checkerberrry, grouseberry, or dierberry) grows in association with bearberry, is similar in its habit, flower and fruit, but is thinner, and can be distinguished at once by the well-known flavor of its leaf. The bearberry delights in the direct sunshine, while the wintergreen prefers the shade, and does best in peaty or sandy damp woods. Oil of wintergreen is extensively used. The leaves sell for three or four cents a pound.

**Pipsissiwa.**—*Chimaphila umbellata* is best known by its Indian name, pipsissiwa, but it is also called prince's pine, rheumatism root, and bitter wintergreen. It resembles wintergreen in its habit and foliage, but can be distinguished from it by the little cluster of flowers or seed pods that rise from the center of its rosette of stem leaves raised four or five inches from the ground. It favors mixed evergreen woods. The extract of this plant is tonic and diuretic, and has application to kidney and rheumatic affections. The dried plants are worth from 3 to 4 cents a pound.

**Witch-hazel.**—This shrub bears its yellow flowers in the fall, when its own leaves and those of other plants are falling. The hazel-like fruit ripens the following season, and at maturity shoots its hard, black seeds to a distance of several yards. The leaves and bark are employed to allay inflammatory conditions. Leaves collected in the fall and properly dried bring 2 or 3 cents a pound.

**Pennyroyal.**—Neglected fields occasionally become filled with this weed, *Hedeoma pterigoides*, the American pennyroyal. It is a much-branched

ciliate plant, with small flowers clustered round the stem in the axils of the leaves. It is easily recognized by anyone who knows the peculiar odor of the oil. This odor is so offensive to insects that the oil is used as an insecticide. The plants except the roots, are collected when in flower, and sell for about 2 cents a pound.

**Fleabane.**—*Erigeron Canadensis*, variously known as butterweed, bloodstanch, horseweed, fireweed, and Canada fleabane, is one of the commonest weeds in new lands. It bears numerous, small, white flowers on branches from a central stem, varying with the fertility of the soil, and the space occupied from a few inches to 7 or 8 feet in height. The upper leaves are numerous and narrow. *Erigeron* oil has a reputation for stanching hemorrhage and controlling diarrhea. The leaves and branchlets, collected at flowering time, and properly dried, are said to be worth 5 cents a pound.

**Coltsfoot.**—*Tussilago farfara*, bears several common names, such as gowan, cough-weed, horse-ginger, and coltsfoot. The yellow blossoms, on their white, woolly stems, appear in the spring before the leaves. The latter are large—6 inches or more in diameter—and shaped like a horse's foot, smooth and green above, and white-woolly beneath. This weed has been introduced from Europe, and, if it is given a chance, it becomes locally abundant. Eastern Ontario and the Provinces by the sea show numerous, well-established patches of it. The leaves and rootstocks have long been valued as a remedy for colds and affections of the chest. Properly dried coltsfoot brings about three cents a pound.

**Sweet Fern.**—*Comptoria asplenifolia*, is a shrubby, sweetgale that sometimes entirely occupies hillsides and denuded pine lands in the rocky country north of the lakes. The shape and odor of its fern-like leaves have given the plant its commonest name. The crushed leaves, when rubbed between the hands, yield a spicy, aromatic odor that well identifies this shrub. The leaves and reddish-brown twigs are used in diarrheal complaints. The price for dried parts is said to be 3 or 4 cents a pound.

There is also a market, at 1½, 2 or 3 cents a pound, for properly-dried leaves of horehound, motherwort, mullein, spearmint, tansy, yarrow, and wormwood, but, as has already been stated, it would only be under exceptional circumstances that it would pay anyone to collect them.

## What, Where, How Much and How to Plant.

With the widespread arousal of interest in apple-growing, stimulated by orchard demonstration and well attested instances of individual profit from commercial operations, there would seem every ground for anticipating an immense increase in the planting of fruit trees this coming spring. Whether or not this planting is liable to be overdone, is a question that might perhaps stand discussion, but our present purpose is to help to answer the many important practical questions that confront the intending planter, expert as well as amateur.

Men with personal experience and intimate knowledge of conditions in their respective fields have been asked to discuss the following points:

1. To what extent is planting of apple trees likely to be made in your vicinity this year? Will it be larger or smaller than last year?
2. What would you consider a fair acreage of orchard for an enterprising farmer with one hundred acres of land?
3. What soil, site and preparation of the land would you prefer?
4. About how many varieties, what ones, and about what proportion of each would you suggest planting, and why? What variety would you plant to pollinate the Spy and other imperfect kinds?
5. What age of trees would you recommend, and would you advise dealing direct with the nurseries, or how?
6. How would you arrange and how would you space the trees in your orchard? Would you plant early apples or other fruit as fillers?

A valuable series of letters is here presented. Read them carefully, and feel free to write, adding helpful suggestions from your own planting experience.

### Twenty-acre Orchards.

Editor "The Farmer's Advocate":

There is a slight increase this year in the number of orchards planted, but the increase is not marked, and there are very few large orchards being planted.

For the farmer having one hundred acres of land in a recognized apple district, I would consider that twenty acres would be a fair acreage to devote to orcharding. This would make orcharding the chief business on the farm, and it would make the farm practically self-sustained in plant food. The purchase of a little concentrated feeding stuff would enable the farmer to maintain indefinitely the fertility of the land. It

would enable him to so manage his business as to be fairly well employed for the twelve months in the year, and it would give work enough to one man (probably two), in addition to the family of the farmer. The revenue would provide not only for a mere living, but would give many of the conveniences and even luxuries that contribute so much to an ideal life.

The soil and site is a matter of comparative indifference. The preparation of the land is almost everything. The chief feature of the preparation of the land is the underdrainage. Of the hundreds of sites of orchards that I have carefully examined, I cannot recall more than two or three that would not have been greatly improved by underdraining. Ninety out of every hundred need drains at least every hundred feet apart, and the great majority would yield a good revenue on underdrains sixty feet apart. Very many soils and sites are absolutely impossible without underdrainage. When underdrained there are only a few that are very objectionable in the apple belt.

Varieties would vary with the district. It would be perfectly absurd to plant the same varieties in Carleton County that would be planted in Kent County. In no commercial orchard would I plant more than three or four varieties.

There is no difficulty in pollinating the Spy with any of the winter varieties. The overlapping of the blooming period of the Spy and other winter varieties in almost any section is sufficient to get good results. There have been no accurate experiments for a sufficiently wide area and for a sufficient length of time to demonstrate beyond a doubt that one variety produces better results on the Spy than another. But there are sufficient facts at hand to justify the statement that there is a possibility that some varieties if used to pollinate the Spy will produce a better type of fruit than if the flowers are self-pollinated or pollinated by some other varieties.

I would strongly recommend one-year-old and two-year-old trees. Two-year-old trees, perhaps, have a slight advantage. They are practically as sure to live as a one-year-old, and usually make as good a growth, and of course have the advantage of one year's more maturity.

I should undoubtedly deal with the nurseries, and if the order was at all a large one, would exact a bond that would secure me an indemnity in case the varieties were not as ordered. Perhaps the greatest losses in orcharding, presuming

that the stock is well cared for, is in the failure to secure varieties that were ordered from the nurseries or from the agents. I can hardly conceive it possible that any intelligent fruit-grower or farmer who is planting a large orchard, would deal with the ordinary nursery agent. In the matter of securing nursery stock, whether ordered early or late, I should insist upon having good stock or none.

The longer that I have experience in orchards and the working of them, the more I am impressed that no arrangement of trees is more satisfactory, all things considered, than the ordinary square planting. I am also perfectly certain that it is a great waste of time and money for the ordinary farmer to use fillers. Fillers are only excusable on very high-priced land, and with highly-skilled fruit-growers catering to special markets. I consider a filler has no place in the ordinary and average apple orchard. I have never made a success of them, and I cannot recall in all my experience more than three or four fruitmen who have.

Ottawa.

A. M. NEILL,  
Chief, Fruit Division.

### Moderate Planting in East Huron

Editor "The Farmer's Advocate":

There is not very much extensive planting of apples down in this county, but will be much the same as last year as to acreage. Last year upwards of 200 acres was planted.

Ten acres of orchard on a hundred-acre farm is quite easily handled, along with other work, and will add much to the value of the property and yearly income of the farmer.

I prefer a sandy loam or gravel soil for fruit trees, within a few miles of a body of water, and sheltered from the north and north-west winds, either natural or artificially by wind-breaks. The soil should be well worked and fertilized, such as would be the case with root crops, etc.

Do not plant many varieties in a small plantation. In a ten-acre orchard four varieties would be plenty, consisting of Spy, Baldwin, Greening and King, consisting of equal portions of each, or if early-maturing varieties are desired, plant North Star (maturing 10 days later than the Duchess, and a much better shipper) and McIntosh Red. Both these varieties come into bearing earlier than does any of the previous mentioned winter varieties. These are all standard varieties, and of good commercial value. The Tolman Sweet is a good pollinizer.



I always plant a three-year-old tree if I can get it, and find that it usually does the best, having most vigorous growth after planting. Dealing direct with the nurseries is quite often the most satisfactory way, unless you know the nursery that the local agent is representing. If you need many trees it is often advisable to go to the nursery and see the stock, and then you know just exactly what you are buying. Always order your nursery stock early, then you get the best trees available; otherwise you have to take culls of many earlier orders, if trees are at all scarce.

The trees are more easily cultivated, sprayed and worked about if they are planted square and placed about 35 to 40 feet apart each way. Smaller growing trees may be planted at 30 ft. apart each way and be quite satisfactory. When the trees are placed diagonally in rows it is quite inconvenient (especially when spraying) working your way in and out among the trees.

Huron Co., Ont.

R. R. SLOAN.

### The Good Fruit Will Win Out.

Editor "The Farmer's Advocate":

Quite an extensive planting of apple orchards will be made in our locality next spring, but perhaps not much more than in the last five or six years, as farmers are planting steadily year after year, and have now a large acreage.

From 25 to 50% of the entire farm might be advantageously planted to orchard, if the farmer is capable of managing so extensive an orchard; if not, then 10 acres is enough.

Would prefer a rich clay loam within 5 miles of Lake Ontario; good drainage, and land clean and fertile.

Would advise a succession of varieties and quite a large proportion of best kinds of early and fall sorts. This would give a long picking season and distribute the work. There seems a growing demand for such kinds as Duchess, Gravenstein, Alexander, Wolf River, Wealthy, Blenheim and McIntosh. Then Snow, Greening, Golden Russet, Stark, Baldwin and Northern Spy should be planted in good supply. Ben Davis has been our most profitable kind, but am afraid they will get a slow sale in years of abundance.

Would recommend vigorous two-year-old trees for planting, and from a near-by nursery if practicable. Place orders early to secure varieties wanted.

In our region I would plant standard trees 35x30 ft., or else if fillers are desired, then 35x20 ft., using Duchess, Wealthy, etc., as fillers. This would leave the permanent trees 35x40 when fillers are taken out, which would be right for Baldwin, Spy, etc., on good soil.

I think there will be over-production of apples in years of favorable conditions, so it will be a survival of the fittest, and varieties of good quality, well graded, will be the best paying.

Durham Co., Ont.

W. H. GIBSON.

### Strong on Spies for Bruce.

Editor "The Farmer's Advocate":

The planting of apple trees in 1911 in our district was in excess of previous years, and the planting in 1912 will be slightly in advance of 1911. A few ten-acre orchards are being planted in this vicinity.

From five to ten acres of orchard might reasonably be advised for a man with 100 acres of land, but an enterprising farmer could easily take care of ten acres on a hundred-acre farm.

Any good soil, either naturally or artificially drained, will do, but preferably a clay, sandy or gravel loam, but would not recommend planting on heavy clay or quick sand. The site may be level, but preferably rolling land, with the slope south or south-east.

In preparing the land for the orchard there is nothing better than a clover sod plowed down the fall previous to planting, but any land that is fit for growing a crop of wheat or roots is quite suitable for an apple orchard.

For this district here I strongly recommend planting nothing but Spies, providing there are other orchards containing other varieties in the near vicinity of the Spy orchard; if not, I would advise planting the fifth row from one side Greenings, and the fifth row from the other Baldwins, as we find those varieties to be the best pollinators for the Spy. The reason for planting nothing but Spies in this district is because it is the best district in America for the production of first-class Spies, and there is always a good demand for good Spies.

As to the age of trees for planting, I recommend strong, vigorous, two-year-old stock. By all means deal direct with a reliable nursery, and do not allow any substitution, and see that every tree is guaranteed true to name. In order to secure a good selection it is advisable, and it is our practice, to place our order six months or one year ahead, and this method has paid us well.

In arranging or spacing the trees, all standard varieties should be planted not less than 40 feet each way. The early, slow-growing varieties, such as Duchess, may be planted as fillers. These will pay for the care of the orchard until such

time as the standards commence to bear, and then they ought to be cut down to give the standards ample room. No farmer on a hundred acres will make a mistake, nor could he make a better investment, than to plant five or ten acres of apple orchard, providing he cultivates, fertilizes, prunes and sprays, and takes care of it in a proper way. In my opinion there is not the least danger of the overplanting of apple orchards, as by the time the young orchards are bearing the old ones will be useless, and will have to be cut down.

A. E. SHERRINGTON.

Bruce Co., Ont.

### Ninety-five Acres Out of a Hundred for Apples.

Editor "The Farmer's Advocate":

There is nothing small about your request for information in your question-box of December 8th. You no doubt are aware it would require about four volumes to answer them fully. However, just a few words: More and more apple trees are going out in Nova Scotia every year. We are just beginning to realize that in the Annapolis Valley is the best fruit-growing proposition in the world. The working out of one and one-half million barrels this year, at fair prices, has just shown us what we can do. In the Annapolis Valley, I would recommend an enterprising farmer with 100 acres of land to plant about 95 acres to orchard.

As to soil, would prefer sandy loam, well drained. No special preparation is required. Care for trees after setting, rather than before.

Study the orchard in your section, and learn what succeeds there. Avoid novelties; stay by well-tried varieties. In large orchards, five or six varieties to cover the season is plenty.

We usually plant three-year-old trees. Better buy direct from the nursery. If reasonably near, go and see the stock. Get the best. A few cents saved on apple trees is false economy. Would set trees in orchard 20 x 30 feet. Intensive orcharding is calling for close planting, and cutting back yearly to keep them in control. In the right hands, 15 x 15 feet is a paying proposition. In these days of orchard specialization, if you are not the right man, better keep out.

King's Co., N. S.

S. C. PARKER,

Secretary N. S. Fruit-growers' Ass'n.

### McIntosh Red and Fameuse for Quebec.

Editor "The Farmer's Advocate":

I believe that in nearly every section of our Province planting will be carried on more extensively than ever before, and, in our immediate neighborhood, where our conditions are influenced by the conditions surrounding the City of Montreal, extensive plantings will go on for a number of years. Around Montreal, a large number of the best orchards have been subdivided into building lots these last three years, so that land immediately surrounding the Island is taken up for orcharding and vegetable-growing.

I think about 25 to 30 per cent. of a man's acreage can be properly handled in orchards, although I think, in this neighborhood, it runs as high as 40 or 50 per cent., and, although labor is scarce and high, I consider that the heavy planting will eventually lead the fruit-growers to a system of co-operation in packing and marketing which will be of untold benefit to the fruit industry. In one section I visited this past season, some growers had all their available land in orchards, and some were cutting down extensive, hard-maple bush to plant out apple trees.

A well underdrained loam, with a northern or western exposure, will eliminate a great deal of scalding of trees in the spring, and, if carried through the early part of the summer in a cultivated condition, and cover crops planted early in July, I think we will get good results for labor expended.

Commercially, we prefer two varieties for this section, McIntosh Red and Fameuse, as these reach perfection, are in constant demand, and are taking the lead over any other varieties. We plant about an equal number of each variety, but the McIntosh are finding favor with a large number of our fruit-growers, and I think the planting in general is in favor of that variety.

I prefer well-grown trees, two years old, so that I can train them as I choose, but do not care for them over three. If these are ordered early from reliable nurserymen, one is pretty sure to get good trees. I know of some proposing to plant next spring who have had their orders in since the first of September.

The young trees are planted 30 to 35 feet each way, in blocks of 40 or more, as is convenient, and kept cultivated with a hoed crop until large enough to interfere with the horses and implements, when a strip around the tree has to be left, and the grass cut on it for a mulch.

Chateauguay Co., Que.

PETER REID,

Secretary Quebec Pomological and Fruit-growers' Society.

### Apples in New Brunswick.

Editor "The Farmer's Advocate":

In the Lower St. John River valley, for sixty miles below and ten miles above Fredericton, about 30,000 trees will be planted next spring. Of this amount, more than half will be concentrated in a very small area at a point 15 miles below the city, on the western bank of the river. This amount shows an increase over last year's planting of fully 50 per cent. for the section mentioned. In Westmoreland and Albert Counties, the total number of trees to be planted next spring, though smaller than in the St. John Valley, will probably be double that of last year. I would estimate the total number of apple trees to be planted in the Province for 1912 at from 50,000 to 60,000. All over the southern and middle portions of the Province a steadily-increasing interest in apple-growing is being manifested, and farmers and business men in both the smaller and larger towns are preparing to plant orchards.

Most of the farms here contain more than 100 acres, more often running from 200 to 400 acres, of which, generally speaking, only 30 to 60 acres is cleared. I would consider a fair acreage for our average conditions to be five.

A medium to light-clay loam, gravelly, or even verging somewhat on stony, with gravelly sub-soil.

We prefer an elevation above the surrounding land, but not so much so as to be badly wind-swept. Such a site drains off the cold air and gives greater freedom from frosts. Preference is always given in this country to rolling or inclined land. We prefer a slight slope to the north-east or north, and always aim to avoid slopes with a southerly exposure. In proximity to large bodies of water, the exposure towards the water is selected. In selecting the site, consideration should always be given to breaking the force of the prevailing winds, the worst wind in our experience being that from the south-west. Where this is not provided for, as is often the case with us, by the natural bush-plot or rising ground, artificial wind-breaks should be planted. Most certainly, more attention should be paid to this feature in New Brunswick.

More of the failures in apple-growing here are due to lack of thorough preparation of the soil than is generally understood or attributed. The temptation on the part of the intending planter to get his trees in at once, and thus save a year or two, though the ground may not be fit, is often a fatal one. It is a recognized principle in stock-raising to keep young stock vigorous, thrifty and growing right ahead; the same is precisely the case with fruit trees. Instead of gaining time by the hasty method of planting, one often loses two or three years. We like to get a soil on which a clover crop has been grown and plowed under two or three years previous to the planting of the trees. Land that is in a good state of fertility, and was planted to a hoe crop the previous season, if plowed in the fall and again in the spring, and well worked up on the surface, will give first-class results when planted.

From three to five, and even four or five may be too many.

As standard—McIntosh Red, Fameuse, Alexander or Wolfe River, and Bethel. As fillers—Duchess, Dudley, and Wealthy.

I would plant one-half of the standard trees with McIntosh Red, and divide the other half equally between Fameuse, Alexander and Bethel. We find that the McIntosh Red yields some fruit every year, while the Fameuse does not, is hardier, brings a slightly higher price, and the fruit is easier picked. Alexander, while bringing a lower price, is a hardy, vigorous tree, yields well, sells well, and the fruit is easy to harvest and grade, and hangs on well to the tree. Bethel, while not a heavy bearer, yields fruit almost every year, and well distributed over the tree, and consequently of good size and uniformity, free from blemish, and well colored. This apple will keep till April, and is a good seller on the local market. The trees of these four varieties seem to be very free from apple-tree canker, which is rather prevalent in the Province. In an orchard of five acres, as recommended above, for average conditions, I would plant only one variety for the fillers, as the same would be easier handled. In larger orchards, I might plant all three varieties mentioned above as fillers, in order to hold the picking gang from the beginning to the end of the apple season. The above mentioned planting selections are based partially on the adoption of the co-operative system of selling, which we are planning to adopt and must have in the development of commercial apple-growing here.

The Northern Spy is not planted here commercially, and I will not consider its pollination. The McIntosh Red is the one variety of which we have seriously to consider the pollination. For a number of years this will be successfully accomplished



by the Dudley and Wealthy as fillers, but in the main we would depend on the Alexander or Wolfe River and Fameuse. While this latter variety is listed among the early-blooming ones, we find here in this Province that it blooms close enough to McIntosh to pollinize it. I would suggest planting the McIntosh in double rows, flanked on either side with a row of Fameuse and Alexander.

At the time of writing, I would prefer to recommend two-year-old trees. What few one-year-old trees were planted here last year did very well, indeed, in many cases surpassing the growth of two and three-year-old trees planted at the same time. We are planting over 3,000 one-year-old trees next spring, and I am rather of the opinion that we shall soon be recommending the planting of one-year-old trees, even for this Province.

By all means deal direct with the nurseries, where possible. The agricultural societies, farmers' clubs and fruit-growers' associations might well send in club-orders. It is a pretty safe plan to refuse to buy trees from a man whose selling contract leaves the buyer to take all the risk and put up with any loss that may occur. When the farmer is buying live stock, he takes good care to see that he gets value for his money. Why shouldn't he do so when buying nursery stock?

Order your trees months before you expect to plant them; in the summer or early fall is none too soon. If one waits till the winter, the best stock and varieties will be sold out. This is a very hard point to impress upon the mind of the average tree-buyer, but more cases of substitution and poor stock are probably due to this one cause than to any other. People are so accustomed to ordering and getting all kinds of merchandise on very short notice, and conclude, therefore, that they can do the same when purchasing fruit trees; but in this they are mistaken, as many a person has learned to his sorrow.

I am only giving you my own ideas on this question. I am planting forty acres of apples on my own farm next spring. The standard trees will be planted 33 feet apart each way, and the fillers will be planted every 16½ feet in the rows running one way, leaving a clear space between the rows of 33 feet, and making 80 trees to the acre. Trees do not make quite as large a growth perhaps as in some sections of the Dominion, and, consequently, the distance given above will permit of the fillers being left in the ground until they are fifteen or sixteen years old, without interfering with the proper growth and vitality of the standard varieties. This distance also gives us a good intercropping space for the first few years—a very important feature—and at the same time allows of cross cultivation for some time to come. If this planting distance is adopted, I would prefer to plant the rows north and south, so as to obtain the maximum amount of sunshine per tree. The arranging of the different varieties, so as to secure ample cross-fertilization, would be provided for as outlined in paragraph 4. Having so arranged the varieties as to secure this point, I would keep in mind, for the sake of economy and despatch in harvesting, the relative periods of maturity of the varieties, and, as far as possible, plant the sturdiest and hardiest varieties on the outside.

The intending planter should never fail to keep a proper record of the orchard. Such a record will not only bring out many points of great interest concerning the different varieties, but is essential to a better understanding of the requirements of trees and to the highest measure of success in apple-growing. The labels should be removed after planting, and a plan made immediately, in which every tree is accorded a certain definite number. This plan may be attached inside the cover of a strong, well-made notebook, and a certain amount of space in the book accorded to each number, and notes made on the condition of the tree throughout the year. Notes, under such headings as: Character of the Winter; Character of the Spring; Summer and Fall; Spring Care of Orchards, when commenced, and what done—same for summer and fall; Opening of first Leaf, Buds and Blossoms—dates of full bloom and total blossom fall—notes on fruit setting—cover crops—intercrops—insect and fungous pests—spraying—fruit yields, etc., should be made. If underdrains have been laid, their whereabouts should be marked on the plan. The trouble involved in the keeping of such a record will be more than amply repaid by the better understanding thus obtained as to the best possible treatment of the orchard.

In conclusion, I would say that no man should undertake the actual operations involved in the growing of an orchard, if his sole object for so doing is to be measured by the dollars and cents that he expects to get out of it. Unless there is a strong, natural liking for the work, and an expectation of deriving some enjoyment and wealth out of the investment, other than mere money, one had better leave it alone.

As to the possibility of overplanting, I have only to say that the leaders of this movement here are tearing nothing from that cause.

Fredericton, N. B.

A. G. TURNEY,  
Provincial Horticulturist.

### Topical Fruit Notes.

A contemporary, commenting on the rascality of "fake" nurserymen or jobbers of nursery stock, does not spare his language in laying bare the little weaknesses of human nature. "Probably in all businesses you will find some rascals, and in all states a 'sucker' for every day of the year. In the case of a boom, as we have at present in fruit-growing, and particularly in apple-growing, both of these classes multiply exceedingly, until there comes the inevitable break when the rascal hies himself to greener fields, and the 'sucker' sulks 'his impotent wrath.'" We agree with all that our contemporary says regarding these fake nurserymen selling inferior and falsey-named nursery stock to unsuspecting persons. It is shameful that our laws should permit such obvious deception, and we believe that no fair-minded and reputable nurseryman would openly countenance such deception. But at the same time we have an idea that most of our established nurserymen sell their overstock and culls of all varieties, knowing full well what use is to be made of them. Nor can we blame them for this. It is a mere matter of unsentimental business on their part, which saves a few dollars from the bonfire. The jobber does the fancy work. Through his bright imagination he makes a Burbank grow upwards, a General Hand becomes a Bradshaw, and a Longfield blossoms as a Tolman Sweet. This, then, is the person to be punished, although it does seem a shame to punish such brilliance in a man who would make our Province one large apple orchard. For it is said by some that genius cannot go with honesty.

On the other hand, the "sucker" is not always without blame. He, too, is often brilliant, and he makes the honest agent groan when he tells him what he knows about fruit trees. He believes himself too sharp to be caught by the jobber with his cheap trees, and believes the reliable agent with his honesty is just that much a deeper scoundrel. To some all agents are alike. Would it not be a pity to fail to land such a fine sample?

Again, a purchaser is often ignorant of the first principles of fruit-growing. He does not realize the extreme care necessary in handling young trees to prevent them from drying out and dying. Very often he cannot appreciate the extreme sensibility of the small roots on his young trees; he does not know the correct method of planting nor pruning, and the subsequent care in cultivation. The result is an orchard of dead trees and a lowering in his estimation of the honesty of nurserymen. In the Niagara peninsula this past season very few growers had any success with their young peach stock. Dozens of orchards have partially or nearly totally failed. Now these growers who have been at the business for years cannot all be accused of carelessness and ignorance, and in such a case the onus seems to fall on the nurseryman. The extreme drouth which prevailed after the planting season may have had considerable to do with these failures, but not all. Many growers are beginning to think that fumigation may be the cause of many such failures in recent years. Personally, the writer, who has fumigated much very tender greenhouse stock, orange and lemon trees in leaf, and nearly all kinds of deciduous fruit without damage to any extent, cannot believe, without proof, that fumigation if carefully done will cause these failures in young orchards. Winter injury, or careless heeling in of trees in the nursery cellars for the winter may be a more likely cause.

Now a nurseryman, no matter how reliable, is not infallible; neither is the most careful and successful grower. The nurseryman admits this when he agrees in his contract to replace all dead or wrongly-named trees at half price or free, as the case may be. He cannot absolutely guarantee his trees true to name and likely to live under any condition, but our best nurserymen will do their utmost to have things right. Such men, no doubt, will side with the growers in supporting legislation to control and punish "fake" jobbers or unreliable and dishonest nurserymen. No man can afford to plant an apple tree and seven or eight years afterwards find out he has a "gold-brick." Neither should the growers sit quietly and see such rascality go on unchecked. The country can't afford it.

W. R. D.  
Wentworth Co., Ont.

## THE FARM BULLETIN.

### Staff Changes at Macdonald College.

The School of Agriculture of Macdonald College, Ste. Anne De Bellevue, Que., has just lost four highly-esteemed members of its staff. Two of these, Messrs. F. C. Elford, Poultry Manager, and J. M. Swaine, Lecturer in Biology, are men who have won distinction in their respective departments, both as teachers and as investigators. Mr. Elford goes to Buffalo, N. Y., to take charge of the Educational Bureau of the Cypress Inaba-

tor Company. It is greatly to be regretted that Canada is to lose the services of so able a man, one whose equal as a practical poultryman, as a lecturer, and as an organizer it would be difficult to find. Mr. Swaine has been called to the Dominion Experimental Farms as Assistant Entomologist, in charge of Forest Insects, a position in which his well-known abilities as an investigator will find ample scope.

The other two who are leaving are younger men, but men of such promise that their success in the college work was practically assured. R. B. Cooley, Assistant in Animal Husbandry, has resigned to go into private business in British Columbia. Mr. Cooley is a graduate of the Ontario Agricultural College, and joined the staff of Macdonald College two years ago. He is a good stockman and an able writer. The work into which he is entering in British Columbia is not unrelated to agriculture. With some associates, he is to deal in lands, with a view to their preparation for live stock and general farming.

W. H. Brittain, Assistant in Biology, goes to the Seed Division, Ottawa, as Assistant Botanist. A son of Dr. John Brittain, the Professor of Nature Study in Macdonald College, Mr. Brittain has inherited the love of nature, the studious habits, and the nice discrimination in the use of words, which distinguished his father. As a member of the first graduating class of the College, Mr. Brittain distinguished himself both as a student and as a debater.

Successors to Mr. Elford and Mr. Brittain have not yet been appointed. Mr. Swaine's place as Lecturer in Biology has been filled by the appointment of W. P. Fraser, of the Pictou Academy, one of the best teachers of Biology in the Province of Nova Scotia. Mr. Fraser received his training at Dalhousie and Cornell Universities, and has specialized in the study of plant diseases.

To succeed Mr. Cooley as Assistant in Animal Husbandry, the College has appointed W. J. Reid, B. S. A., of Reid's Mills (Dundas Co.), Ont. Mr. Reid took the two years' course at the Ontario Agricultural College, and entered Macdonald College in 1909 as a member of the third-year class. Since his graduation, last spring, Mr. Reid has been connected with the dairy staff of the Strathmore Farm, in Alberta, one of the farms conducted by the Canadian Pacific Railway in connection with its dining-car service.

### Ontario Institute Meetings Arranged for First Half January, 1912.

Speakers—F. H. Silcox, Iona; C. E. Porter, Appleby (Jan. 11—18); Mrs. M. L. Woelard, Toronto (Jan. 3—11); W. F. Kydd, Simcoe (Jan. 19); Mrs. Thos. Shaw, Hespeler (Jan. 18, 19). South Grey—Durham, Jan. 3; Hanover, Jan. 4. North Bruce—Warton (afternoon), Jan. 5; Oliphant (evening), Jan. 5; Hepworth (afternoon), Jan. 6; Hepworth (evening), Jan. 6; Parkhead, Jan. 8. West Bruce—Tara, Jan. 9; Port Elgin, Jan. 10. South Bruce—Walkerton (2 days, judging class), Jan. 11, 12. Union—Lavery's Schoolhouse, Jan. 13; Clifford, Jan. 15. South Huron—Teeswater (2 days), Jan. 16, 17. East Huron—Gorrie, Jan. 18; Brussels, Jan. 19.

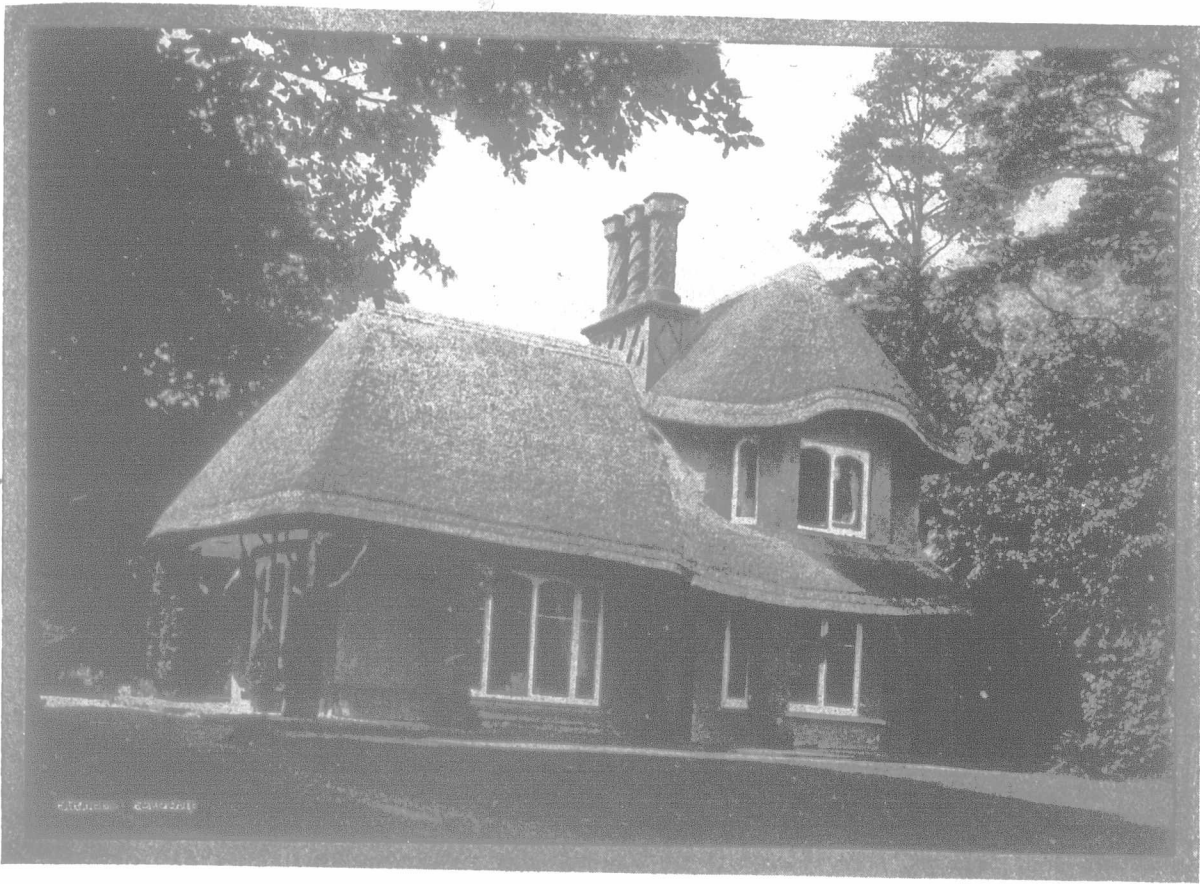
Speakers—D. James, Thornhill; R. L. Moorehouse, Cairo; Mrs. McTavish, Port Elgin (Jan. 3 and 4); Mrs. W. B. Ferguson, Strathroy (Jan. 13—18). North Waterloo—Hawkesville, Jan. 3; Linwood, Jan. 4. North Perth—Millbank, Jan. 5; Atwood, Jan. 6. South Perth—Mitchell, Jan. 8; St. Mary's, Jan. 9. South Huron—Exeter, Jan. 10; Brucefield, Jan. 11. North Middlesex—Mt. Carmel, Jan. 12; Greenway, Jan. 13; Parkhill, Jan. 15; West McGillivray, Jan. 16. East Middlesex—Thorndale, Jan. 17; Harrietsville, Jan. 18.

Speakers—James McDermott, Elmvale; A. M. Campbell, Maxville (Jan. 3—13); Mrs. W. J. Hunter, Pleasant (Jan. 13—20 and Jan. 3 and 4). S. Oxford—Norwich, Jan. 3; Mt. Elgin, Jan. 4. N. Norfolk—Bealton, Jan. 5; Waterford, Jan. 6; Delhi, Jan. 8; Courtland, Jan. 9. S. Norfolk—Langton, Jan. 10; Vittoria, Jan. 11. East Elgin—Aylmer, Jan. 12, 13. West Elgin—Midlemarch, Jan. 15; Talbotville, Jan. 16; Dutton, Jan. 17; Rodney, Jan. 18. West Middlesex—Middlemiss, Jan. 19; Walker's Schoolhouse, Jan. 20.

Speakers—J. O. Duke, Ruthven; G. S. Peart, Burlington (Jan. 3—8, and 18, 19); Mrs. M. N. Norman, Toronto (Jan. 5—19). Halton—Nassagaweya, Jan. 3; Kilbride, Jan. 4. N. Wentworth—Waterdown, Jan. 5; Frelton, Jan. 6; Rockton, Jan. 8. N. Brant—St. George, Jan. 9; Onondaga, Jan. 10; Cainsville, Jan. 11; Tranquility, Jan. 12. S. Brant—Burford, Jan. 13; Mohawk, Jan. 15; East Oakland, Jan. 16; Scotland, Jan. 17. S. Wentworth—Ancaster, Jan. 18; Stoney Creek, Jan. 19.

Speakers—W. C. Shearer, Bright; Mrs. H. W. Parsons, Forest. S. Wellington—Aberfoyle (afternoon), Jan. 4; Morrison (evening), Jan. 4; Eden Mills (afternoon), Jan. 5; Rockwood (evening), Jan. 5. West Wellington, Alma, Jan. 6; Dray-





A Cosy Irish Cottage.

**A Land of Sunshine.**

By Robert Wilson.

To Ireland's geographical position, in a great measure, may be attributed the various characteristics of her people. Those of the northern portion of the "Emerald Isle" resemble their adjacent Scottish kinsmen in that hard-headed business acumen, which has gained for the Province of Ulster, in her various commercial pursuits, the economy, to which she is pre-eminently entitled. The majesty and unparalleled beauty of the eastern Wicklow mountains, together with the gentle influences of the Irish Sea beyond, have doubtless had the combined effect of bestowing upon the scions of this isle of enchantment those human traits, inseparable from all dwellers in kindred lands. The romance, never absent from the Irish nature, has been traced to the unbroken stretches of the mighty Atlantic, by which her western shores are ever washed.

While certain peculiarities of temperament may thus be accounted for, it yet remains indisputable that the sons of Ireland, from Cork to Belfast, and from Dublin to Limerick, are additionally endowed with such a profusion of humor, affection, geniality and kindness as is probably possessed by no other nation upon earth. The traditions of the "Emerald Isle" are all blended with a vein of humor, and who shall say the modern Irishman fails to live accordingly? One short hour in the land of the Shamrock will reveal to the visitor innumerable evidences which will infallibly support this contention.

Who can enter the portals of "Regal Dublin," "Rebel Cork," or "Boisterous Belfast," without realizing they are dwellers in an atmosphere of breeziness? Yet these cities are but on the fringe of Ireland, displaying nothing more than a sample of the fascinations which will be revealed within. Withal, there is a strange admixture of sadness in Ireland, and it is here the national characteristic asserts itself. Just as Paddy, after heaving a most pronounced sigh, immediately launches out into some side-splitting comicality, so the tear invariably gives place to the smile which is ever uppermost in the Irish nature. This is the Irishman's prerogative, and who shall deny him?

Ireland's sad days are gone, however; the memory alone is left, and progress is becoming every day more intricately interwoven with the destinies of that land which for so long was a veritable "Isle of Unrest." Ireland and her sons have conquered. They have more than conquered. Famine and rapine, oppression and insurrection, have been thrown aside, and to-day we have in Ireland a community which would reflect pride and credit upon any nation on earth. Such are the Irish of to-day—such are the Irish of which we now speak. As of yore, Ireland's sons are fulfilling their destiny with a high honor. In all the walks of life they are brilliantly represented, whether it be in civil, military or religious

ton, Jan. 8; Glen Allan, Jan. 9. East Wellington—Mt. Forest, Jan. 10; Cedarvale, Jan. 11; Conn (afternoon), Jan. 12; Conn (evening), Jan. 12; Kenilworth, Jan. 13. North Grey—Chatsworth, Jan. 15; Desboro, Jan. 16; Kilsyth, Jan. 17; Shallow Lake, Jan. 18; Kemble (afternoon), Jan. 19; Brown's School (evening), Jan. 19; Owen Sound, Jan. 20.

Speakers—Anson Groh, Preston; Miss M. V. Powell, Whitby. East Simcoe—Crown Hill (afternoon), Jan. 3; Craighurst (evening), Jan. 3; Mitchell Square (afternoon), Jan. 4; Jarrett (evening), Jan. 4; Warminster (afternoon), Jan. 5; Uthoff (evening), Jan. 5; Washago (afternoon), Jan. 6; Ardtrea (evening), Jan. 6. West Simcoe—Rosemont, Jan. 8; Everett, Jan. 9; Creemore, Jan. 10; Lavender, Jan. 11; Singhampton, Jan. 12. Centre Grey—Badjeros, Jan. 13; Dundalk, Jan. 16; Hopeville, Jan. 17; Flesherton, Jan. 18; Maxville, Jan. 15; Eugenia, Jan. 19; Kimberley, Jan. 20.

Speakers—David Bonis, Rannoch; Miss B. Gilholm, Bright. South Simcoe—Stroud, Jan. 3; Thornton, Jan. 4; Churchill, Jan. 5; Thompsonville, Jan. 6; Loretto, Jan. 8. Peel—Sand Hill, Jan. 9; Castlemore, Jan. 10; Cheltenham, Jan. 11; Belfountain, Jan. 12. Centre Wellington—Hillsburg, Jan. 13; Cumnock, Jan. 15; Bethany, Jan. 16. West Wellington—Palmerston, Jan. 17; Moorefield, Jan. 18; Rothsay, Jan. 19.

Speakers—Henry Grose, Lefroy (Jan. 3-17); F. R. Mallory, Frankford (Jan. 18-20); Miss S. Campbell, Brampton (Jan. 12-20). Dufferin—Jessopville (afternoon), Jan. 3; Keldon (evening), Jan. 3; Riverview (afternoon), Jan. 4; Corbetton (evening), Jan. 4; Honeywood, Jan. 5; Horning's Mills, Jan. 6; Violet Hill (afternoon), Jan. 8; Whitfield (evening), Jan. 8; Perm, Jan. 9; Mono Centre (afternoon), Jan. 10; Camilla (evening), Jan. 10; Laurel, Jan. 11. West York—Kleinburg, Jan. 12; Woodbridge, Jan. 13; Weston, Jan. 15; Islington (afternoon), Jan. 16; Elia (evening), Jan. 16; Maple, Jan. 17. North York—Nobleton, Jan. 18; Schomberg, Jan. 19; Kettleby, Jan. 20.

Speakers—Gavin Barbour, Crosshill; Miss A. M. Holton, Parkhill. North Ontario—Sandford, Jan. 3; Zephyr, Jan. 4; Sunderland, Jan. 5; Beaverton, Jan. 6; Cambridge, Jan. 8; Brechin, Jan. 9; Udnev, Jan. 10. West Victoria—Woodville, Jan. 11; Hartley, Jan. 12; Little Britain, Jan. 13; Valentia, Jan. 15. East Victoria—Camron, Jan. 16; Burnt River, Jan. 17; Dunsford, Jan. 18; Omamee, Jan. 19.

Speakers—C. W. Gurney, Paris; Mrs. F. W. Watts, Clinton (Jan. 8-16). West Peterboro—Stewart's, Jan. 3; Fourth Line Smith, Jan. 4; Peterboro (afternoon), Jan. 5; North Monaghan (evening), Jan. 5. East Peterboro—Westwood, Jan. 6; Norwood, Jan. 8; Havelock, Jan. 9. East Hastings—Tweed, Jan. 10; Roslin, Jan. 11; Philiston, Jan. 12; Foxboro, Jan. 13. West Hastings—Turner's Schoolhouse, Jan. 15; River Valley, Jan. 16; Hoyle's Schoolhouse, Jan. 17. Prince Edward—Demorestville, Jan. 18; Cherry Valley, Jan. 19; West Lake, Jan. 20.

Speakers—S. G. Carlyle, Chesterville; W. J. Kerr, Woodroffe (Jan. 3-15); Mrs. W. W. Farley, Smithfield (Jan. 12 and 16). Centre Frontenac—Sudbort Lake, Jan. 3; Picadilly, Jan. 4; South Leeds—West Port, Jan. 5; Sedley's Bay, Jan. 6; Landsdowne, Jan. 8. Frontenac—Dufferin, Jan. 9;

Inverary, Jan. 10; Elginburg, Jan. 11; Westbrook, Jan. 12. Addington—Tamworth, Jan. 13; Enterprise, Jan. 15. North Hastings—Queensboro, Jan. 16; Eldorado, Jan. 17; Madoc, Jan. 18; Ivanhoe, Jan. 19; Moira, Jan. 20.

Speakers—Geo. Carlaw, Warkworth; J. C. Stuart, Dalmeny (Jan. 3-12); Mrs. E. B. McCurt, Lucan (Jan. 8-19). North Leeds and Grenville—Toledo, Jan. 3; Easton's Corners, Jan. 4; Merrickville, Jan. 5; Burritt's Rapids, Jan. 6. South Grenville—Maynard, Jan. 8; Roebuck, Jan. 9; Brouseville, Jan. 10; Shanly, Jan. 11; Ventnor, Jan. 12. Dundas—Williamsburg, Jan. 13; Winchester Springs, Jan. 15; Iroquois, Jan. 19.

Speakers—R. E. Harkness, Irena; R. J. Connell, Roebuck (Jan. 11-15); Miss Ethel Robson, Ilderton (Jan. 19-22); Miss Campbell, Brampton (Jan. 5-9). Carleton—Kars, Jan. 5; Stittsville, Jan. 6; South March, Jan. 8; Carp, Jan. 9; Fitzroy, Jan. 10. South Renfrew—Glasgow, Jan. 11; Renfrew, Jan. 12; Adamston, Jan. 13. North Renfrew—Forrester's Falls, Jan. 15; Beachburg, Jan. 19; Westmeath, Jan. 20; Alice, Jan. 22.



Kissing the Blarney Stone.



airs. It would be manifestly impossible, in a brief sketch, to do justice to such a theme, the roll of Ireland's great men is of such a length. Who, however, can omit a passing reference to the great British War Lord, who, after gaining distinctions innumerable in Afghanistan, India and South Africa, is happy and proud to emblazon his origin before the world, representing to posterity that which Ireland has done, in the person of Lord Roberts, of Waterford and Candahar. Recent history tells us of an incident with a peculiar Irish "smack" about it, which happened at the storming of Alexandria, in 1882, in which Sir, now Lord Charles Beresford played no unimportant part. Steaming right under the huge guns mounted on the Egyptian forts, which were playing such havoc on the British fleet, he so silenced them as to draw from the British Admiral the now historic flag-signal, "Well done, Condon!" Hare-brained, if you will, but just the sort of deed one would expect from an Irishman—the sort of deeds in which the Irish have been peculiarly conspicuous in the making of the Empire. Another great Irishman, though born in England, avenged that terrible disaster, known in history as "The Black Hole of Calcutta." Through his direct instrumentality, the power of Britain was established once and for all in India. On his successful return home he was granted an Irish peerage. Among the innumerable worthy sons of Ireland whose names stand forth in letters of gold on her Roll of Honor must forever be included that of the Duke of Wellington, who, born near Dublin, finally overthrew the invincible Napoleon at the battle of Waterloo. Jonathan Swift, Tom Moore (the greatest of all Irish poets), Samuel Lover, and the irrepressible Charles Lever are but a few of the mighty host of Ireland's brilliant sons. Every one with a knowledge of Irish history, however, will have his own favorites whose names may be added to this list. Thus Ireland is vindicated; her sons have amply justified her ambitions to rank high among the nations of the Empire. A particular sign of the times lies in the fact that, in this twentieth century of grace, many who in former years, in the "distressful" period, through which Ireland has emerged with pronounced success, would have evaded any claims on their motherland, are now evincing the most unique spirit of patriotism, in many cases claiming relationship where none exists. Truly these are proud days for Ireland.

The tourist too frequently hurries away from the large Irish cities, in order to revel in the beauties of her enchanting lakes and mountains, or the incomparable charms of her rural allurements. The cities of Dublin, Belfast and Cork, however, present such features of incalculable interest, and amusement, too, that visitors would do well to remain a while, ere passing on to districts more remote, variously painted by her sons in the immortal language of "Heaven's Reflex" or "A Sweet Land of Verdure, that Springs from the Sea." Dublin: how many excellent things may be said of thee, had the theme been a new one? As, however, the charms of this light-hearted city have been sung in song and praised in story by those to whom nature has granted especial endowments in this direction, the reader may be referred to the literature of Ireland, the proud work of her gifted sons, for anything in the way of an exhaustive treatise of this land of sunshine. The affection which Irishmen all the world over possess for this the capital of their native land finds expression in the adjective "dear," which is invariably prefixed to that name. Thus we find throughout the works of her poets and novelists that the old city on the Liffey is interchangeably spoken of as "Dear Old Dublin," or, as Charles Lever prefers it, "Dear Old Dirty Dublin." Let not Irishmen of the most sensitive temperament take umbrage at the latter expression. It is freely used by Ireland's greatest sons, without any invidious suggestion. "Dear Dirty Dublin, to te salute." Is there any city on the surface of this earth of ours that can boast of such a wide selection of names as has been affectionately conferred upon the capital of Ireland. If, however, the visitor be content to take this "most car-drivingest city" exactly as he finds it, he will be amply repaid for his acceptance of the welcome so heartily and spontaneously extended him. Dublin does not understand the meaning of the term half-heartedness. She does things thoroughly, or not at all. She attracts or she repels; she fascinates or she entrances. It has been said that, one hour spent in "Dear Old Dublin," is the best physic any man can take for chronic ennui or a pronounced fit of the blues, and there is an extraordinary amount of truth in the assertion. Say what you will, come whence you may, there is something irresistibly refreshing about Ireland's capital—some incomprehensible influence hovering around the "Ould Liffey," or, perchance, blown across the glorious Phoenix Park or Peautiful Dublin Bay, that causes a lighter and more buoyant flow of blood to course through one's veins, removing those anxieties and cares which frowned upon us so darkly as we ap-

proached the portals of Erin's capital. When the stolid policeman on his beat cannot resist the temptation, in answer to some ordinary question, to interpolate his reply with some ridiculous "deluderin' talk," it is small wonder that his less consequential brethren, occupying positions less austere, fairly overflow with droileries, personalities and fun, bearing neither offence nor resentment in their wake. Said, however, in any other country, relieved of that musical accent which adds such a distinctive relish, the personal remark would cause displeasure in a greater or less degree, but not so here. And why? There is but one answer: It is simply because this is Ireland. This is Ireland, light-hearted Ireland, wherein nothing will surprise the visitor. Here it is the unexpected that happens; a system of topsyturvydom prevails, in delightful contrast to the more orthodox methods adopted across the Channel.

Dublin, Ireland's seat of learning, and Belfast, her commercial rival, frequently captivate the stranger to such an extent as to dwarf the claims of the quaint and ancient city of Cork; yet this is not as it should be, for, most assuredly Cork possesses attractions as great as any city in Ireland. A fine day, a good outside car, and a seat beside one of the jovial drivers with which Cork is liberally supplied, is a positive treat in store for the visitor. Bubbling over with genuine wit and clever repartee, this self-constituted guide and counsellor will not fail to keep his fare in the very best of spirits. The most atrocious perversions of the truth, combined with the most imaginary quotations as a means to emphasize the most fictitious statements, pure inventions of his own—for this specimen of Ireland's sons is a most accommodating individual—need cause the visitor no uneasiness. Let him ponder over the fact that he is in Ireland. Set amid the enchantments of a river impregnated with the charm of romance, Cork is one of the happiest corners in Ireland. The history and progress of this ancient city is well authenticated, and, despite the vicissitudes through which she has passed, the scenes of sadness and farewell enacted within her portals, there is a conspicuous air of gladness ever hovering over Cork and her swain, the charming River Lee.

One might know that Blarney Castle and the Blarney Stone were not very far away from Cork. Its influence may be transmitted through the veriest street urchin. The manners of her people are the very embodiment of courtesy and agreeableness. No one can find fault, no one can quarrel, when in this light-hearted city. Paddy here is a most accommodating individual, and is ready to suit his views in the most obliging manner to any and everything. Those who know Cork, however pay no attention to this pleasant phase in his character; the halo of the Blarney Stone encircles him, for is he not but five miles away from the source of its potent influence?

Probably the traveller will be attracted by the loveliness of the girls of Cork more than by anything else in this ancient city. It is here the bachelor invariably succumbs to the charms and wiles of Ireland's daughters, who, with lustrous blue or gray eyes and finely-chiselled features, surrounded by a treasonable profusion of rebellious dark tresses, combined with the caressing persuasiveness of the Southern Munster Brogue, defy competition. Generously favored with a magnificent array of interesting sights, probably the most popular building in Cork is famous Shandon Church, with her celebrated Shandon Bells. In the stillness of a summer night their sweet chimes sound with peculiarly impressive cadence across the waters which encircle the old city of the Lee. The charter song of Cork is "The Bells of Shandon, too well known to require repeating—familiar to everyone, owing to its catchy metre, and the quaint lines,

"With thy bells of Shandon, sound far more grand on

The pleasant waters of the river Lee."

The authorship of this quaintly original ballad is incorrectly attributed to a "Father Prout." This was but a nom de plume of one, Francis Sylvester Mahony, who was born in Cork, but spent the best years of his life in London as a magazine writer.

A description of the charms of the west country, including Glengariff and Killarney, where even Thackeray was constrained to lay aside his satiric pen, lost in wonder, admiration and amazement, would be clearly presumptuous. It would be but a poor attempt to "gild the rose and paint the lily."

#### Seed Growers' Convention.

The eighth annual convention of the Canadian Seed-growers' Association will be held at Ottawa on February 8th and 9th, 1912. This convention will be addressed by several prominent men, and many matters of importance and interest to seed-growers and farmers generally will be discussed. As this meeting commences on the last day of the

convention of the Forestry Association, those from a distance desiring to attend will be able to obtain special railway rates. Further particulars may be obtained by applying to the Secretary, Canadian Seed-growers' Association, Canadian Building, Ottawa.

#### SPECIAL RENEWAL OFFER.

GOOD UNTIL DECEMBER 31st, 1911.

Last year we made the Special Renewal Offer given below, and thousands of our subscribers took advantage of it.

Our circulation at present is larger than it has ever been before in the history of the paper, and we are aiming now to increase it by 5,000 before the coming renewal season is over. We will expect our subscribers to help us make this increase. The larger our circulation, the better paper we can give you, and it is therefore to your advantage as well as ours to have this increased circulation. There is no other agricultural journal in America that gives such good value as "The Farmer's Advocate," but we want to give still better.

THE OFFER IS:—For one new yearly subscription and your own renewal for 12 months we will accept \$2.00. For each new name in addition to the first one, we will accept from you \$1.00, the balance of 50c. being retained by you as commission. Or, if preferred, you may send in the new names, accompanied by the full subscription price of \$1.50 each (United States subscriptions \$2.50 per year), and have your choice of some of our splendid premiums.

NOTE.—This is a special offer, good only till the end of the year. Secure your neighbor's subscription to-day, before someone else gets him, or before he signs for other papers for next year.

#### Seed Growers' Meeting at the Winter Fair.

At the meeting of the Canadian Seed-growers' Association, held in Guelph, Dec. 14th, Prof. C. A. Zavitz ably filled the chair, and, after outlining briefly what the Association stands for and its methods, called upon L. H. Newman, the Secretary-Treasurer, to give the minutes of the last meeting. These the Secretary said were published in the seventh annual report, which would soon be sent out.

The meeting thought it would be a good idea to have a committee on resolutions appointed, and the chairman named the following members: John Hunter, Wyoming; T. J. Shepley, Ouvry and Alf. Hutchinson, Mt. Forest.

T. J. Shepley read an excellent paper on how he operated his seed plots. He said, in part, that he was aiming high, and that his eye was on the Kluck trophy, which, by the way, he won this year with his selection of twenty-five ears of Reid's Yellow Dent corn. He was also induced, last winter, after conferring with Prof. Moore, of the Wisconsin Experimental Station, to try Wisconsin No. 7 dent corn. His plots were on drained clay-loam soil, and his corn was planted 3 feet 8 inches apart, by hand. He had greatly enriched the plot for Reid's. After corn was up, he thinned to three plants in each hill, and cultivated most thoroughly—a point on which he laid great emphasis. He planted his Wisconsin No. 7 on May 11th, and it was ready to cut on September 6th. The results were most satisfactory. He estimated the yield on Reid's Yellow Dent plot—50 hills one way, by 20 hills the other—to be worth \$54. He had even watered some of his corn, but found it of no benefit over thorough cultivation. "Hope," he said, "was the railroad to success," and his experience this year has made him a most enthusiastic seed-grower and member of the Seed-growers' Association.

J. H. Coatsworth, of Ruthven, gave the next address, on his observations on two year's judging corn in the field-crop competitions. He has great faith in Southwestern Ontario as a field for growing splendid field seed corn which will ripen ten days to two weeks earlier than seed corn produced on the plains of the Middle West. He believed farmers planted too thickly, as a rule. Often there were four and five stalks in a hill, where two or three would be ample. In planting 3 feet 6 inches apart each way, there would be



3,200 hills per acre. If two good ears came from each hill, there would be 6,400 ears, of which 55 would fill a bushel, or 116 bushels per acre. Three ears would run it up to over 160 bushels. He also thought that many farmers were planting varieties which were too large and too late in maturing for the country's best interests. He believed Reid's Yellow Dent to be one of these. He liked the White Cap and Early Bailey, which took 90 to 100 days to mature. The mixing of varieties, too, was a great trouble for seed purposes. The methods for drying seed corn were objectionable on most farms. He thought that drying kilns would be feasible. Some farmers persisted in growing their corn in drills for seed. He preferred the hill system, and observed that more corn was obtained in the hill practice, while more fodder came from the drills. Prof. Zavitz said their experiments at the College bore out this observation.

In the absence of Wm. Naismith, the veteran potato-grower, of Falkenburg, Muskoka, his paper on "Growing and Storing Potatoes" was read by Mr. Newman. Briefly outlined, his plan is to plant potatoes on pea-stubble land which was previously broken out of sod, plowed early, and thoroughly worked during the autumn. He applies about twenty tons stable manure on this land early in winter previous to planting. In the spring this is disked in, and the furrows opened about three feet apart, and four inches deep. Potato sets are planted, and covered with a device like a snow plow, doing two rows at a time. Thorough cultivation follows. When tubers are ready to dig, he uses a small plow-like digger, and stores them in the bank of a ravine, 3 feet deep, 4 feet wide, and long enough to hold 100 bags. A few bed-pieces are used crosswise, which hold poles lengthwise, and the whole is covered six inches deep with hay and one foot of soil to shed water, etc., allowing for ventilation at each end, until November 15th, when all is closed up for the winter. In this way they do not sprout early in the spring, are of good flavor, and grow well when planted. His average yield is 220 bags per acre. Soil is a sandy loam, with a hardpan bottom, which furnishes plenty of moisture. He has a new strain of Empire State to put on the market soon.

Alf. Hutchinson, of Mt. Forest, led the discussion, and said that his experience with pitted seed had been limited, but what he had kept in that way had done much better for him than seed kept in cellars, etc. He believed it was the best way to save the seed. To allow potatoes to sprout twice must weaken their vitality. Planting whole seed had not failed, while cut seed had sometimes caused very many blanks. In answer to a question, "Would you leave seed in pits until planting time?" he said, "Yes." He pointed out how he had not planted his potatoes until about 11th of June this year. Notwithstanding the fact that there was practically no rain for four weeks after planting, those potatoes grew most rapidly, and gave an average yield of 200 bushels per acre, and would have done much better if they had not been caught with the early September frost.

Dr. M. O. Malte, of the Seed Branch, Ottawa, gave an interesting paper on the production of clover seed in Ontario. He believes that farmers should make more of a business of growing clover seed than they are doing at present. He pointed out that John Fixture, of the Experimental Farm, St. Anne's, after securing a good crop of hay this year, had produced \$23 worth of seed per acre on 33 acres. He thought that hardier strains of clover would result if, in a season like the last one, such clover as was left should be kept for seed. It would prove itself much hardier another year. He pointed out how clover was cross-fertilized chiefly by insects, and how essential the bumblebees are for this purpose. The danger in the use of foreign seed was dwelt upon, not only from the standpoint of the introduction of foreign weeds, but that the clover might not prove hardy here. He further advocated a system of co-operation such as is practiced in Denmark, and which is somewhat similar to our Canadian Seed-growers' Organization. Under this system, the seed is grown of a similar strain, cleaned at a central point through a good mill, and properly graded. Such a system does away with many middlemen, and brings larger returns to the growers.

A gentleman asked if he thought honeybees were useful in the fertilization of clover, to which an affirmative reply was given. This year it was stated that the honeybees were able to extract nectar from the clover plants, and made considerable red-clover honey.

Mr. Newman explained some of the new regulations passed by the Canadian Seed-growers' Association, in that all growers having seed put on the market should send him first a sample, after preliminary cleaning, to determine what seeds, if any, should be removed, and to what extent it should be screened to pass the inspector when he

came to put the lead seals and certificates on the packages which were sold on order or otherwise.

The meeting was brought to a close by a few remarks on some things noticed in the inspection of the plots of members of this Association by one of the Ontario inspectors.

T. G. RAYNOR.

### Our Scottish Letter.

Fat-stock shows are now all but over, and we have had a somewhat "sober" time. The days of zealous conflict in the fat-stock arena appear to be nearly over. The butchers are slow to buy, because the public are unwilling to consume the over-fed, heavy-weight show animal. Yet, unless the animal is heavy, it can win no prize. Here, then, is the puzzle: What purpose is gained by such competitions? What can they teach us, seeing the public will not pay anything extra for the carcasses which are thus overfed? Surely it is a waste of money feeding animals beyond the public taste in beef, mutton or pork. But how are we to know the best feeding sorts, except by testing all, and pushing the best and most easily ripened to the front. The cattle or sheep which feed most rapidly and to biggest weights will be most profitable for the feeder in ordinary commercial business. The champion at Birmingham was Messrs. Game & Son's Shorthorn heifer, Village Lassie, from Aldworth, Northleach, Glos. She was bred by her exhibitors, and was got by their great sire, Village Beau (87631), a twin calf, bred by Wm. Duthie, Collynie, and bought at a handy figure at one of his sales when a calf. He is a most successful sire, being also responsible for the champion bull of this year, the Duke of Portland's Village Diamond. The weight of Village Lassie at 2 years 10 months 1 week and 3 days was 1,735 pounds. She is certainly a wonderfully well-filled Shorthorn—indeed, more like an Aberdeen-Angus heifer in fineness of bone and rotundity of form, than a Shorthorn. In spite of the supreme victory for the Shorthorn, the fat-stock shows generally have been a triumph for the Aberdeen-Angus breed. They had champion honors at Norwich and Edinburgh, and made a clean sweep of the leading honors in their classes for carcasses at Smithfield. The Edinburgh champion was the Aberdeen-Angus heifer Elismonda, from Mr. Kennedy's herd at Doonholm, Ayr. She was also bred champion at Smithfield. The champion steers at all the four shows were Aberdeen-Angus oxen. The Edinburgh champion steer, Captain Archibald Stirling's Blackband, was also champion steer at Smithfield, and was followed in his class at Smithfield by a magnificent Aberdeen-Angus steer, Sirdar, owned by Sir Richard Cooper. Blackband's weight at Smithfield was 1,870 lbs., at 2 years, 7 months, 3 weeks and 4 days; and Sirdar's weight was 1,970 lbs., at 2 years 11 months, 5 days. In the carcass competitions, Cheviot, Suffolk and Southdown sheep were very successful, and, among pigs, the honors nearly all went to the Berkshire.

We are having a puzzling time in England with foot-and-mouth disease. During the year there have been half a dozen outbreaks in the South and West. All of them were stamped out at once, and recently it was announced that all restrictions on movement within the affected area in Somerset would be withdrawn. Unhappily, late on Thursday night, another outbreak was reported in the same county, and once more restrictions on movements will have been imposed. This must be most exasperating to stock-owners in that country, one of the foremost in the dairying world. The scene of all these half a dozen outbreaks is between 300 and 400 miles south of the Scottish Border, and happily we have had no contagious disease of any kind among cattle in Scotland for about two years, and only a very rare outbreak of swine fever or sheep scab.

Doctors differ, and patients die, and veterinary surgeons have recently been demonstrating the irreconcilable nature of their views on the very simple question, "What is ringbone?" A filly guaranteed to be sound was refused by her buyer on the ground that she was affected with ringbone. Eight well-qualified experts in their professions swore in court that, in their opinion the filly had ringbone; quite as many members of the veterinary profession, at least equally as well qualified, swore that in their opinion the filly had no ringbone. The judge who tried the case decided in favor of the former. But the case has been appealed to a higher court, and it remains to be seen what the decision there will be. Meantime, those who are opposed to the inspection of horses at shows by veterinary surgeons have scored. They point to the helplessness of the profession, when so many of its members cannot agree as to what constitutes so simple a disease as ringbone. It is impossible not to sympathize with those who argue in this way. Certainly, when such disagreement is possible in respect of so simple a disease as ringbone, what might be ex-

pected where much more serious issues are at stake. In debating a certain matter in the House of Lords this week, the Lord Chancellor said the only thing certain about expert witnesses is that they will differ. It would be well were differences not so sharply defined as they have been in what we know as the Dumfries filly case, above referred to.

"SCOTLAND YET."

### More Land for the O. A. C.

The area of the Ontario Agricultural College Farm, at Guelph, is likely to be enlarged. The College has been asking the Provincial Government to purchase more land for the institution, and Hon. Jas. S. Duff, who visited the College last week to look over the various options secured, is believed to be recommending the purchase to the Cabinet Council, so that there is every prospect of its going through. Probably about one hundred and fifty acres will be purchased. Increasing the extent of the experimental plots has reduced the larger fields of the farm. Then, again, the twenty acres of orchard, which used to belong to the farm, has gradually taken away from it, until this winter the College is obliged to buy some alfalfa hay. The live stock has materially increased from year to year, and there is not enough farm land now to supply all the feed for the stock carried.

President Creelman informs us that if the purchase is made, they are likely to set out a commercial apple orchard on some of the new land, under the direction of Prof. Crow. They hope, also, still further to extend the acreage of the experimental plots, as there are so many new and promising hybrids among the grains that Prof. Zavitz is specially anxious to test them on a larger scale. The work of the Experimental Union is also growing, and more seed is required to supply the members of the Union year by year.

Nothing is, as yet, settled, and no definite announcement has been made, but the options are being closed up along the lines suggested above.

### Northumberland Fruit Growers' Co-operate.

Another co-operative producers' association has been organized as the Northumberland Fruit-growers' Association, embracing what the manager, R. B. Scripture, designates as the best apple-raising section in Canada, having 16,000 acres of trees, principally winter varieties. The association expects to have this year about 50 members and to have a pack of 10,000 to 15,000 barrels of Nos. 1 and 2 fruit. They hope in two years to have a pack of 50,000 to 60,000 barrels. Every member will spray three times and cultivate weekly where possible. A central packing house is to be provided, and only experts employed to do the packing. The quality of every barrel will be guaranteed by the association. The manager will make a thorough inspection of each orchard, probably weekly, and has charge of course of the buying of all supplies and selling same at exact cost to the members. He supplies help in picking and packing in the orchard, the cost to be borne by the owner.

The orchard packing is only to tighten up the apples in barrels to take to central packing house, and to superintend packing and sell the fruit. The officers are: President, W. W. Farley, Smithfield; Vice-President, C. E. Post, Brighton; Secretary-Treasurer, E. C. Brown, Brighton.

Ottawa despatches announce that arrangements are being completed by Hon. Martin Burrell, Minister of Agriculture, for the holding of a fruit convention in Ottawa early in the new year. The gathering will be a large one and will be representative of the fruit-growing interests of all Canada, the various associations and administrative bureaus.

The convention will probably be held in February or March, and there will be in connection with it a fruit exhibition which promises to be something better than any fruit display ever before seen in this country, inasmuch as it will represent the best results in every branch of the industry, as far as the season will allow.

A convention somewhat on these lines was held in 1905, but the coming one is promised to be upon broader lines and more comprehensive in its scope.

In order to reach the young men who find it difficult to leave home for any length of time, the Petrolia District Office of the Ontario Department of Agriculture held a two-weeks' short course at Inwood, commencing December 4th. So much was the course appreciated that, during the last two days of inclement weather, the Institute tent was filled with eager men. On the night of December 15th a meeting was called, and the young men organized themselves into a farmers' club.



## THE CANADIAN BANK OF COMMERCE

ESTABLISHED 1867

Capital paid-up, \$10,000,000.  
Rest, \$8,000,000.

The Canadian Bank of Commerce extends to farmers every facility for the transaction of their banking business, including the discount or collection of sales notes. Blank sales notes are supplied free of charge on application.

Accounts may be opened at any branch of The Canadian Bank of Commerce to be operated by mail, and will receive the same careful attention as is given to all other departments of the Bank's business. Money may be deposited or withdrawn in this way as satisfactorily as by a personal visit to the Bank.

## MARKETS.

### Toronto.

#### REVIEW OF LAST WEEK'S MARKETS

The total receipts of live stock at the City and Union Stock-yards for the past week were as follows:

	City.	Union.	Total.
Cars.....	148	244	392
Cattle.....	1,225	1,585	2,810
Hogs.....	4,865	13,170	18,035
Sheep.....	2,540	3,582	6,122
Calves.....	178	60	238
Horses.....	24	45	69

The receipts of live stock at the two markets for the corresponding week of 1910 were as follows:

	City.	Union.	Total.
Cars.....	143	106	249
Cattle.....	1,899	889	2,788
Hogs.....	3,249	2,028	5,277
Sheep.....	2,249	1,163	3,412
Calves.....	162	11	173
Horses.....	1	41	42

The combined receipts at the two markets for the past week show an increase of 143 carloads, 22 cattle, 12,758 hogs, 2,710 sheep and lambs, 65 calves, and 27 horses, in comparison with the same week of 1910.

Receipts during the week were larger than the dealers expected, especially in hogs and lambs, which caused prices to decline on Thursday's market. Cattle of good quality kept firm all week, at Monday's quotations.

Exporters.—E. L. Woodward bought 38 steers for export, 1,170 lbs. each, at \$6.10. There was one load sold at \$6.35, and one at \$6.50.

Butchers.—Picked lots sold at \$5.80 to \$6.10, and some Christmas cattle sold at \$6.50 to \$6.75; good, \$5.80 to \$6.10; mediums, \$5.40 to \$5.75; common, \$4.50 to \$5.25; cows, \$3 to \$5.25; bulls, \$4 to \$5.

Feeders and Stockers.—Feeders, 800 to 900 lbs., sold at \$4.50 to \$4.85; stockers, \$3.50 to \$4.

Milkers and Springers.—Trade in milkers and springers was dull all week, at prices ranging from \$40 to \$65 for the bulk, with a very few at \$70 each.

Veal Calves.—Prices for veal calves were steady all week, at \$4.50 to \$8, and \$8.50 for extra choice.

Sheep and Lambs.—Early in the week lambs sold up to \$7.15, but on Thursday prices declined to \$6.40 and \$6.60; sheep sold at \$3 to \$4.

Hogs.—Up to and on Wednesday, hogs sold at \$6.50, fed and watered at the market; but on Thursday the receipts were greater than the demand, and prices declined to \$6.40.

#### BREADSTUFFS.

Wheat.—No. 2 red, white or mixed, 87c. to 88c., outside points; Manitoba No. 1 northern, \$1.08½; No. 2 northern, \$1.05½; No. 3 northern, \$1.01½, track, lake ports. Oats.—Canadian Western No. 2, 47c.; No. 3, 45½c., lake ports; Ontario No. 2, 42c. to 43½c.; No. 3, 42½c. to 43c., outside points. Rye No. 2, 92c. to 93c., outside. Buckwheat—60c. to 61c., outside. Barley For malting, 75c. to 80c. for food, other than No.

3 yellow, all rail from Chicago, 68c., track, Toronto. Peas—No. 2, \$1.05 to \$1.10, outside. Flour—Ontario winter wheat, ninety-per-cent. patents, \$3.50 to \$3.60, seaboard. Manitoba flour—Prices at Toronto are: First patents, \$5.50; second patents, \$5; strong bakers', \$4.80.

#### HAY AND MILLFEED.

Hay.—Baled, car lots, track, Toronto, \$16 to \$17 for No. 1, and \$14 to \$14.50 for No. 2.

Straw.—Baled, car lots, track, Toronto, \$6.50 to \$7.

Bran.—Manitoba bran, \$23 per ton; shorts, \$25; Ontario bran, \$23 in bags; shorts, \$25, car lots, track, Toronto.

#### COUNTRY PRODUCE.

Butter.—Market firm, with little change in prices. Creamery pound rolls, 32c. to 34c.; creamery solids, 32c.; separator dairy, 30c.; store lots, 25c. to 26c.

Cheese.—Large, 15½c.; twins, 16c.

Honey.—Extracted, 12c.; combs, per dozen sections, \$2.50 to \$3.

Eggs.—Case lots, 28c.; eggs, new-laid, 60c.

Potatoes.—Ontario potatoes, car lots, \$1.25 to \$1.30 per bag; New Brunswick, car lots, \$1.25 to \$1.30.

Beans.—Broken lots, \$2.10 to \$2.15 for primes, and \$2.20 to \$2.25 for hand-picked.

Poultry.—Receipts were moderate last week until the Thursday's market, when there was a plentiful supply. Prices ranged as follows: Turkeys alive, 16c.; geese, 10c.; ducks, 12c.; chickens, 10c.; hens, 9c.; turkeys dressed, 18c.; geese, 13c.; ducks, 14c.; chickens, 12c.; hens, 10c.

#### HIDES AND SKINS.

E. T. Carter & Co., 85 Front street, have been paying the following prices: No. 1 inspected steers and cows, 12½c.; No. 2 inspected steers and cows, 11½c.; No. 3 inspected steers, cows and bulls, 10½c.; country hides, cured, 11½c. to 12c.; green, 10½c.; calf skins, 12c. to 15c.; sheep skins, 60c. to 85c. each; horse hides, No. 1, \$3.25; horse hair, per lb., 33c. to 35c.; tallow, No. 1, per lb., 5½c. to 6½c.

#### TORONTO SEED MARKET.

The William Rennie Seed Company report seed prices as follows: Alsike No. 1, per bushel, \$9 to \$9.50; alsike No. 2, per bushel, \$8.50 to \$9; red clover, No. 1, per bushel, \$11 to \$12; red clover, No. 2, bushel, \$9.75 to \$10.50; timothy, No. 1, per cwt., \$15 to \$16; timothy, No. 2, per cwt., \$14 to \$15.

#### FRUITS AND VEGETABLES.

The Dawson-Elliott Company, wholesale fruit, produce and commission merchants, corner West Market and Colborne streets, Toronto, report Canadian vegetables and fruit as follows: Apples—Spies, No. 1, \$4 to \$4.50; No. 2, \$3 to \$3.50; Greenings, No. 1, \$3 to \$3.25; No. 2, \$2.50 to \$2.75; Baldwins, No. 1, \$3 to \$3.25; No. 2, \$2.50 to \$2.75; Snows, No. 1, \$6 to \$6.50; No. 2, \$4 to \$4.50; Russets, No. 1, \$3 to \$3.50; No. 2, \$2.50 to \$3; onions, Canadian, per bag, \$1.50 to \$2; beets, 75c. per bag; turnips, per bag, 45c.; carrots, 75c. per bag; parsnips, per bag, 85c.; celery, 50c. to 60c. per dozen; tomatoes, hot-house, 22½c. to 25c. per lb.; lettuce, Canadian grown, 25c. to 40c. per dozen bunches; Canadian cranberries, per case, \$3.50.

### Chicago.

Cattle.—Beves, \$4.80 to \$8.90; Texas steers, \$4.20 to \$5.75; Western steers, \$4.50 to \$6.80; stockers and feeders, \$3.20 to \$5.85; cows and heifers, \$2 to \$6.50; calves, \$5 to \$7.25.

Hogs.—Light, \$5.60 to \$6.12½; mixed, \$5.80 to \$6.25; heavy, \$5.90 to \$6.30; rough, \$5.90 to \$6.05; good to choice hogs, \$6.05 to \$6.35; pigs, \$4.50 to \$5.65.

Sheep and Lambs.—Native, \$2.50 to \$4.10; Western, \$2.75 to \$4.10; yearlings, \$4.25 to \$5.35; lambs, native, \$4 to \$6.30; Western, \$4.25 to \$6.25.

### Buffalo.

Cattle.—Prime steers, \$7.25 to \$8; butcher grades, \$3 to \$6.75.

Calves.—Common to prime, \$6 to \$9.25. Sheep and Lambs.—Choice lambs, \$6.60 to \$6.75; cull to fair, \$5 to \$6.50; yearlings, \$4.50 to \$5; sheep, \$2 to \$4.

Hogs.—Yorkers, \$6.15 to \$6.30; pigs, \$6 to \$6.10; mixed, \$6.25 to \$6.30; heavy, \$6.25 to \$6.30; roughs, \$5.40 to \$5.65; stags, \$5 to \$7.25.

### Montreal.

Live Stock.—The Christmas display of beef was poor in Montreal, everything considered, there being very little of that extra choice beef which is generally to be found offering at this time of year. The top price seems to have been 6½c., and some choice stock was bought for Quebec at 6c. to 6½c. Some fine steers and heifers were reported sold at 5½c. to 6c. per lb. The market ranged down to 1½c. to 2½c. for canners' bulls and cows. There was a fair turnover. Lambs were the feature of the market for small meats, prices advancing ½c. and more, being 6c. to 6½c. per lb.; ewes, 3½c. to 4c., and bucks and culls, 3½c. to 3¾c. Calves ranged all the way from \$5 to \$15 each. Selected hogs sold at 7c. to a fraction less.

Horses.—Dealers report a very dull demand for horses. The disappearance of the snow has upset buyers' calculations, apparently, and although there have been subsequent falls and there is now sleighing, the snow is not deep, and, when the long-continued mild weather is taken into consideration, it is not surprising that lumbermen and others who frequently buy horses when a hard winter may be counted on, are holding off at the present time. Ice men are not buying yet either. However, there is still time for the latter to come into the market. Prices, meantime, are holding about steady, as follows: Heavy draft horses, weighing from 1,500 to 1,700 lbs., \$300 to \$350; light draft, 1,400 to 1,500 lbs., \$225 to \$300; light horses, \$100 to \$200; broken-down animals, \$50 to \$100. Choicest carriage and saddle animals sold at \$350 to \$500.

Dressed Hogs.—Abattoir-dressed, fresh-killed hogs were selling at 9½c. to 9¾c. per lb., while country-dressed were 8½c. to 9c. per lb.

Poultry.—Stocks fairly large and quality good. There was talk of importing American turkeys, but it is doubtful if any of this took place. However, prices were 19c. to 20c. per lb. for choice stock. Chickens, 12c. to 14c. per lb.; ducks, 16c. to 18c.; geese, 10c. to 12c., and fowl about the same as geese. The above is for choice quality, inferior being lower.

Potatoes.—Green Mountain stock quoted at \$1.25 per 90 lbs., and perhaps a fraction higher, while in a jobbing way prices range up to \$1.45, and even \$1.50 per bag. Ordinary stock is worth 10c. to 15c. under these prices.

Honey and Syrup.—White clover comb honey, 11c. to 11½c. per lb., extracted being 7c. to 8c.; dark comb, 8c. to 10c., and extracted, 7½c. to 8c. Maple syrup, 7c. to 7½c. per lb., in wood, and 70c. to 80c. per tin. Sugar, 8½c. to 9½c. per lb.

Eggs.—Stocks are light, and orders for carloads have been received and refused. New-laid stock is hardly worth while quoting, there being so little of it. Selects, 30c. to 32c., and No. 1 candled, 26c. to 28c., according to quantity and quality.

Butter.—The market for butter continued very firm. Prices were from 30c. to 32c. per lb. for choicest creamery, and for single-package lots many were holding for the top price. Manitoba dairy was quoted at about 22c. to 24c., although the top figure was hard to get, and Western dairy was 25c. to 26c., rolls being 25c. to 26c.

Cheese.—September cheese ranges from 14½c. to 14¾c., and October from 14c. to 14½c. per lb.

Grain.—Market for oats fairly active, prices were 47½c. for No. 2 Canadian Western; 46c. to 46½c. for No. 1 feed; 46c. for No. 3 Canadian Western; 46½c. for No. 2 local; 45½c. for No. 3 local, and 44½c. for No. 4 local.

Flour.—There is a very good demand from foreign sources, and millers say they are shipping at good prices. Quotations show no change, being \$5.60 per barrel for Manitoba spring-wheat patents; \$5.10 for second patents, and \$4.90 for strong bakers'. Ontario patents, \$4.75 to \$5 per barrel; 90-per-cent. straight rollers, \$4.25 to \$4.40.

Feed.—Market very firm, and a good demand. Prices steady, at \$23 per ton in bags, for Manitoba bran; \$25 for Manitoba shorts; \$27 to \$28 for Ontario middlings; \$32 to \$34 for pure grain mouille, and \$26 to \$29 for mixed mouille.

Hay.—Offerings light, and demand good.

Market firm, and prices steady, at \$16 to \$17 per ton for No. 1 baled hay; \$15 to \$15.50 for No. 2 extra good; \$13.50 to \$14 for No. 2 ordinary; \$11 to \$11.50 for No. 3 hay, and \$10.50 to \$11 for clover mixed.

Hides.—Rather dull demand for hides, prices about steady, at recent range. Dealers were bidding, f. o. b., Montreal, 11c., 12c. and 13c. per lb. for beef hides, Nos. 3, 2 and 1, respectively, and selling to tanners at ½c. advance. Calf skins, 11c. and 13c. per lb., for Nos. 2 and 1, respectively. Lamb skins steady, at 80c. each, while horse hides are \$1.75 and \$2.50 each. Tallow, 1½c. to 3½c. per lb. for rough, and 5c. to 6½c. for rendered.

### British Cattle Market.

John Rogers & Company, Liverpool, cable quotations for both States and Canadian steers, from 13½c. to 13¾c. per pound.

### GOSSIP.

A newspaper item last week stated that the C. P. R. was negotiating with the Governments of Ontario, Quebec and New Brunswick, with a view to having special trains tour these Provinces so that agricultural demonstrations and lectures might be given. Geo. A. Putnam, Superintendent of Farmer's Institutes for Ontario, submitted last July an outline of some good exhibits, demonstrations and lectures, which, in his opinion, were suited to the Western section of the Province. Details as to arrangements had not been completed up to the time of going to press.

J. M. Gardhouse, Weston, Ont., proprietor of Rosedale Stock Farm, writes, in changing his advertisement, that his stock came into winter quarters in a good, healthy condition. Sales in Leicester sheep in the past autumn have been by far the best in the history of his flock, sheep having been shipped to nearly every Province in the Dominion, and at present he has nothing for sale in Leicesters. Sales in horses have been fair, but he is still offering at right prices several Toronto winners. Anyone in need of a good young stallion or mare in foal, should write for particulars. The Shorthorn bulls that he is offering for sale, are big, lusty fellows, just turned twelve months old, of choice breeding, and from good milking dams.

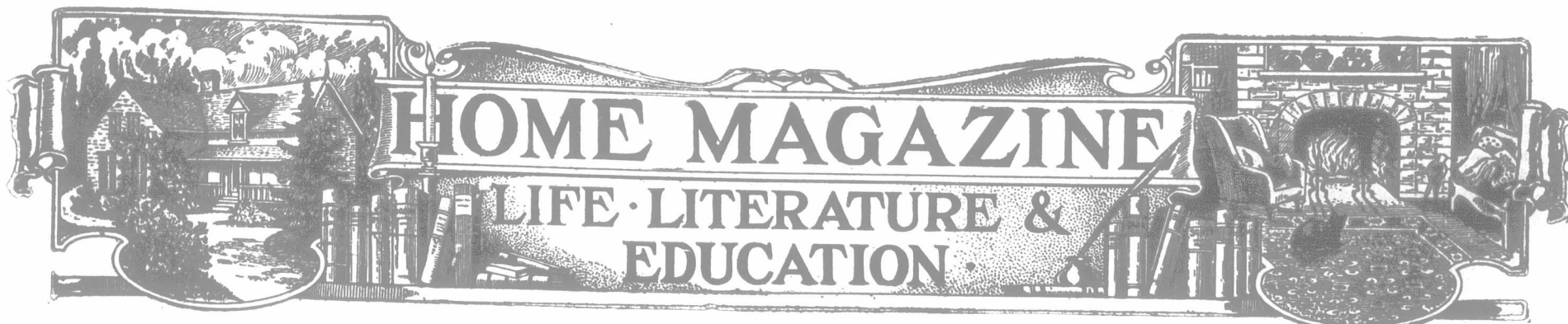
### BARON OF BUCHLYVIE SOLD FOR £9,500.

Never in the history of the breed, says the Scottish Farmer, has there been an event which created so much excitement amongst Clydesdale men as the sale by auction, on December 14th, of the noted stallion, Baron of Buchlyvie, the famous eleven-year-old son of Baron's Pride. The actual sale lasted just nine minutes. It began with a bid of £3,000 from Alex. Rennie, and while several bidders were in at first, the real contest lay between Wm. Dunlop and James Kilpatrick, the parties interested in the celebrated law suit recited in the December 21st issue of "The Farmer's Advocate," page 2132, in which the court declared the horse to be the joint property of the two men last named. At £9,450, Kilpatrick was in, and Dunlop's representative went to £9,500 (\$46,233.33). The highest price previously paid for a stallion of the breed was £3,000, given for Prince of Albion.

### TRADE TOPIC.

A durable tank heater, which will burn any kind of fuel, and which is designed so as to be used to heat poultry houses and outbuildings, is advertised in this issue by the Heller-Allen Co., Windsor, Ont. The smoke-stack can be extended out of the building. The entire heater weighs about 150 pounds, is 24 inches long, and 12 inches in diameter, and is cast in one piece. See advertisement in another issue.





**Of Interest to the Women's Institute.**

**Its Progress for the Past Year.**

Report of the Superintendent, Mr. Geo. A. Putnam, given at the recent Convention of the Association, Toronto.

The past year has seen larger and better things for Ontario Women's Institutes, and the work which you are doing is attracting increased attention, not only throughout Ontario, but the other Provinces of the Dominion. In fact, you are looked upon as leaders in this very important and comparatively new work among home-makers. You are commanding the respectful attention of public men and women of prominence as never before. Your influence is already felt, but who can measure the benefit to future generations of the work which you are doing.

If our organization has done nothing else, it has taken the women beyond, but not above, those things which concern the everyday routine of the home. Due prominence has, however, been given to those duties and responsibilities which come to every woman who is responsible for the well-being of a household. At the same time, the lives of the members have been broadened, and their influence directed to the betterment of morals, education, life problems, community interests, home and public hygiene, water supply, civic improvement, care and education of the defective, etc., etc. Your field of usefulness is unlimited.

Women are drawn naturally to those of their own religious belief or social circle, but we find in the Institute women of all denominations and social standing binding themselves together and co-operating in promoting among themselves and throughout the Province those principles and institutions which their higher intelligence, mature judgment and experience have proven worthy of womanhood's best efforts. Those who have most in common are naturally drawn together in the formation of a local society, but an organization which lives up to its opportunities and privileges appeals to all high-minded women in the locality sooner or later, and if we are inspired by the best motives, we will reach down and help the most lowly and needy of the community. If there are women in your locality who have not yet been attracted by or enlisted in the work of the Institute, ask yourself why. Is it that you have not lived up to your opportunities, that you have not yet done best to bring your society to the favorable notice of these women? Are you content to allow the women of your district judge of the high ideals of Ontario Women's Institutes by what your society has done. If not, then ask yourselves what there is to be done and what you can do to command not only their attention, but their co-operation.

You have not only further perfected yourselves during recent years in administering to the material wants of the race, but you have used your influence and done your part to satisfy the desire for better intellectual and social advantages and to raise the standard of morals throughout rural Ontario. The highest ideals of womanhood are the same wherever true womanliness exists, and as you stand true to these ideals for yourself and for the nation, you will find yourselves drawn closer together in an ever-strengthening bond of common endeavor.

The woman who has been active in Ontario Women's Institutes, no matter where she goes, carries that something which impels her to tell her new associates of the good to be derived and given through the Women's Institutes. In British Columbia, Saskatchewan,

Manitoba, Alberta, New Brunswick, as well as from across the line, word comes telling of the formation of Institutes, or the deep interest which the women show in the ideals for which the Institute stands.

We are not and have not been concerned that our organization shall secure publicity by doing that which is sensational, and done for the purpose of attracting public attention. We do not aim to do that which will give the society notoriety, but our desire is to make the life of the lonely and isolated brighter, to spread the gospel of right living physically and morally, which we are pleased to know exists so largely among Canadians, and to attract and secure the co-operation of the increasing number of those in our towns and villages who are inclined to magnify the society life. The Institute deals with the vital things of life, and leaves formalities to the care of others. Our desire should be to deal with the everyday needs of our people in such a way that the life of each will be made more perfect.

While the greatest source of satisfaction is to be found in the enthusiasm of the members, the excellence of the work done, and the bright prospects for the future, we are also gratified at the growth in numbers during the past year. We now have 654 branches, with a membership of nineteen thousand and ninety-one, for the past year, an increase of three thousand over 1909-10. The total attendance at Women's Institute meetings for the year was over one hundred and fifty thousand.

It would, no doubt, be profitable to further enlarge upon the underlying principles, accomplishments, and possibilities of our society, and set up ideals towards which to work. I assume, however, that you as delegates are looking for definite information and suggestions as to how the aims and objects of the organization may best be attained. I shall, therefore, confine my further remarks to observations based upon the work of the past year, and give suggestions which we trust many of you will put into practice in your own organization.

It has been particularly gratifying to note the readiness with which the members generally throughout the Province have responded to the call of their officers in making the regular monthly programmes of interest and value, and no society can become entirely successful without this co-operation. The Institutes have not only continued to devote a fair proportion of their time and effort to the discussion and study of household topics, but they have more than ever reached out and taken an interest in community problems—civic improvement, the perfecting of self-improvement facilities, such as libraries, rest-rooms, etc. The moral atmosphere of many communities has been cleared. Although you have always accepted nobly the responsibilities which have been yours, a noticeable and most gratifying feature of the work during the past year is the enthusiasm shown by not only the new organizations, but those which have been established for a number of years. There is a growing tendency on the

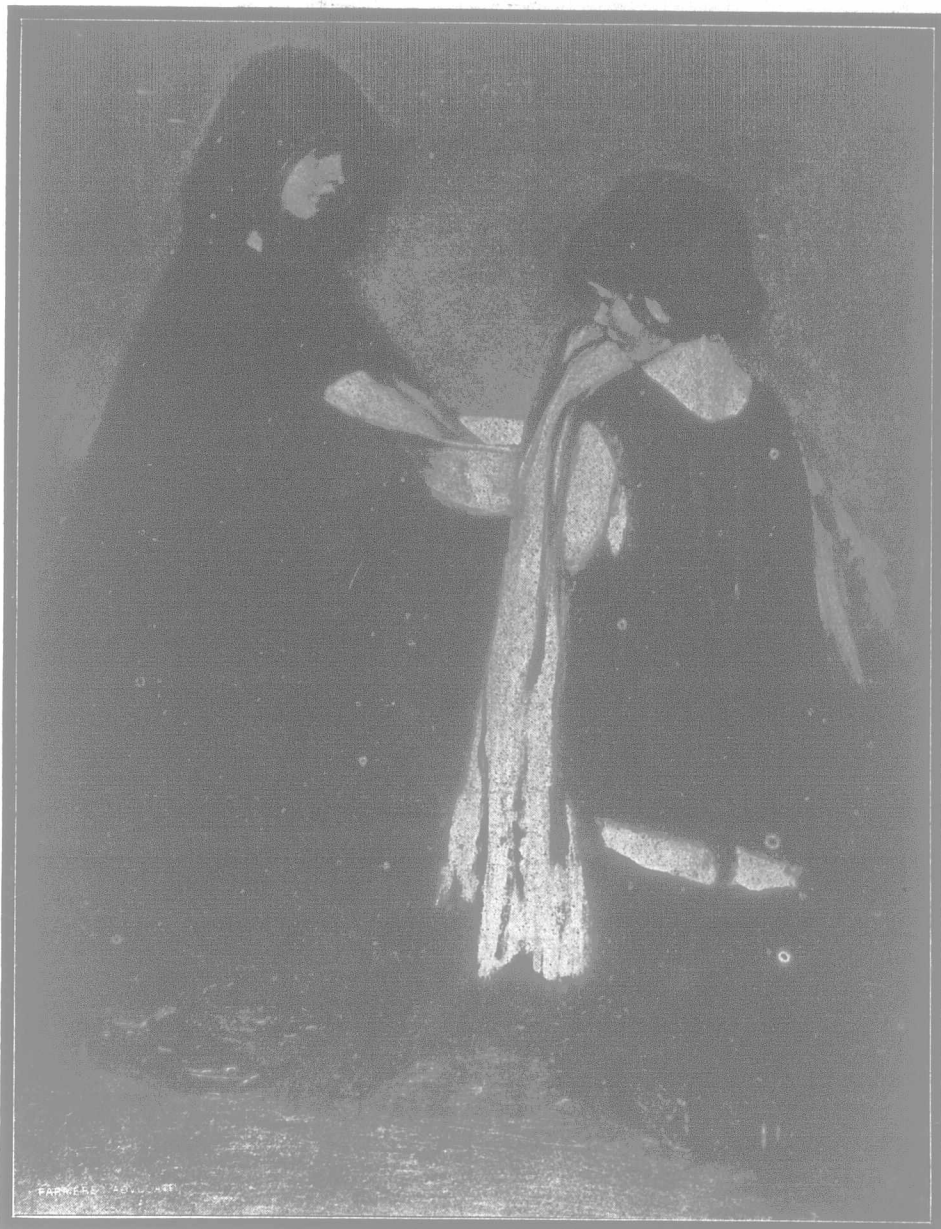
part of the Women's Institutes to co-operate with the Farmers' organizations to the mutual benefit of all concerned. An increasing number of Agricultural Societies are seeking the co-operation of the Women's Institutes in revising their prize lists and introducing features in their Fall Fairs, which are of special interest and value to the women. It is not necessary that the Institutes should lend financial assistance to the Fairs in order that this co-operation may exist and continue. In fact, the Fairs are much more liberally supported financially than the Institutes, and the organization should consider well before giving its funds direct to the Fair. If, however, they wish to appropriate a portion of their money to the local fair, they should see that it is for educational purposes, or some competitive feature among those who are or are likely to become active in Women's Institute work.

An increasing number of Institutes appreciate the necessity of embracing a variety of topics in their yearly programmes. While it is well to avoid monotony in the work of the Institute, there is a danger of spreading our efforts over too wide a field, and finding ourselves at the end of the year with no substantial work accomplished. While we should seek for some variety, we should endeavor to choose subjects which are correlated. Such a choice of subjects is an inducement to the members to choose their reading along more definite lines.

Definite plans for the year, in so far as programmes are concerned, are the best interests of the work, and an ever-growing proportion of our branches are publishing printed programmes, many of these containing full outlines of the proceedings for each meeting, while others give announcements of the main topics for each meeting, and leave space for the filling in of such topics as may appeal to the members, throughout the year. People of marked ability may come to your locality during the year, and it is well not to have your programme so full that you will not be able to hear from them for a year or more after their arrival. One of the important duties of those in attendance at the district annual meeting is to formulate plans, so far as possible, and give advice for the preparation of the branch programmes. A few localities have decided upon one or more topics to be taken up at each meeting by all branches. Such assistance as this will be appreciated by the newer branches, and those which have not been most prosperous.

County Conventions hold a prominent place in Institute work, and where a general co-operation of the branches can be secured, much benefit is derived therefrom. We highly commend this feature or work.

The permanency of the work is reflected in the increasing number of branches which are providing permanent quarters. In many branches they have already secured a permanent hall, which is used as a library, reading-room and meeting-place, while in a number of districts the branches have co-operated in establishing a rest-room in the chief town of the district, which is used as a common meeting-place and rest-room, not only by the women from the surrounding country, but also the women and girls of the town. At Whitby, Lindsay, and Hespeler, as well as at a number of other places, we find such provision, and at the latter place the girls and women of the town congregate every Monday evening for sociability, and take advantage of the occasion to give each other suggestions and assistance in fancy-work, sewing, etc. Wards and rooms in local hospitals have been furnished and are



By Harrietta M. Shore.

"Sisters."

Royal Canadian Academy Exhi.



maintained by some of the Institutes. Contributions to various lines of philanthropic work are becoming more general. Such contributions and efforts require some special means of raising money, and the resourcefulness of the Institutes in this respect is indicative of the aggressiveness of Institute workers.

Increased and more general attention is being devoted to civic improvement on the part of our Institute officers and members. Towns and villages have been cleaned up, trees planted, walks improved, and, in some cases, renewed, streets lighted, and encouragement given to the private individual to keep his own place as well as the street in front of his place in a tidy, attractive manner.

The suggestion made last year that the Institutes inquire into conditions surrounding the local schools, and do what they could to improve the same, has been generally acted upon, and many scholars and teachers have benefited materially through the activity of the Institutes in this respect. Not only has the sanitation equipment and decoration of the school been looked to, but much has been done to beautify and make more attractive the surroundings of the school-yard and schoolhouse. A few Institutes have distributed seeds and plants among school children upon the understanding that they care for the same according to directions furnished. In the majority of such cases, arrangements are made for an exhibition where the flowers and vegetables produced are entered for competition. This is a most beneficial feature of work.

There is an increasing tendency on the part of the Institutes to ask members who are known to be proficient along certain lines to give demonstrations in those branches of housework or home-keeping in which they excel.

It is impossible to give anything like a complete list of the subjects which are prominent in the work of the past year. While we conclude from time to time that every conceivable line of work has been touched upon by the Institutes, we continue to receive reports containing new features. Among the topics which have been prominent in the work of the past year, we may mention: The installation of drinking-fountains, addresses by doctors and dentists bearing upon their professions, banking, gardening, manners of our children, my bird neighbors, study of Hand Book, spelling-match, points in law which women should understand; my grandmother, my mother, and myself; current events; source preparation and purity of imported foods.

There has been an increased tendency during the past season to enlist the cooperation and assistance of the gentlemen in making the work of the Women's Institute more effective. Many professional men, such as doctors, dentists, lawyers, bankers, as well as businessmen, merchants, butchers, etc., have given addresses and demonstrations before the Women's Institutes.

When planning for this Convention, one of the most important topics decided upon was "Women and Business Methods." Although I appealed to a number of men who are well versed in business methods, I failed to secure a suitable person to handle this topic. It is the intention of the Department, however, to gather information along this line and place it before the Institutes in some manner which we trust will be acceptable and profitable to them.

You will remember that at our last Convention an advisory committee was appointed for the purpose of conferring with the Department as to ways and means whereby some systematic form of instruction could be given to a group of Institutes. The basis upon which assistance was at first offered made the instruction rather more costly than was acceptable to the members of the Institutes. We then made the offer more liberal, and are pleased to state that we now have a group of six Institutes in the Haldimand and Norfolk district which are receiving a course of lectures from a well-qualified and specially-trained teacher, who has already given you some particulars regarding the work in hand. The indications are that work similar to this can be organized in some localities upon a basis which will be practically self-supporting. The words of appreciation from those taking the instruction should be sufficient to induce the Legis-

lature to appropriate funds to encourage the work in its initial stages.

While the assistance by way of literature and lectures given to the Institute members has not been thorough, especially from the standpoint of the professional teacher, our efforts have made it possible for the industrious and attentive to get much valuable information on food values, uses of fruits, vegetables and honey, milk-care, uses, and food value, flour and bread-making, care of teeth, bacterial life, prevention and treatment of tuberculosis, care and feeding of infants, poultry-raising, gardening, etc.

It will be our aim to give what assistance we can in the current year regarding household conveniences and labor-saving devices, house-planning and remodelling, water supply and disposal of waste for town and country homes, life problems—in their deepest and broadest sense. St. John's Ambulance Association. Help for the boys.

While we have adopted the motto, "For Home and Country," and do not, so far as I can learn, wish to make any change, it will be of interest to the delegates to hear some of the mottos and quotations which have appeared on programmes received from Institutes during the past year.

"If you know a good thing, pass it on."

and any good that we can do will be a willing service."

"If you have a little kindness, pass it on."

"The road to happiness lies over small stepping-stones."

"The life of each day would be pleasanter if we would permit ourselves to enjoy the work in hand."

It is indeed encouraging and most gratifying to receive words of approval from Institute officers and members regarding services of delegates who have been sent throughout the Province from time to time. While we have endeavored to furnish the Institute with speakers qualified along a variety of lines, we have always aimed to take up work which is of special interest and value to the mother in the home.

You have a most valuable co-worker—I should say leader—in Miss Watson, of Guelph. She is untiring in her efforts to assist you, and her capabilities are apparently unlimited. The Department has a high appreciation of the work which she is doing, and the increasing requests made of her by the Institutes throughout the whole Province is the strongest tribute to her work.

Our official organ continues to support the Institute work, and we believe you are the best friend that journal has. We are indebted to the local press

of lost opportunities for doing good; it is an occasion for putting new life into our work, with its possibilities and responsibilities of the individual woman to accomplish some work yet unattempted or undone in her home, in her town, in her country, in her Province, in her nation, or in her Empire. Let us have a passion for carrying from one end of society to the other, the best knowledge, the best ideas of our time.

## The Roundabout Club

### Work of Our Literary Society.

#### RESULTS, STUDY I.

After three years of excellent work on behalf of the students of the Literary Society, the editors of the Roundabout Club feel justified in looking for excellence. In the essays received upon the subjects set for Study I. for this season, they have not been disappointed. Particularly in the subject, "A Walk Through a Weedy Field in Late Fall," did our students—at least the majority of them—catch the spirit of the suggestion, and our only regret is that the prize list must of necessity be restricted.

The prizewinners are: "R. H. C.," York Co., Ont.; "Rue," Welland Co., Ont.; S. Hunter, Halton Co., Ont.; "Plough Boy," Middlesex Co., Ont.; W. J. Way, Kent Co., Ont.; Sherard McLeay, Perth Co., Ont.

Honor Roll.—Bernice, Bruce Co., Ont.; S. V. McGregor, Halton Co., Ont.; Mrs. T. P. Kerr, Prescott Co., Ont.; Honor Bright, Halton Co., Ont.; "Betsy," Wentworth Co., Ont.; G. B. Pentland, Huron Co., Ont.; M. F. Hall; L. M. C., Kent Co., Ont.; Margaret H. Veale, Oxford Co., Ont.; "Nanie," Middlesex Co., Ont.; A. F., Prince Edward Co., Ont.; M. L. B., Oxford Co., Ont.; Zetta Patterson, Wentworth Co., Ont.; J. W. Thompson, Gray Co., Ont.

Of these, the first two came "perilously" close to winning a prize. We were particularly pleased with Bernice's observation in regard to the interest with which the weed-grown field is invested to the botanist (Query—Why should not every farmer be, to some extent, a botanist?—Ed.) and to the little child,—so pleased that we cannot refrain from quoting: "Those sturdy little plants—shamelessly persistent young vagabonds that they are, hated and berated by every ambitious husbandman, have one—nay, two friends among humans, viz., the botanist and the little child. To the former, each leaf, stem, and curving petal of the meanest weed that grows, holds a tiny world of interest all its own, and in silent communion with these growing things—of plebeian birth though they be—he passes many an hour, and calls them golden.

The child—with fine contempt for all class distinctions—calls a flower a flower, and loves it accordingly, whether it grows upon a dandelion stock or the choicest orchid shrub. So to the child, a field of weeds has pleasures undreamed of in the philosophy of the average passer-by. What knows the real-estate enthusiast of the delights of chasing imaginary fairies from behind mullein-stocks?

Or what mathematician could compute with the rapidity the child imagination conjures up scenes in which the given objects may figure to advantage? Why, in a twinkling, the rather disreputable-looking stubble of what doubtless was a most unsatisfactory crop, is a field of soldiers of stern and relentless mien, the upright ones ready and willing to do instant battle for king and country, while the fallen ones have, of course, gone to grief in the same worthy cause. The old stone-pile is a castle impregnable,—as such imposing structures should be;—the tall elms over on the knoll there are forts high and mighty; while the stream forms the line of demarcation between the enemy's country and the home ground.

To S. V. MacGregor we would suggest, Why not next spring, nay, this very winter, begin the study of trees, shrubs and plants? You speak of the "tall, stringy weeds" upon which you "rush," and you cry, "Oh, for a technical knowledge to correctly classify them, for I find myself so woefully ignorant!" This very ad-



The Little Busybody.

(From a painting by Helen McNicoll, Royal Canadian Academy Exhibition, Toronto, Nov.-Dec., 1911.

"Nor need we power or splendor, wide hall nor lordly dome,  
The good, the true, the tender, these form the wealth of home."

"To-day is the time to be happy."  
"Patience and application will carry you through."

"In love of home, the love of country has its rise."

"Women, after all, are the great props and comforts of existence."

"We should all try to discharge our duty."

"For nothing lovelier can be found in woman than to study household good."

"We all meet on one common level."

"Knowledge is power."

"Loyalty, socialibility, progress."

"Our aim—to educate and brighten."

"We all meet on one common level, our neighbors as ourselves, with one object in view—to raise the standard of health and morals of our people."

"Frugality makes an easy chair for old age."

"We pass through this world but once,

throughout the whole Province, and especially the agricultural journals, which have so nobly supported you in your efforts.

I cannot close without expressing hearty appreciation on the part of the Department for the continued co-operation of the large band of Institute officers who have assisted us in making the work such a success up to the present. We have every reason to believe that this assistance will continue. We are always ready for suggestions. If you have anything which you think will be of benefit to Institutes in other localities, do not fail to write the Department regarding the same. While we learn through the monthly reports much which is of interest and value from a Departmental standpoint, we are confident that many organizations are carrying on aggressive work along lines which might be made generally helpful, but which we have not heard of.

This meeting has a greater significance than the summing up of our accomplishments during the past year, or a review



mission is a good sign. Believe us, you have it in you to become an enthusiastic botanist, and—believe us again—you have no idea of the interest with which even a slight knowledge of botany can invest even a weedy field. The more you know, the more you SEE. A farmer whom we know, a year or so ago purchased one of the fine books on weeds, issued by the Government at Ottawa, at the ridiculously-low price of \$1.00. After a few weeks' study of it, he declared that he saw "hundreds" of weeds on his farm which he had never even noticed there before. You can understand the practical benefit, as well as the new interest which came from the revelation. SEEING the weeds, he was enabled to fight them. We believe that every farmer in Canada should own one of these books.

Your essay was well thought out, and well written, Miss McGregor. We trust that it will not be your "last, as well as your "first." We look forward to seeing you one of our most energetic students.

In closing, may we add a few general hints to the students of the Roundabout Club?

1. Do not change your pen-name if you can avoid it. Doing so causes confusion in the office here. If you are choosing a pen-name for the first time, let it be a distinctive one. A "telling" pen-name invests its owner with a sort of personality and distinctiveness utterly lost, perhaps, by such cognomens as "A Farmer's Daughter," R. E. N."
2. Remember that your essay cannot, like Tennyson's Brook, "go on and on for ever," and do not lose too much time in coming to your subject. We have occasionally received essays in this office whose introductory paragraphs have reminded us of the homely adage about "the tail wagging the dog."
3. Avoid bombastic, grandiloquent, and over-flowery writing as you would the plague.
4. Try to express your thoughts sim-

ply and clearly. Roundabout ways of making a statement, and obscure writing generally, are inexpressibly tiresome.

5. Never use a long word where a short one will answer. This is a rule invariably observed by the best writers.

6. Do not forget that full address must be given with every letter or essay sent to the Roundabout Club.

7. Address all communications to "The Roundabout Club," "The Farmer's Advocate," London, Ont.

**A Walk Through a Weedy Field.**  
(By "Rue," Welland Co., Ont.)

This afternoon I started earlier for the cows than is my custom so that I might visit the "five oaks" field, which lies beyond the pasture. Gloomy skies and chill winds don't encourage much loitering out of doors; were I a city dame I should probably order my motor-car and speed away to some "bridge" party. Oh, well, the city dame has some advantages which I may envy, but even on this November day I shall get more pleasure out of my tramp across the fields than "bridge" could yield me.

I cross the pasture and enter the "five oaks." The field was seeded with lucern two years ago, but it was a poor catch, and having grown up with weeds, will have to be plowed and seeded again.

Along the brook which crosses the corner of the field, I see the pale yellow of a crowfoot daisy, and the clear white of two or three ox-eye daisies. How persistent they are; cut by the mower before they had ripened seed, they, though perhaps sore discouraged, are still struggling to fulfil their object in life. Farther over, toward the oaks, were several stalks of chicory—the only ones on the farm—and Robert dug them up with a mattock, yet at the bottom of the holes are shoots of green. Is this the same variety of chicory which is used to adulterate coffee? I don't see how a crop of it could possibly be a failure;

one of the neighbors who has much of it, calls it "blue devil." It reminds me of what Bud Means, in the "Hoosier Schoolmaster," said about his dog. "When Bull once takes hold, heaven and earth can't make him let go."

Close to the fence and near the trees is a patch of "paint-brush." It was a really beautiful spot of color in early summer, but now only the rosettes of hairy leaves are to be seen.

I seat myself on the rail fence—I'm glad there are a few old rail fences yet—and survey the familiar scene. At my left is the brook, bordered by shrubs of various kinds, the wild crab apple, whose blossoms were a dream of beauty and fragrance, the button ball in the bed of the stream, the fringe of hawthorn farther on; the turkeys have profited by the crimson fruit, but a few bright berries still cling to the leafless branches. One pine bends over the steep western bank; beside it stand a few maples now demure and gray. The pods of the milkweed are nearly all empty. Over the field the vivid green of the patches of clover, mottled, and barred with the dullness of dead ragweed, resolve themselves into continents, islands, peninsulas.

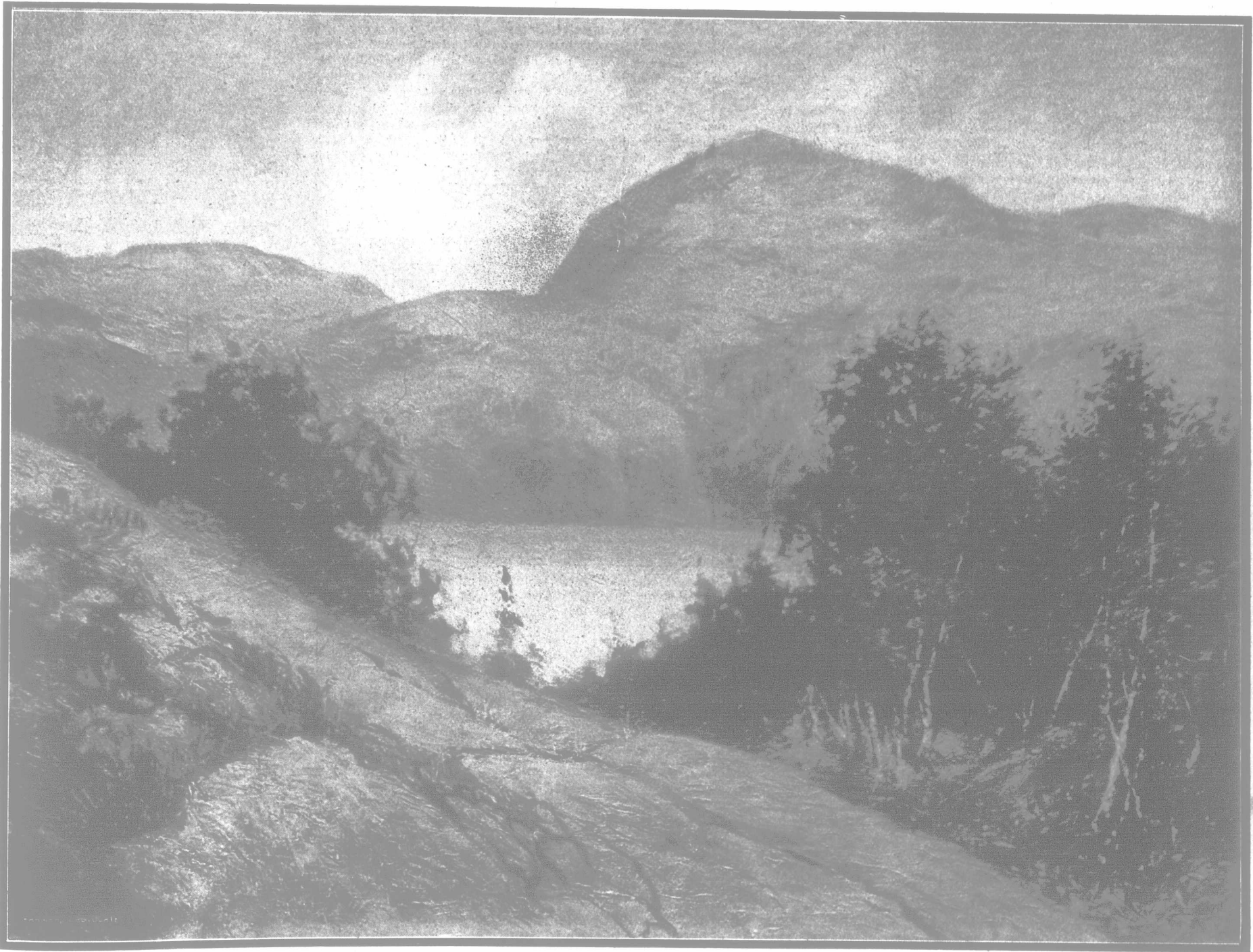
On the other side of the fence are numerous brown stalks of wild carrot; those who don't have to wage unceasing war against it, call it by the not inappropriate name of "Queen Anne's lace." We have none of it—yet. If resignation is the feeling with which we bear our neighbor's misfortunes, that is probably the reason why those brown stalks offend me less than this flourishing buckhorn at my feet. Years ago, this field was overrun with thistles—there are very few now,—which is an encouraging fact. Do fashions change in weeds? The mullein also has "gone out."

A squirrel rustles across the leaves and runs up the tree beside me. I cross the field again thinking how much better this gloomy weather or the dim haze of Indian summer harmonizes with the sober

colors of the season than would the bright sunshine of June. I roll myself under a barbed-wire fence to avoid going around by the gate, start the cows down the lane, and fall to meditations ranging from the primal curse of "thorns also, and thistles shall it bring forth," to the remarks in last week's paper on the eradication of bindweed, and pausing by the way at Job's imprecation. "Let thistles grow instead of wheat, and cockles instead of barley," and the story of the tares sowed by the enemy among the wheat. It wasn't an enemy who sowed that field with weeds; some came by accident, some through carelessness, none through ill intention. Some, early recognized, have been kept in check, if not eradicated. Others have stolen a march and entrenched themselves so securely that our only hope of subduing them is to "lay waste the country."

Some—like the chicory—may be valuable in their own places, but, alas, when they get into others' places! Rev. Carden was such a good moral man, who would have been most useful as a mason or carpenter, but was sorely out of his sphere as a preacher; and that physician who might better have been educated as a woodchopper. I step aside to start a loitering cow, then resume my musings. That paint-brush was really pretty. Is it like that neighbor who is so given to exaggeration? His stories are most picturesque and amusing, but they do occasionally cross the line into untruthfulness. If there had been a good stand of clover in that field, many of the weedlets would never have got a start; the application of this fact in the field of morals is obvious.

These "bootjacks" on my clothes came from the low land along the brook. What wonderful ways seeds have of spreading themselves, and what vitality some weeds have; some of them cut at midday are like the snakes' tails which  
(Continued on page 2165.)



By Robt. F. Gagen, A.R.C.A.

"Hills of the Saguenay."

Royal Canadian Academy Exhibition, 1911.



# Our New Serial Story

## THE SCARLET PIMPERNEL.

A STORY OF ADVENTURE.

By Baroness Orczy.

(Serial rights secured by "The Farmer's Advocate.")

CHAPTER I.

Paris: September, 1792.

A surging, seething, murmuring crowd, of beings that are human only in name, for to the eye and ear they seem naught but savage creatures, animated by vile passions and by the lust of vengeance and of hate. The hour, some little time before sunset, and the place, the West Barricade, at the very spot where, a decade later, a proud tyrant raised an undying monument to the nation's glory and his own vanity.

During the greater part of the day the guillotine had been kept busy at its ghastly work: all that France had boasted of in the past centuries, of ancient names, and blue blood, had paid toll to her desire for liberty and for fraternity. The carnage had only ceased at this late hour of the day because there were other more interesting sights for the people to witness, a little while before the final closing of the barricades for the night.

And so the crowd rushed away from the Place de la Grève and made for the various barricades in order to watch this interesting and amusing sight.

It was to be seen every day, for those aristos were such fools! They were traitors to the people of course, all of them, men, women, and children, who happened to be descendants of the great men who since the Crusades had made the glory of France: her old noblesse. Their ancestors had oppressed the people, had crushed them under the scarlet heels of their dainty buckled shoes, and now the people had become the rulers of France and crushed their former masters—not beneath their heel, for they went shoeless mostly in these days—but beneath a more effectual weight, the knife of the guillotine.

And daily, hourly, the hideous instrument of torture claimed its many victims—old men, young women, tiny children, even until the day when it would

finally demand the head of a King and of a beautiful young Queen.

But this was as it should be: were not the people now the rulers of France? Every aristocrat was a traitor, as his ancestors had been before him: for two hundred years now the people had sweated, and toiled, and starved, to keep a lustful court in lavish extravagance: now the descendants of those who had helped to make those courts brilliant had to hide for their lives—to fly, if they wished to avoid the tardy vengeance of the people.

And they did try to hide, and tried to fly: that was just the fun of the whole thing. Every afternoon before the gates closed and the market carts went out in procession by the various barricades, some fool of an aristocrat endeavored to evade the clutches of the Committee of Public Safety. In various disguises, under various pretexts, they tried to slip through the barriers which were so well guarded by citizen soldiers of the Republic. Men in women's clothes, women in male attire, children disguised in beggars' rags: there were some of all sorts: ci-devant counts, marquises, even dukes, who wanted to fly from France, reach England or some other equally accursed country, and there try to rouse foreign feeling against the glorious Revolution, or to raise an army in order to liberate the wretched prisoners in the Temple, who had once called themselves sovereigns of France.

But they were nearly always caught at the barricades. Sergeant Bibot especially at the West Gate had a wonderful nose for scenting an aristocrat in the most perfect disguise. Then, of course, the fun began. Bibot would look at his prey as a cat looks upon the mouse, play with him, sometimes for quite a quarter of an hour, pretend to be hoodwinked by the disguise, by the wigs and other bits of theatrical make-up which hid the identity of a ci-devant noble marquise or count.

Oh! Bibot had a keen sense of humor, and it was well worth hanging round that West Barricade, in order to see him catch an aristocrat in the very act of trying to flee from the vengeance of the people.

Sometimes Bibot would let his prey actually out by the gates, allowing him to think for the space of two minutes at least that he really had escaped out of Paris, and might even manage to reach the coast of England in safety: but Bibot would let the unfortunate wretch walk about ten metres towards the open country, then he would send two men after him and bring him back, stripped of his disguise.

Oh! that was extremely funny, for as often as not the fugitive would prove to be a woman, some proud marchioness, who looked terribly comical when she found herself in Bibot's clutches after all, and knew that a summary trial would await her the next day, and after that, the fond embrace of Madame la Guillotine.

No wonder that on this fine afternoon in September the crowd round Bibot's gate was eager and excited. The lust of blood grows with its satisfaction, there is no satiety: the crowd had seen a hundred noble heads fall beneath the guillotine to-day, it wanted to make sure that it would see another hundred fall on the morrow.

Bibot was sitting on an overturned and empty cask close by the gate of the barricade; a small detachment of citizen soldiers was under his command. The work had been very hot lately. Those cursed aristos were becoming terrified and tried their hardest to slip out of Paris: men, women and children, whose ancestors, even in remote ages, had served those traitorous Bourbons, were all traitors themselves and right food for the guillotine. Every day Bibot had had the satisfaction of unmasking some fugitive royalist and sending them back to be tried by the Committee of Public Safety, presided over by that good patriot, Citizen Fouquier-Tinville.

Robespierre and Danton both had commended Bibot for his zeal, and Bibot was proud of the fact that he on his own initiative had sent at least fifty aristos to the guillotine.

But to-day all the sergeants in command at the various barricades had had special orders. Recently a very great number of aristos had succeeded in escaping out of France and in reaching England safely. There were curious rumors about these escapes; they had become very frequent and singularly daring; the people's minds were becoming strangely excited about it all. Sergeant Gros-pierre had been sent to the guillotine for allowing a whole family of aristos to slip out of the North Gate under his very nose.

It was asserted that these escapes were organized by a band of Englishmen, whose daring seemed to be unparalleled, and who, from sheer desire to meddle in what did not concern them, spent their spare time in snatching away lawful victims destined for Madame la Guillotine. These rumors soon grew in extravagance; there was no doubt that this band of meddling Englishmen did exist; moreover, they seemed to be under the leadership of a man whose pluck and audacity were almost fabulous. Strange stories were afloat of how he and those aristos whom he rescued became suddenly invisible as they reached the barricades and escaped out of the gates by sheer supernatural agency.

No one had seen these mysterious Englishmen; as for their leader, he was never spoken of, save with a superstitious shudder. Citizen Fouquier-Tinville would in the course of the day receive a scrap of paper from some mysterious source; sometimes he would find it in the pocket of his coat, at others it would be handed to him by someone in the crowd, whilst he was on his way to the sitting of the Committee of Public Safety. The paper always contained a brief notice that the band of meddling Englishmen were at work, and it was always signed with a device drawn in red—a little star-shaped flower, which we in England call the Scarlet Pimpernel. Within a few hours of the receipt of this impudent notice, the citizens of the Committee of Public Safety would hear that so many royalists and aristocrats had succeeded in reaching the coast and were on their way to England and safety.

The guards at the gates had been doubled, the sergeants in command had been threatened with death, whilst liberal rewards were offered for the capture of these daring and impudent Englishmen. There was a sum of five thousand francs promised to the man who laid hands on the mysterious and elusive Scarlet Pimpernel.

Everyone felt that Bibot would be that man, and Bibot allowed that belief to take firm root in everybody's mind; and so, day after day, people came to watch him at the West Gate, so as to be present when he laid hands on any fugitive aristocrat who perhaps might be accompanied by that mysterious Englishman.

"Bah!" he said to his trusted corporal, "Citizen Gros-pierre was a fool! Had it been me now, at that North Gate last week . . ."

Citizen Bibot spat on the ground to express his contempt for his comrade's stupidity.

"How did it happen, citizen?" asked the corporal.

"Gros-pierre was at the gate, keeping good watch," began Bibot, pompously, as the crowd closed in round him, listening eagerly to his narrative. "We've all heard of this meddling Englishman, this accursed Scarlet Pimpernel. He won't get through my gate, morbleu! unless he be the devil himself. But Gros-pierre was a fool. The market carts were going through the gates; there was one laden with casks, and driven by an old man, with a boy beside him. Gros-pierre was a bit drunk, but he thought himself very clever; he looked into the casks—most of them, at least—and saw they were empty, and let the cart go through."

A murmur of wrath and contempt went round the group of ill-clad wretches, who crowded round Citizen Bibot.

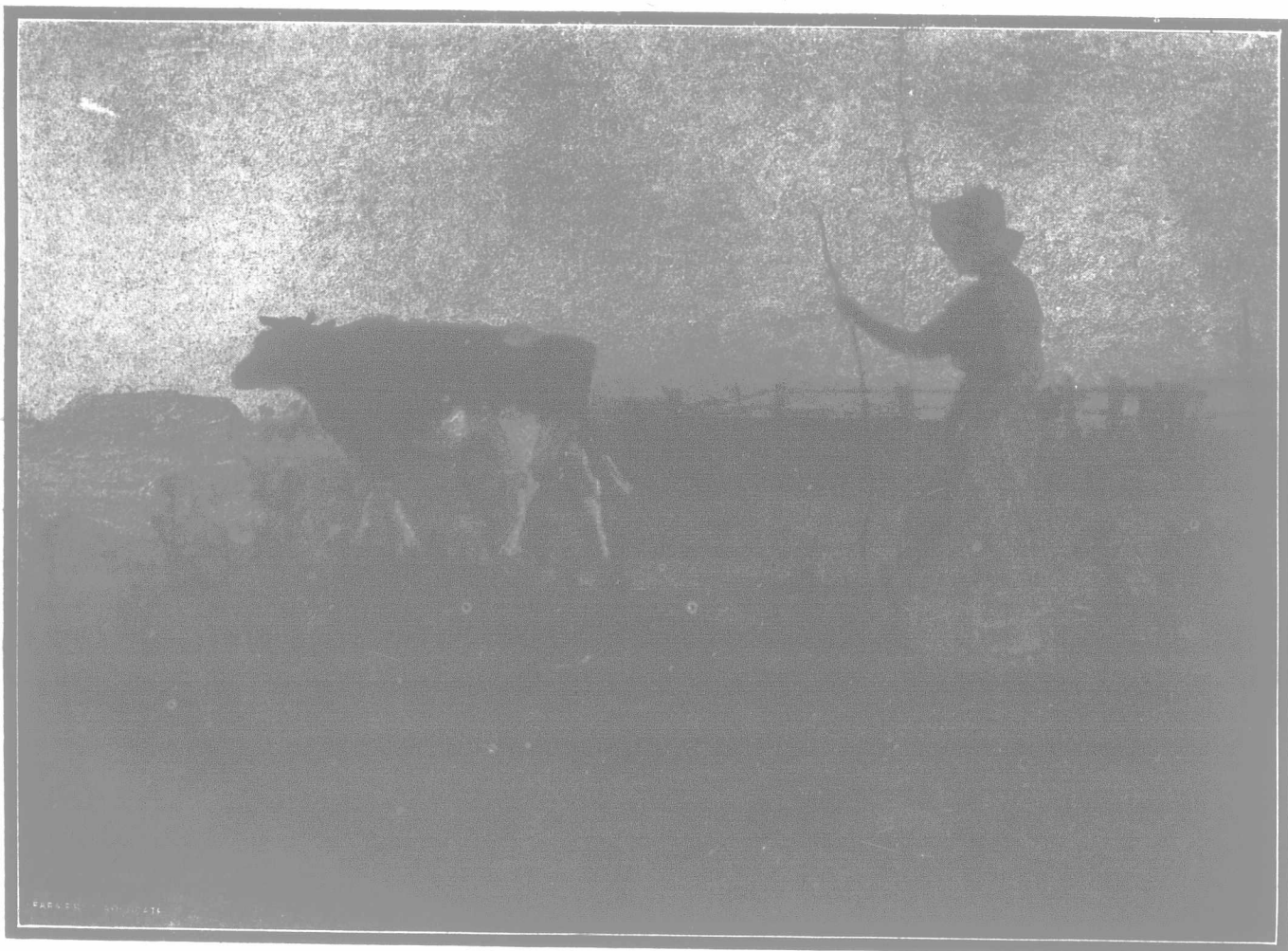
"Half an hour later," continued the sergeant, "up comes a captain of the guard with a squad of some dozen soldiers with him. 'Has a cart gone through?' he asks of Gros-pierre, breathlessly. 'Yes,' says Gros-pierre, 'not half an hour ago.' 'And you have let them escape,' shouts the captain furiously. 'You'll go to the guillotine for this, citizen sergeant! that cart held concealed the ci-devant Duc de Chalis and all his family!' 'What!' thunders Gros-pierre, aghast. 'Aye!' and the driver was none other than that cursed Englishman, the Scarlet Pimpernel."

A howl of execration greeted this tale. Citizen Gros-pierre had paid for his blunder on the guillotine, but what a fool! oh! what a fool!

Bibot was laughing so much at his own tale that it was some time before he could continue.

"After them, my men," shouts the captain," he said, after a while, "re-

(Continued on page 2169.)



"Girl and Cow."

From a painting by Mrs. J. M. W. Turner, exhibited at the Royal Canadian Academy Exhibition, Toronto. This painting is a reproduction of the original, and is not a copy of the original.



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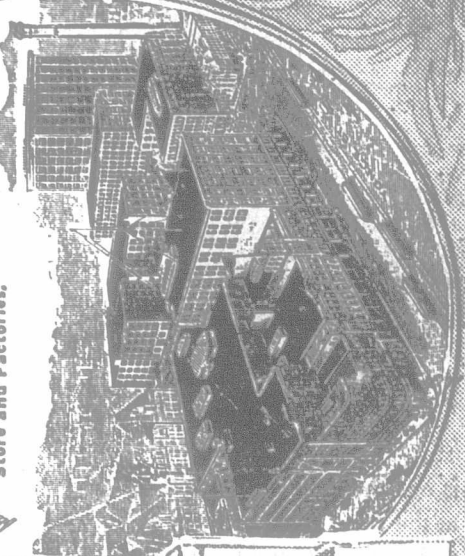
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## Hope's Quiet Hour.

### Where is Your Treasure?

Lay not up for yourselves treasures upon earth . . . but lay up for yourselves treasures in heaven . . . for where your treasure is, there will your heart be also.—St. Matt. vi.: 19-21.

These solemn words have searched the hearts of men for nearly two thousand years, and yet they are as fresh and full of living fire as when they were first spoken on that mountain in Palestine. Each of us must stand alone before God—He does not examine us in crowds—and answer honestly the question: "Where is your treasure?" For many years we have been laying up treasure on earth or treasure in heaven; wherever our eager interests are, there is our treasure. If we care most about earthly success—riches, fame, admiration, respect, or pleasure—then we have been busily laying up treasure on earth. If we care most about holiness, about pleasing God and helping those who are in need—then we have been laying up treasure in heaven.

It is an easy thing to deceive ourselves in this tremendously important matter. The question is not so much what we are doing, but why we are doing it—though, of course, our acts are very important, too. Our Lord has warned us that righteousness done "before men, to be seen of them," is passed over by God as unworthy of His attention. Those who give alms, pray, or fast, with the secret desire of winning the approval of men, receive the reward they are looking for, the reward they want. But they are throwing away the treasure in heaven for the sake of earthly treasure, which does not really satisfy a soul hungry for real righteousness, and which perishes in the using. We abhor hypocrisy, looking down with lofty contempt on anyone who makes a pretence of being good in order to serve his own ends—let us make sure that we don't live in glass houses ourselves before we throw stones at hypocrites.

In Henry Van Dyke's new book, "The Mansion," is described a man who had spent his life in busily laying up treasure on earth; while all the time he imagined he was laying up treasure in heaven. His life was crowded with deeds that seemed to himself to be good, and he admired himself so intensely that he naturally thought God would admire him, too. He indulged in no vices—nothing that could open his eyes to his own simpleness was allowed any place in his life. He was a rich man, and gave liberally to many charities, but each gift was really a gift to himself—an investment for his own benefit. He was always looking out for the return to himself of any bread which he cast upon the waters. Nothing bestowed in "charity" was considered to be wasted if it redounded to his own credit, but he was doubtful about money given to Foreign Missions, because, he said, "you never hear from it in any definite way." He did not dream of putting any money into God's hand, for Him to use for the spread of Christianity—he had no confidence that funds committed to God's care were in safe hands. His boast was: "I can honestly say that there is not one of my charities that has not brought me in a good return, either in the increase of influence, the building up of credit, or the association with substantial people."

One evening he was sitting beside his library table, on which was a pile of newspaper clippings in which his name was mentioned in connection with various charitable associations. Falling asleep, he dreamed that he was in the midst of a white-robed company of men, who were led by a mysterious Guide, each to his own beautiful mansion in the New Jerusalem. When the dreamer begged to be shown the mansion prepared for him, he was led into a bare and lonely field. There stood a tiny hut, built of scraps of material, put carefully together as if to make the most of the poor fragments. "There was something pitiful and shamefaced about the hut. It shrank and drooped and faded in its barren field, and seemed to cling only by sufrage to the edge of the splendid city."

When he pleaded that there must be a

mistake, that the long and faithful service of one so well-known and devoted could not be repaid like this, the only answer was:

"That is all the material you sent us."

The man insisted that all his life had been spent in acts which would supply material for a heavenly mansion, he had built a schoolhouse, the wing of a hospital, several churches, etc. But the Guide told him that these were all marked and used as foundation for his name and mansion in the world. "Did you not plan them for that?" he asked. "Were not all these carefully recorded on earth where they would add to your credit? They were not foolishly done. Verily, you have had your reward for them. Would you be paid twice? . . . We have saved and used everything that you sent us."

When the wretched man asked how he could have done better, and what things were of value there, he was told:

"Only that which is truly given. Only that which is done for the love of doing it. Only those plans in which the welfare of others is the master thought. Only those labors in which the sacrifice is greater than the reward. Only those gifts in which the giver forgets himself."

Now, let him that is without sin among us be the first to cast a stone at that respected self-contented man, who was trying to serve two masters. Have we never given as much as we could afford—when many people would know the amount of our subscription—and kept back our gifts entirely, or in part—when only God would know? Have we never worked industriously, because we were ashamed to be considered idle? Have we never joined with apparent earnestness in public prayer or praise, because we like to be thought "good," without making much effort to realize the Presence of our listening God?

If there is any love for God or man, as the motive-force inspiring our prayers, our words and actions, how gladly the Master-BUILDER will use the imperishable material laid trustfully in His hands. After many days we shall most certainly find the bread cast lovingly on the waters. Not one grain of pure gold can escape the eager watchfulness of Him who loves us.

If we have been working energetically in the past to lay up treasure on earth, let us raise our hearts higher at once. Let us—low on our knees—ask God to accept our work and our gifts, and then let us fight our hardest to keep out conceit, self-righteousness, and the love of human applause.

"Can we not do our part and not be heard?"

Why should we care that men should see us

With our tools, and praise the skill with which we use them?

And oftentimes we chafe and think it hard

That we should lay our 'great' and 'costly' stones

For other men to build on and get praised,

While our names are forgotten or passed o'er."

The past is in our Father's tender keeping. He will sift out all the rubbish and treasure all that has any preciousness in it. Let us begin the New Year with the honest determination to be better than we seem, instead of with the desire to seem better than we are. Let us set our hearts more and more on God and the beauty of holiness, and then we shall find time for prayer, meditation, Bible-reading, and God's special work. The things we most desire we can usually find time for—or make it. The least important things—in our opinion—are bound to get crowded out. If God's business is constantly crowded out by earthly affairs, in our everyday life, then it is quite time to examine the secret desires of our hearts and find out whether the treasure we are daily laying away is in heaven or on earth.

We have failed over and over again, but God loves us—He wants to blot out all our failures, and treasure every cup of cold water which we have given for love's sake and have forgotten. Drawing strength from Him, we can rise after every fall and begin again. Every day is the beginning of a New Year. Every day we can lay the past in our Father's hand and start over again.



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TORONTO

If we could only learn to believe it, we are really unharmed by men's blame, and gain very little by their praise. Let us all try to care so much for God's approval that the love of the world will be crowded more and more out of our hearts. Let us act on the poet's advice:

"By thine own soul's law learn to live; And if men thwart thee, take no heed, And if men hate thee, have no care— Sing thou thy song, and do thy deed: Hope thou thy hope, and pray thy prayer, And claim no crown they will not give."

DORA FARNCOMB.

"The world is full of Judgment Days, and into every assembly that a man enters, in every action he attempts, he is gauged and stamped."—Emerson.

### Work of Our Literary Society.

(Continued from page 2161.)

we used to believe didn't die till sundown. And how brave those daisies are—one must admire fine qualities even in an enemy—to start again after being cut and put forth a few blossoms under these gray skies. But the cows turn into the yard, and with a lingering look to the west, where the clouds show a golden edge, I close the gate, regretful that there won't be many more trips to pasture this year.

Welland Co., Ont.

You write easily and well, Rue,—sometimes even picturesquely. Your moralizing, too, is not carried to the verge of the tiresome, a precipice over which the moralizing species is usually in danger

of falling. We have enjoyed your little sketch very much.

### A Walk Through a Weedy Field in Late Fall.

(By R. H. C., York Co., Ont.)

'Tis Saturday evening, and, with the week's work satisfactorily accomplished, I am enjoying a brief period of rest; real rest that means a relaxation both mentally and physically. At last, tired of thinking of nothing in particular, my mind turns back to this afternoon's half-holiday, and I again go over my experiences of the day that is past, and which can never return.

This afternoon I decided to take a stroll as it was an almost perfect day, one of those rare autumn days that you read about. The sun shining brightly, or at least doing its best, for the air is filled with a sort of haze that pro-

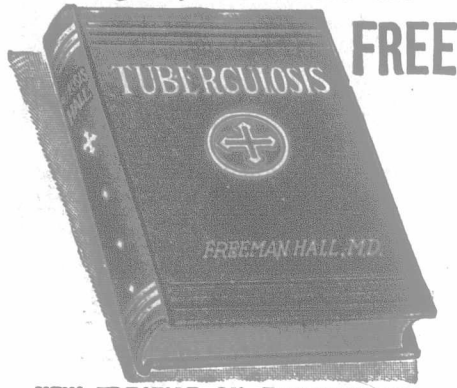
claims it a day in Indian summer; very little breeze blowing, and the freshly-plowed land sending forth a sort of steam after the recent frost,—all helps to make this Saturday afternoon one that a poet would rave over and call queer names, or names that seem queer and foreign to an ordinary mortal.

Armed with nothing more formidable than a camera, I set out for the distant woods with the sluggish stream flowing through it on its way to the lake, and then on to the great and mysterious ocean, with notebook and pencil in one pocket, a small portfolio with sheets of blotting paper between its covers in another capacious pocket, and a formidable-looking bottle labelled POISON in another. My inseparable companion, my camera, I have said, for perchance I might find an inquisitive squirrel or blue jay that will be quiet until I can



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get a snap at him. This is the way I do my hunting, and let me tell you that it requires a vast amount of skill and endless patience to hunt in this manner.

But to return to my tramp, starting out from my home with yonder haze-enveloped wood as my destination, I crossed plowed fields, skirted a field of fall wheat for fear the good farmer would not like to have me walk across it, and now only one field separated me from my favorite hunting-ground—the wood—with its stream running through the west side of it. But what a field I still had to cross! Evidently the farmer was one of the sort who are generally known by the cognomen of "Peter Tumbledown." I stopped, and, selecting a panel in the tumble-down rail fence that looked as if it would bear my weight, sat down and took a more critical survey of this field. Here the antics of a woodchuck attracted my attention, and I maneuvered around to get him in range of my camera and finally securing a "snap," I returned to my seat on the fence and proceeded to make a few notes about the occurrence that, with a picture of the "ground-hog," would eventually find a place in my "Book of Travels." This accomplished, I was once more at liberty to survey this field that had so impressed me. Second thoughts may be best, but a second look at this neglected field did not tend to improve it; nay, it only brought out the details in all their grandeur. This may seem a queer word to use, but when I consider that this field was supposed to have produced a crop of grain this year, the sight that met my eyes was surely grand. Great majestic burdocks surrounded every boulder that showed through the ground. On a little hillock a group of mulleins stood like so many sentinels guarding the huge stone that had possession of this vantage-ground. With a gentle breeze moving them lazily to and fro, their tall stocks seemed to bid defiance to anyone who would seek to dispossess them of their claim upon the soil and of their guardianship of the great boulder that topped the knoll. Farther on, in a kind of swampy corner of the field, the nodding heads of bulrushes were just discernable.

To get a nearer view of these intruders and evident possessors of the land, I left my post of vantage and started across the field in the direction of the wood, picking my way between the stones that covered the field, walking around stumps and large stones. But what a variety of weeds I saw! I soon found my shoes covered with dust, and had to stop to rest on a large stone to remove some smaller pebbles that had found a lodging-place in my shoe. Starting on again, I started to carefully examine the ground, and soon found many varieties of weeds. I didn't think that so many varieties could ever be found growing together in one field. I took out my notebook and jotted down the names of them as I went along. Thistles, and then some more thistles, they seemed to be everywhere. The prickly Canada thistle, the annual sow thistle, and that great foe of the farmer, the perennial sow thistle, all were ripe, and their seeds attached to downy, white balloons, went floating in all directions as I walked along. Ragweed, that troublesome weed was also in evidence, and after watching carefully I soon distinguished specimens of both varieties—the lesser, or common ragweed, with an odd specimen of the great ragweed. Here I came to a patch where the good farmer, if the term "good" may be applied to him, had evidently sown too much grain in one place,—but wait! I look on the ground, and the reason for this patch of fine stubble is soon discovered. The fine straw does not mean too much grain sown, but shows the presence of another intruder, the wild oat. A few dozen oats are gathered up and stored away in one of my many pockets, to find a lodging-place when I return home, in a little glass bottle that is destined to occupy a place in my weed-seed collection. What is this weed that stands up so straight, surmounted by a seed pod? Sticky cockle, or night-flowering catchfly, and plenty of it, numerous pods to a plant, and each pod filled to overflowing with seed, which is scattered over the ground as I walk along. Here I find the vine and empty pod of the tare, and the red leaves and vine of the wild buck-wheat. Oh, what a time the farmer will

have in getting rid of all the plants that this seed will produce!

Over a little farther I came to a clump of milkweeds clustered around the stump of what was once a noble pine. The pods were ripe, and flew open when touched, and away sailed the brown seeds with their white sails. I passed on, treading on plants of chickweed, the remains of plants that had been noble specimens of lamb's quarters. Here I also found specimens of lady's thumb, and came presently to the mulleins that I had noticed before starting across the field. Here were also noticed some noble specimens of the burdock family, almost hiding a huge boulder around which they were growing. Near the far fence I came to the bulrushes, whose yellow leaves and brown seedstocks could be seen from the fence. Passing around this swampy spot and walking along the fence for a short distance I came in contact with various burs,—blue bur, hound's tongue, and pitchforks, all attaching themselves to my clothes. So I got up on the fence near a clump of goldenrod, once showing golden in the sunshine, but now ripe and feathery, and proceeded to rid myself of my unwelcome visitors.

As I passed on into the woods I mused on the shiftlessness of this farmer in allowing so many weeds to go to seed every year and to get such a firm hold on the land but the sight of a squirrel banished all thoughts of weeds from my mind, and I proceeded to stalk the little red chap in hopes of getting him in range of my camera.

R. H. C.

York Co., Ont.

The dragon that you will have to fight in essay-writing, R. H. C., is a tendency to repeat the same word, to the extent of making it noticeably disagreeable—as regards the harmony of the composition. To tell the truth, before permitting your article to go into print, we were obliged to eliminate many of these words. Do not forget, please, that, unless purposefully, for the sake of emphasis, a word must not be repeated more frequently than necessary.

On the other hand, we have been able to give you great credit on the score of observation. You took your walk, you used your eyes, you managed to get a good deal of pleasure out of the experience, and you wrote a very creditable essay about it all. We have an idea that you are one of those who find much to interest and please in the rural life. Have you read John Burroughs' essays, and Thoreau's "Walden," "In the Maine Woods," etc.? They should appeal to you.

**A Walk Through a Weedy Field in Late Fall.**

(By S. Hunter, Halton Co., Ont.)

All the small patches of snow that so lately lingered along the fences and in little hollows among the fallen leaves, marking the footsteps of Squaw winter on his annual passage, had disappeared. And this morning the sun's rays, vainly striving to pierce the orange and golden haze that intervened between him and the weedy field, plainly indicated that Indian summer was close on the trail.

Pause just a moment before entering, and behold! the field—glorified, veiled in gossamer, bespangled with glistening, glittering diamonds!

From this field a crop of late oats has been harvested, and the growth is short and uniform in height. Upheld by still blooming mouse-ear and field chickweeds, cudweed, sorrel, mustards, and shepherd's purse, are innumerable webs of small spiders—inhabitants of the upper air—which, becoming heavy during the night by moisture collecting upon their slender threads, have fallen, forming over the level surface a complete covering.

Through the delicate gauze can be seen an occasional soft, velvet leaf of mullein, yellow spots here and there betray the presence of a late dandelion, or of a dauntless sow thistle, stunted, dwarfed, yet persistently striving to perpetuate its species.

Here a patch of ground-mallow shows green and lusty, and we know that hidden beneath the foliage the pretty flowers are numerous. There, Mayweed, yarrow, cockle, and different members of the crowfoot family, are easily discern-

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able, each surprisingly fresh and radiant. And, oh, you motherwort! angel among weeds! Like a benediction, you come to us early, early in spring, and you never, willingly, say good-bye; your palmately-lobed leaves, always and ever so delightfully green and lovely! Motherwort! just whisper—have you a soul?

Entering—we draw in the scent of catnip, and feel the clutch of burdock burs on our—advisedly—cotton garments.

Just in this curve formed by the turning of the fence is an entanglement of stout stalks—all their glory of life and color departed, but sturdy still in death—of curled dock, evening primrose, goldenrod, fireweed, fleabane, and yellow avens.

Brown and sere, the teal—unique among his fellows, with an individuality all his own—stands side by side with the still green and flourishing Scotch thistle—a worthy pair, veterans in the general struggle for existence.

Up against and into this barricade has been blown a great drift of tumbleweed, interspersed with the soft, downy fluff of milkweed.—Weed!—Surely a misnomer, so marvelously beautiful are plant, flowers, and seeds; worthy, without doubt, of higher classification.

So on—past Canadian thistles, chicory, ragweed, groundsel, plantain, ox-eye daisy, and elecampane; adding to our collection of burs and shedding as we go, seeds of cocklebur, stickseed, hound's tongue, and sweet cicely.

In this low, damp corner, weather-beaten, bedraggled, yet much in evidence, are the vervains, blue and white; asters, boneset, wild carrot and bulrushes.

But, so very many are missing—where are they? Gone for a while—resting, waiting, listening—eager to come forth at the calling of their names.

Now back, up the water-course, where horsetail and healall flourish, and spurge and peppermint run riot.

Such delicacy of tint, such fragrance, such beauty and perfection of form, such miracles of light and shade, have we encountered, that our heads swim with the sweetness of them, and we are impressed anew with the thought, that—

"On every herb on which you tread,  
Are written words, which—rightly read,  
Will lead you from earth's fragrant sod,  
To hope—and holiness—and God."

S. HUNTER.

Do you think, writer of the above, that a botanist can be a botanist only? Or does his knowledge of the plants compel him to be something of a poet, too—a man far different from Wordsworth's "Peter Bell," to whom

"A primrose on the river's brim,  
A yellow primrose was, to him,  
And it was nothing more."

You, too, enjoyed your trip to the weedy field. Have you read Emerson's "Woodnotes," and "Each and All"? Perhaps, after all, the fascination which even such an overgrown spot possesses for some of us is due to "the river and sky" which "we cannot bring home." The weeds themselves we must recognize as bold intruders which every good farmer must fight, not only for the sake of his own, but also for his neighbor's welfare.

By the way, we have asked a noted naturalist of this city about the spider-webs which are so often seen glistening with dew over a stubble-field on fall mornings. He says that the webs are really spun from stalk to stalk by the spiders, and that they do not fall from the air.

The rest of the essays must be held over until a later date.

### A Poet on "The Weedy Field."

(Mr. Wm. Wilfred Campbell.)

The ragged daisy starring all the fields  
The buttercup abrim with pallid gold;  
The thistle and burr-flowers hedged with prickly shields.

All common weeds the dragged pastures hold,  
With shrivelled pods and leaves, are kin to me,

Like heirs of earth and her maturity.

They speak a silent speech that is their own.

These wise and gentle teachers of the grass;  
And when their brief and common days are flown,

A certain beauty from the year doth pass,—

A beauty of whose light no eye can tell,  
Save that it went; and my heart knew it well.

I may not know each plant as some men know them,

As children gather beasts and birds to tame;

But I went 'mid them as the winds that blow them,

From childhood's hour, and loved without a name.

There is more beauty in a field of weeds  
Than in all blooms the hothouse garden breeds.

For they are nature's children; in their faces

I see that sweet obedience to the sky  
That marks these dwellers of the wilding places,

Who with the season's being live and die;

Knowing no love but of the wind and sun,

Who still are nature's when their life is done.

They are a part of all the haze-filled hours,

The happy, happy world, all drenched with light,

The far-off, chiming click-clack of the mowers,

And yon blue hills whose mists elude my sight;

And they to me will ever bring in dreams,

Far mist-clad heights and brimming rain-fed streams.

### The Ingle Nook.

#### "Little Scotty."

Dear Ingle Nook Friends,—In our report of the Women's Institute Convention we referred in passing to the story of "Little Scotty," as told by Mr. Atkinson, of the Broadview Institute. Before the Christmas Season entirely passes I must tell you something more of it, for it is the best Christmas story I have heard in many a long day.

There is no need, to repeat, even to those of you who could not attend the Convention, all the details of the Broadview Institute and the work that Mr. Atkinson is there doing for the East Toronto boys; all of this—or at least the main outline of it—has been dwelt upon in recent issues of "The Farmer's Advocate." Suffice it to say, that as soon as the gardens out there at the Institute were in good working order a new difficulty presented itself. The boys found that they could make money by selling their flowers and vegetables; henceforth, money, money, money, was talked about incessantly, and a certain degree of selfishness and self-seeking began to manifest itself among the little lads.

Now, an overplus of this spirit was exactly what Mr. Atkinson did not want. While anxious to see the boys develop into good business men, he was still more anxious to see them develop into good men,—generous, unselfish, and honorable, and this new channel into which things were drifting caused him much uneasiness. He thought, and wondered, and puzzled over the matter, and talked to his friends about it, and finally someone suggested that a boy be adopted as a counter-acting influence.

Mr. Atkinson grasped at the idea, and at once called a mass-meeting of the boys. The idea was received with enthusiasm, and at once a discussion raged at fever heat among the two hundred or more lads as to what sort of boy should be adopted and where he should be found.

"I'll tell you," said one of the eager ones, "we must find a fellow who hasn't had half a chance."

Accordingly, a committee was formed to find this "fellow who hadn't had half a chance." Homes and Shelters were visited, and finally the delegation re-

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**Women's**—Sizes 8½ to 11. Colors: black, light tan, dark tan, pearl, and black with white feet. Medium weight, 6 pairs \$2.00. Same colors (except black with white feet) in light weight LUSTRE HOSE, 6 pairs \$3.00. Light weights in black, tan and gun metal, 6 pairs \$2.00. Same in extra light weight LUSTRE HOSE, 6 pairs \$3.00. Same in pure thread-silk, \$3.00 for 3 pairs (guaranteed three months). Outsize in black, medium weight, 6 pairs \$2.00, and in extra light weight LUSTRE HOSE, 6 pairs \$3.00.

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FOR CATALOGUE WRITE

M. L. HALEY, Springfield P.O., Ontario

(See Gossip on page 2183.)

WHEN WRITING ADVERTISERS MENTION THE FARMER'S ADVOCATE.

turned to Mr. Atkinson with the news that the right one had been found—"a little fellow who hadn't had a quarter of a chance"—an orphan and a cripple.

One can imagine the great day when the little cripple arrived,—the two hundred eager lads all assembled from their various homes for the occasion, the Institute building all, perhaps, in festive array, the awkward yet not less sincere greetings of the boys to this little new arrival, who was to be, for a while, their very own, clothed, boarded, and sent to school by them.

Henceforth, at any time, Little Scotty might be seen stumping about the Institute building and grounds on his little crutches. On foot-ball nights, the big boys would carry him on their shoulders to see the games. Oh, but Scotty had come to a royal way of living!—And the boys had come to a royal way of serving.

As Christmas drew near last year, Scotty was very much interested. He had never heard of Santa Claus before; this year he was hearing a great deal about him. He was a little suspicious, too, but at last, on the night before Christmas, concluded, on risk, to hang up his two little stockings in the hall up-stairs.

After he had gone to bed there was a high revel downstairs. One room with a big fireplace in it had been set aside for Scotty's presents. Boys arrived, and yet more boys, all carrying boxes and parcels containing clothes, toys, and good things to eat. Big cloth stockings a yard or more long had been made, and these were hung across the fireplace and filled to bulging. Presents were, likewise, displayed on the table, and at every other point of vantage.—Then the young monkeys slipped up-stairs and filled the two little stockings with potatoes and shavings.

Next morning, long before daylight, Little Scotty got up and stumped out on an investigation trip. He turned out everything down to the toe of his two lonely little "socks," then started back to his little bed, muttering that he "had never believed in that Santa Claus yarn anyway."

Down in the hall below, early as it was, a number of the boys had already arrived, and were keeping quiet as mice. We may be sure that Mr. Atkinson was not far away. When Scotty started off, the chorus arose—"Come down here, Scotty! Santa Claus left the things down here for you!"

Down came Scotty, almost breaking his little legs in his hurry to get down the stairs.

The boys took him into the room, and he stood still, dazed.

"See! They're all for you, Scotty!" said the delighted boys.

"All for-me?" repeated the little lad.

"Yes, all for you, Scotty."

"All for-me?" again, wonderingly.

And then—the little man just hobbled over to the table, put his head down on it, and—sobbed aloud.

"The rest of us were crying, too," said Mr. Atkinson, "but we weren't feeling very badly. We just couldn't help it."

Now, did you ever hear a sweeter Christmas story than this true one of East Toronto?

### Re Quilt Patterns.

The quilt patterns so kindly sent us by various friends will appear next time. I am sorry they had to be held out so many weeks, but there will still be a long winter ahead for quilt-making.

### Furnishing a Parlor.

Dear Dame Durden,—I have enjoyed reading the letters in the Ingle Nook for a long time, and now I come to you for some advice about how to furnish a parlor.

The room is large, and has windows in the south and east. The walls are tinted a deep cream, with a stencilled border in olive green. I have deep cream net curtains for the windows. Would white muslin or net be best for the sash curtains? What colors would you suggest for the rug and upholstered furniture? The floor is white pine. What finish should I use on it?

BESSIE.

Haldimand Co., Ont.

Net would be better than muslin for the sash curtains. Personally, I should

like an olive-green rug, to match the stencilling, or a rug in Oriental pattern, with touches of olive-green. A brown and green, or blue and green rug, would also do very well. There are very handsome reps in green or tobacco-brown that are used for furniture covering. Have the shade tone with the predominant shade in your rug.

Many people simply wax and polish a floor of Georgia pine; it grows darker with time. If you want a stain, you will not go far astray if you choose one of the wood-browns, rather dar( in tone.

### Plum Pudding.

Dear Ingle Nook Folk,—An Ingle Nook reader of Essex Co., Ont., asked for a recipe for plum pudding. I am sending a recipe for carrot pudding. It is not so expensive.

Carrot Pudding.— $\frac{1}{2}$  cups flour, 1 cup sugar, 1 cup suet, 1 cup raisins, 1 cup currants, 1 cup grated potato, 1 cup carrot, 1 teaspoon soda. Steam or boil three hours.

I take a great deal of pleasure reading "The Farmer's Advocate," and I also get many helpful hints.

AN ONTARIO FARMER'S DAUGHTER.  
Brant Co., Ont.

Many thanks for the recipe. Did you see the directions for making a fascinator given by "A Farmer's Daughter" in a recent Ingle Nook? As they appeared so recently, we do not repeat.

### Sausage.

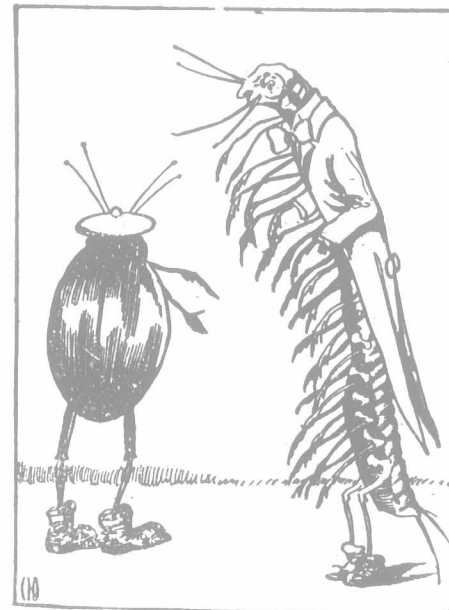
Dear Dame Durden,—Inclosed, find an article clipped from a paper.

Can you tell me anything about the effect of Saxolite on the skin? Is it harmless or harmful? Also, Dame Durden, I want some information about putting down sausage-meat for summer use. I've read of putting it in crocks and pouring lard over it. How late in the season will it keep so? Thanking you for many helpful suggestions.

"HELENOS."

Brant Co., Ont.  
Evidently the clipping is an advertisement. I know nothing of Saxolite, so cannot inform you on this question.

The following recipe for making sausages is taken from my notebook: For every 55 lbs. of lean and fat pork chopped fine mix together 1 lb. salt, 6 ounces best black pepper, 1 teaspoon cayenne pepper, and a handful of powdered sage. Mix well through the meat. Sausage for winter use may be packed in stone crocks with two inches of boiling lard run over it; or it may be packed in clean muslin bags, dipped in melted lard, and hung in a cool place. For summer use it may be canned. Make into small cakes and cook about two-thirds enough for the table, or until the water is out. Pack while hot into cans, fill them full of boiling lard, and seal at once. When cooked next summer, it will be more delicate if all the fat is poured off after it is fried, and a little cream poured over it and boiled a moment.



Johnny Bug—"Why, what are you crying about, Willie?"

Willie Centipede—"Boohoo! I hung up six stockings, and Santa Claus only put presents in thirty-nine of them. Boohoo!"



The Scarlet Pimpernel.

(Continued from page 2162.)

member the reward; after them, they cannot have gone far! And with that he rushes through the gate, followed by his dozen soldiers.

"But it was too late!" shouted the crowd, excitedly.

"They never got them!"

"Curse that GrosPierre for his folly!"

"He deserved his fate!"

"Fancy not examining those casks properly!"

But these sallies seemed to amuse Citizen Bibot exceedingly; he laughed until his sides ached, and the tears streamed down his cheeks.

"Nay, nay!" he said at last, "those aristos weren't in the cart; the driver was not the Scarlet Pimpernel!"

"What?"

"No! The captain of the guard was that damned Englishman in disguise, and everyone of his soldiers aristos!"

The crowd this time said nothing: the story certainly savoured of the supernatural, and though the Republic had abolished God, it had not quite succeeded in killing the fear of the supernatural in the hearts of the people. Truly that Englishman must be the devil himself.

The sun was sinking low down in the west. Bibot prepared himself to close the gates.

"En avant the carts," he said.

Some dozen covered carts were drawn up in a row, ready to leave town, in order to fetch the produce from the country close by, for market the next morning. They were mostly well known to Bibot, as they went through his gate twice every day on their way to and from the town. He spoke to one or two of their drivers—mostly women—and was at great pains to examine the inside of the carts.

"You never know," he would say, "and I'm not going to be caught like that fool GrosPierre."

The women who drove the carts usually spent their day on the Place de la Grève, beneath the platform of the guillotine, knitting and gossiping, whilst they watched the rows of tumbrils arriving with the victims the Reign of Terror claimed every day. It was great fun to see the aristos arriving for the reception of Madame la Guillotine, and the places close by the platform were very much sought after. Bibot, during the day, had been on duty on the Place. He recognized most of the old hags, "tricotteuses," as they were called, who sat there and knitted, whilst head after head fell beneath the knife, and they themselves got quite bespattered with the blood of those cursed aristos.

"Hé! la mère!" said Bibot to one of these horrible hags, "what have you got there?"

He had seen her earlier in the day, with her knitting and the whip of her cart close beside her. Now she had fastened a row of curly locks to the whip handle, all colors, from gold to silver, fair to dark, and she stroked them with her huge, bony fingers as she laughed at Bibot.

"I made friends with Madame Guillotine's lover," she said with a coarse laugh, "he cut these off for me from the heads as they rolled down. He has promised me some more to-morrow, but I don't know if I shall be at my usual place."

"Ah! how is that, la mère?" asked Bibot, who, hardened soldier though he was, could not help shuddering at the awful loathsomeness of this semblance of a woman, with her ghastly trophy on the handle of her whip.

"My grandson has got the small-pox," she said with a jerk of her thumb towards the inside of her cart, "some say it's the plague! If it is, I sha'n't be allowed to come into Paris to-morrow."

At the first mention of the word small-pox, Bibot had stepped hastily backwards, and when the old hag spoke of the plague, he retreated from her as fast as he could.

"Curse you!" he muttered, whilst the whole crowd hastily avoided the cart, leaving it standing all alone in the midst of the place.

The old hag laughed.

"Curse you, citizen, for being a coward," she said. "Bah! what a man to be afraid of sickness."

"Morbheu! the plague!"

Everyone was awe-struck and silent,

filled with horror for the loathsome ma-lady, the one thing which still had the power to arouse terror and disgust in these savage, brutalised creatures.

"Get out with you and with your plague-stricken brood!" shouted Bibot, hoarsely.

And with another rough laugh and coarse jest, the old hag whipped up her lean nag and drove her cart out of the gate.

This incident had spoilt the afternoon. The people were terrified of these two horrible curses, the two maladies which nothing could cure, and which were the precursors of an awful and lonely death. They hung about the barricades, silent and sullen for a while, eyeing one another suspiciously, avoiding each other as if by instinct, lest the plague lurked already in their midst. Presently, as in the case of GrosPierre, a captain of the guard appeared suddenly. But he was known to Bibot, and there was no fear of his turning out to be a sly Englishman in disguise.

"A cart . . ." he shouted breath-lessly, even before he had reached the gates.

"What cart?" asked Bibot, roughly.

"Driven by an old hag. . . A covered cart. . ."

"There were a dozen. . ."

"An old hag who said her son had the plague?"

"Yes. . ."

"You have not let them go?"

"Morbheu!" said Bibot, whose purple cheeks had suddenly become white with fear.

"The cart contained the ci-devant Comtesse de Tournay and her two children, all of them traitors and condemned to death."

"And their driver?" muttered Bibot, as a superstitious shudder ran down his spine.

"Sacré tonnerre," said the captain, "but it is feared that it was that accursed Englishman himself—the Scarlet Pimpernel."

(To be continued.)

GOSSIP.

COMING EVENTS.

Eastern Ontario Dairymen's Convention, Campbellford, Jan. 3-5, 1912.

Western Ontario Dairymen's Convention, Ingersoll, Jan. 10-11, 1912.

Eastern Ontario Live-stock, Dairy, and Poultry Show, Ottawa, Jan. 16-19, 1912.

Dominion Shorthorn Breeders' Association annual meeting, Toronto, Feb. 6th, 1912.

Official records of 245 Holstein-Friesian cows were accepted for entry in the American Advanced Register, from October 19th to November 20th, 1911. This herd of 245 animals, of which one-half were heifers with first or second calves, produced in seven consecutive days, 95,246.5 lbs. of milk containing 3,245.332 lbs. of butter-fat, thus showing an average of 3.41 per cent. fat. The average production for each animal was 388.8 lbs. of milk containing 13.246 lbs. of butter-fat; equivalent to over 55.5 lbs. or 26.4 quarts of milk per day, and over 15.45 lbs. of the best commercial butter per week.

THE TILLSONBURG HOLSTEIN SALE

Attention is called to the advertisement in this issue, of the important auction sale of 135 high-class Holstein-Friesian cattle, consigned by eight prominent breeders, to take place at Tillsonburg, Ont., on January 2nd, 1912, commencing at 10 a. m., sharp. See also descriptive notes on inside cover, page 2183. In addition to those therein mentioned, we are advised by M. L. and M. H. Halev, that they have included in the sale the great five-year-old cow, Calamity Starlight Butter Girl, whose official record is 22.60 lbs. butter in seven days, as a three-year-old. She also won Sweepstakes at Guelph Winter Fair, making a world's record for a three-year-old in public test, testing 5.5 per cent., making 4 lbs. butter a day for three days. This is no doubt the most important sale of dairy cattle ever catalogued in Canada, and should attract attention of dairy farmers from far and wide.

ELM PARK ANGUS.

Agricultural Notes, written by James Cameron, in the Glasgow Herald, recently contained an interesting account of the Aberdeen-Angus herd of Jas. Bowman, Guelph, Ont. Mr. Bowman's parents came to Canada 60 years ago from Tyneside, and he himself had a natural bent for the black skins, besides having an eye to their show-ring winnings. His herd, which is kept to a breeding strength of 20 to 25 head, is composed of Advie Roses, Pride of Aberdeens, Witches, Kymas, etc., which trace back to well-

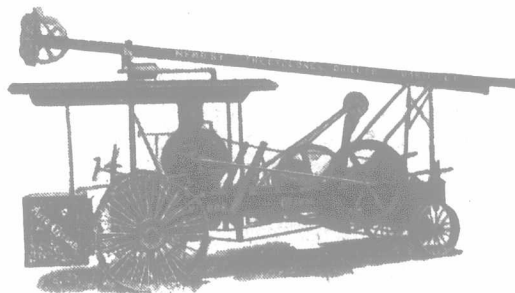
known show cows in the Old Country. Magnificent (27115), a noted show bull, now four years old, and sired by the champion, Idelamere, out of Matilda 7th of Aldbar, heads the herd. Select Suffolk sheep are also a feature of the Elm Park Farm.

Visitor (to foreman of print shop)—Why are your men in such a hurry?

Foreman—We're getting out a timetable for a railroad, and they want to finish it without making any changes.

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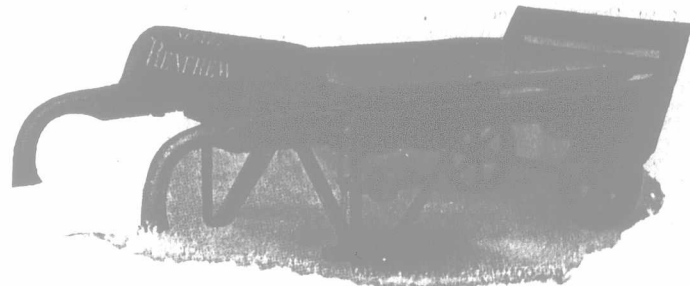
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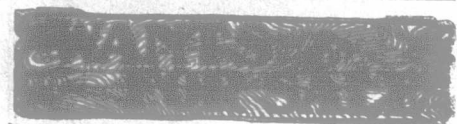




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in the paint or varnish line  
you will find under this "Cover  
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for it on every can. A particu-  
lar high quality finish for  
every variety of use around  
the farm and farmhouse is  
included among

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Advertisements will be inserted under this heading, such as Farm Properties, Help and Situations Wanted, and Pet Stock.  
**TERMS**—Three cents per word each insertion. Each initial counts for one word and figures for two words. Names and addresses are counted. Cash must always accompany the order. No advertisement inserted for less than 50 cents.

**AGENTS WANTED**—We have an unusual premium proposition; every person will be interested. No outlay necessary. Apply: B. O. I. Co., Ltd., 228 Albert St., Ottawa, Ont.

**BELTING FOR SALE**—Over 1,000,000 feet in rubber, canvas, etc.; all sizes and lengths, at 25 to 50% less than regular prices; also large quantities of iron pipe, fencing, etc. Catalogues sent on request. The Imperial Waste & Metal Co., 20 Queen St., Montreal.

**CREAM WANTED** at the Guelph Creamery. Business run on the co-operative plan. Write for particulars, or call and see us. Stratton & Taylor.

**FOR SALE**—143 acres, Lot 22, East Mitchell Road, Blanshard, Perth County, 4 1/2 miles from St. Mary's. On the farm is a two-story "quarry stone" house, 13 rooms, surrounded by nice lawn and sheltered by evergreen trees; three large barns with stone stabling underneath; good hogpen, driving-shed and henhouse. Farm is well watered by never-failing spring and windmill; water in stables; farm well fenced and drained. The soil is clay loam and in a first-class state of cultivation. Ten acres of fall wheat, and plowing all done; ten acres of good hardwood bush; good orchard and small fruit. Rural mail delivery and telephone. Mrs. William G. Kennedy, Administratrix, St. Mary's, Ontario.

**FARM FOR SALE**—84-acre farm, clay loam, belonging to the estate of the late William Farmer, 1/2 mile from the Village of Ancaster, 7 miles from Hamilton; school, churches and electric railway at Ancaster. This farm is in a high state of cultivation; hay, straw and grain, excepting wheat, being fed back to the land, with 10 acres of summer-fallow for the past 25 years; well drained and watered, hydraulic ram supplying both house and barns. 10 acres fall wheat, 10 acres plowed, 20 acres hardwood bush and 8 acres of orchard. The barns are in first-class shape, and consist of large barn, 34 ft. horse stable, cow stable, sheep pen, implement barn, root cellar, henhouse and pigpen, with accommodation for 80 to 100 pigs, cement floor. The house is a 7-roomed stone cottage, with good cellar, hard and soft water, telephone, woodshed or work-shop, all under one roof. Price, \$10,000. This is a good farm, and worth all we are asking. Apply to Thos. W. Farmer, Ancaster, Ontario.

**FARMS FOR SALE**—30 farms for sale, all sizes, Halton, Peel and Wellington Counties. Write for catalogue. J. A. Willoughby, Real Estate, Georgetown.

**SMALL DAIRY FARM**, to be worked on 5 shares. Fine buildings; silo; intensive system. Stock supplied. Address: Dairy Farm, "Farmer's Advocate," London, Ont.

**VALUABLE FARM FOR SALE**—For sale at once, 128 acre farm, clay loam soil, Ancaster Township, Wentworth County, 6 1/2 miles from Hamilton, convenient to churches, school, electric railway, post office and Ancaster Village. Rural telephone in house, 2 good wells and never-failing spring. 122 acres under cultivation, and about 5 acres of orchard. Good bank barn and other farm buildings; 9-roomed good frame dwelling house, with pleasant surroundings. 16 acres of wheat, 8 acres rye sown, and 25 acres fall plowing done this year. Farm suitable for stock-raising, fruit-growing, dairying or general farming. Apply: W. M. McClelland, Barrister, Room 708 Bk. of Hamilton Bldg., Hamilton, Ont.

**WANTED**—Rock elm, maple and walnut logs. Bradley Co., Hamilton, Ontario.

**WANTED**—Bright young man or woman as correspondent in each town. \$5 to \$50 paid for single item of information. Mercantile Assurance Association, Box 317, Halifax, N.S.

## POULTRY AND EGGS

Condensed advertisements will be inserted under this heading at two 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 30 cents.

**Bronze Turkeys**—Won at Guelph two first, second, third and two fifths in a class of 40 birds. Choice Toms, weigh 24 to 27 lbs. each, good enough for any show. Chas. Gould, Glencoe, Ontario.

**Bronze Turkeys**—Choice young birds for sale. My strains have won "championship" at Guelph Winter Fair the past nine years. W. J. Bell, Angus, Ontario.

**Choice White Wyandottes** and Rose-comb Rhode Island Reds from prize-winning strains. Satisfaction guaranteed. Alex. McTavish, Chesley, Ont.

**FOR SALE**—Pure-bred Mammoth Bronze turkeys, fine heavy birds; bred from first-prize-winning stock. Also choice Partridge Wyandotte cockerels. R. G. Rose, Glanworth, Ontario.

**FOR SALE**—Extra choice large Pekin ducks; good growing birds. John M. Beckton, Glencoe, Ontario. Bell 'phone.

**Mammoth Bronze Turkeys** from prize-winning stock. Satisfaction guaranteed or money refunded. G. E. Nixon, Arva, Ont.

**Mammoth Bronze Turkeys**—Large, vigorous birds for sale. Apply to Roy Hammond, Port Dover, Ontario.

**Pure-bred Bronze Turkeys**, heavy toms and hens. Prices reasonable. C. A. Powell, Arva, Ontario.

**Rose-comb Brown Leghorns**—Prices reasonable. Write me your wants. W. M. Sproule, Westbrooke, Ontario.

**White Holland Turkeys for Sale**—Toms, \$4. Miss Mary Caldwell, Box 10, Shanty Bay, Ontario.

**White Wyandottes**—A few choice cockerels for sale. Large, heavy-laying strain. Will make splendid breeders next spring. Wade Morrow, Brighton, Ontario.

**218 AND 220 EGGS PER HEN** in one year. 50 B. P. Rock and White Wyandotte Cockerels, bred direct from these hens. 25 S.-C. White Leghorn Cockerels; grand breeders. Write to-day for illustrated catalogue and prices. It's free. L. R. Guild, Box 16, phone 24, Rockwood, Ontario.

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**WANTED**—At the De'hi Tannery, Custom Robe and Fur Tanning. Horse and cattle hides make best Robes and Coats when properly tanned and made up right. Send them to me and have them dressed right, and you will be well satisfied.  
B. F. BELL, Delhi, Ont.

## GOSSIP.

The Evergreen Holstein herd of F. E. Pettit, Burgessville, Ont., is now headed by the richly bred bull, Francy Sir Admiral, whose dam, as a three-year-old, made 26.71 lbs. butter in seven days, milk testing 4.28 per cent. fat, sire Sir Admiral Ormsby, whose four four-year-old daughters average 26.25 lbs. butter in seven days. Aggie's Mayblossom, record 22.38, average test 4.05 per cent., has a fine bull calf ready for service. Three nearest dams average 23.50. Queen Annie Posch, 18.50 lbs. at three years, test average 3.7 per cent., has also a fine bull one year old. Three nearest dams average 21.55. Pauline Pet, record 18,000 lbs. milk in one year, and average 16,000 for several years, has a fine bull calf from a son of Francy 3rd, record 29.15 lbs. in seven days, test 4.2 per cent.

## MAPLELINE HOLSTEINS AND YORKSHIRES.

A short distance west of Strathroy lies the well-managed stock farm, Mapleline, the property of W. A. Bryant, Cairngorm P. O., Ont., breeder of Holstein cattle, Yorkshire swine, and Oxford Down sheep. Mr. Bryant is one of the leading breeders of Western Ontario, a liberal feeder, and one who exercises great care in his selection of breeding stock, with the result that he generally has on hand something nice to show intending purchasers. The stock bull in service is the splendidly-bred Homestead Colantha Sir Abbecker 2nd, a son of Bell Dewdrop, with a seven-day butter record of 25.18 lbs., and a seven-day milk record of 574.1 lbs., and for thirty days a record of 103.08 lbs. butter and 2,343.7 lbs. milk. His sire was the great Dutchland Colantha Sir Abbecker, whose dam and sire's dam have records that average of butter for seven days, 31.83 lbs., and for thirty days, 122.77 lbs., with an average per cent. of butter-fat of 4.13, while their milk records average for seven days 616.15 lbs., and for thirty days 2,723.90 lbs. None of the thirty odd females that make up the herd have ever been officially tested for seven-day records, but five heifers were last year in the R.-of-P. tests, and all qualified with an average of 10,000 lbs. This year five more of the two-year-olds are in the test, and indications are that they will do even better. What these heifers have done was done without any extra feed or forcing. For sale, are three yearling bulls, out of R.-of-P. dams, and got by Dutchland Colantha Sir Abbecker, mentioned above; also two bull calves Mr. Bryant has also for sale some choice young sows, and ram and ewe lambs. Write your wants; his prices are right.

## HOMESTEAD HOLSTEINS.

An exceptionally choice and well-selected herd of R.-of-M. Holsteins is the Homestead herd of G. & F. Griffin, near Burgessville, Ont., a few miles south of Woodstock. The Messrs. Griffin spare no pains to keep their herd up to a high standard, and there are not many breeders of this great dairy breed that can show so nice and uniform a lot of cows carrying so large and well-bowed udders. The stock bull in service is Canary Rachel Clothilde, a son of Rachel Schillaard Clothilde, whose seven-day butter record is 26.14 lbs., and milk record for seven days 577 lbs. He was sired by that noted bull, Brightest Canary, whose sire's sire's dam was that great cow, Sadie Vale Concordia, with a seven-day record of 30.64 lbs. The dam of Brightest Canary was Canary Mercedes Brightest, with a seven-day butter record of 26.295 lbs., and her dam 25.161 lbs. With such breeding, coupled with the following great cows, the result should be a most desirable one: Jewell Mercena Mercena, record at three years, 16.22; Annie May Schuiling, at three years, 17.17 lbs.; De Kol Cecelia, made, 90 days after freshening, 17.84 lbs.; Beldina Schuiling, 20.21 lbs.; Princess Mercena De Kol, at 1 year and 11 months, 12.26 lbs.; Josephine De Kol Colantha, at four years, made 19 lbs. Those mentioned show the high-class character of the herd. From such breeding, for sale, are a few females, and a limited number of young bulls, out of such cows as Jewell Mercena Mercena,

De Kol Cecelia, etc., mentioned above. Daughters of the stock bull are being bred to a son of Mercena Schuiling, whose seven day record is 22 1/2 lbs., and her dam's record 27 lbs. This is surely the kind of breeding from which great records come, and is the kind of breeding the Messrs. Griffin offer for sale.

## The Peace of the Mountains.

I wish I could get the peace of the mountains into me.  
The mountains of God are ever still, full of rest;  
"Be quiet," they say, and lift their thoughts up to heaven;  
The lark with his wings as he rises brushes their crest;  
They gather the rose of dawn, the glory of even;  
The night with her stars leans on them, breast to her breast.  
I wish I could get the peace of the mountains into me,  
And not to have all the world a trouble to me.

I am full of frets and fatigues, angers and fears;  
I wish the mountains would tell me their secret of peace.  
They have seen men born and die, all the work of their hands  
Pass like the leaves of autumn; increase and decrease  
Of natural things, and the years, like a glassful of sands,  
Run out and be done, and the nations wither and cease.  
They have looked to God through all the days and the years;  
I wish I was still like the mountains, not vexed, full of fears.

The wind roars over them, singing up from the sea;  
There is nothing that lasts, they say, but God and the soul.  
They have crows of the mists and rain for their habits gray;  
The world's a dream, wherever the death bells toll.  
There is nothing that lives, they say, but God and the soul.  
Nothing at all that matters but God and the soul;  
I wish I could get the peace of the mountains into me,  
And not to have all the world a trouble to me.

## The Old Farm.

The old farmhouse I see again;  
In its low, dark eaves the twittering wren  
It nested long ago;  
And I breathe once more the south wind's balm  
And sit and watch in the twilight's calm,  
The Bat fit to and fro.

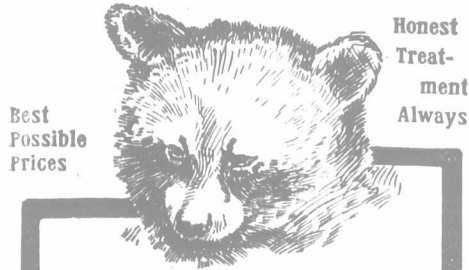
The white cows lie at the pasture bars,  
And the dairy, cool, with its tins and jars,  
Is stored with curds and cream;  
There's somebody putting the things to right,  
And through the windows I see a light  
From the tallow candle gleam.

The garden is rich with its old-time bloom,  
And I catch, in fancy, the faint perfume  
Of blossoms dank with dew;  
And over it all is the starlit dome,  
And round about it the peace of home—  
How it all comes back to view!

The night wind stirs in elm and oak,  
And up from the mill pond comes the croak  
Of the bullfrog's rich bassoon;  
And I catch the gleam, as over the brink  
There peeps, with tremulous, shivering blink,  
The rim of the crescent moon.

It all comes back from the dusk of time,  
With the mournful cadence and swell of rhyme  
That is half remembered still—  
Like a measure from some forgotten strain,  
That hauntingly comes and flees again,  
And under a dusky twilight sky  
It, mingling, floats with the plaintive cry  
Of the desolate whippoorwill.





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Sit right down now and mail us this coupon before you forget it; we have many things to tell you.

SIGN AND MAIL THIS COUPON TODAY

TRAUGOTT SCHMIDT & SONS, Detroit, Mich.  
Dear Sirs:—I want to ship my furs where I can be sure of Honest Treatment and the Highest Prices. Will you send me price lists, tags, etc., and put me on your regular list?  
Name.....  
Address.....

## HAND A SHARPLES Tubular Cream Separator DOWN TO YOUR SON

Users have run their Sharple's Dairy Tubulars over a decade at total cost of fifty cents or less for repairs. One quart of oil has lasted Dairy Tubular over six years.

Tubulars, after long service, are being handed down from father to son. That simple, wear-a-lifetime, guaranteed-forever Dairy Tubular has no disks. Twice the skimming force of others. Skims faster and twice as clean. Repeatedly pays for itself by saving what others lose. Can you afford to bother with any other?  
Write to-day for 1912 catalogue 193.

THE SHARPLES SEPARATOR CO.  
Toronto, Ont. Winnipeg, Man.

## AGENTS 100% PROFIT

LITTLE WONDER POCKET TOOL SCISSORS, in combination which is combined 18 tools and articles. Practical, useful, made of first quality steel, fully guaranteed. Sells in every home, store or shop. EASY SELLER. BIG PROFITS. Write quick for terms and FREE SAMPLE to workers. Send no money. A postal will do.  
P. THOMAS MFG. CO. 8144 Wayne St. DAYTON, OHIO

## MATRICULATION

The doorway to the professions, first step towards becoming a doctor, lawyer, minister, dentist, druggist, civil engineer, electrical engineer, etc. We fit you at home. Special regulations for home-study students. Write:

Canadian Correspondence College, Limited  
Dept. E. Toronto, Canada.

For Sale: **Royal Erskine (10699)**

Clydesdale stallion, three years old. Will make close to a ton. Apply to:

G. Treleven, Cambray P. O., Ontario.

## QUESTIONS AND ANSWERS. Miscellaneous.

### ROUP.

Some time ago one of my Brown Leghorn hens got sick. Inflamed circles formed around her eyes, and she could not see very well. Now two Hamburg pullets have one side of their head enlarged and one eye completely closed. They eat well, and otherwise look all right. What is wrong? What is remedy?  
R. A. S.

Ans.—This is likely one of the forms of roup, as it causes swelling of the head and eyes. It comes, in all probability, from a cold in the beginning, but will spread among a flock if not checked. It may be due to the fowls roosting in a draft or being confined in ill-ventilated, filthy buildings. Kill and burn those badly affected. Place a little potassium permanganate in the birds' drinking water, about as much as can be placed on a five-cent piece, to a gallon of water. Remove the cause of the disease. If only two or three birds have contracted the disease, it will pay better to kill them than to attempt treatment. If larger numbers get it, use a dessert-spoonful of Epsom salts to a gallon of drinking water, or the potassium permanganate, as directed. Bathe the affected birds' heads in a five-per-cent. solution of potassium permanganate. Disinfect the poultry house with whitewash containing a five-per-cent. solution of carbolic acid. Feed liberally. Keep clean, and allow plenty of fresh air in the poultry house.

### MISCELLANEOUS.

1. Would rape answer as a mulch for strawberries?
2. Would it be advisable to grow corn on a piece of land two succeeding years?
3. Can you tell me of a firm which erects silos of treated lumber?
4. In sowing turnips, is there something to be done to keep off lice?
5. How much meal should be fed to an ordinary milch cow?
6. If a note is placed in a bank to be collected, is the bank supposed to notify the party when such note is due?  
E. M. D.

Ans.—1. We do not think that rape would prove as satisfactory a mulch as straw or strawy manure. If applied in small quantity, it might serve as a partial protection. If applied too heavily, there is a possibility that the rape might smother the plants.

2. It is always better to rotate crops. Corn is a somewhat heavy feeder, but if the land was heavily fertilized after the first crop, no very bad effect would be likely from sowing it on the same land two years in succession. Better returns would likely follow if a cereal were placed on the corn ground and another field found for the corn.

3. The Canadian Dairy Supply Company, Montreal, and M. Brennan & Sons' Manufacturing Co., Hamilton, are two companies whose stave-silo construction advertisements run in this paper. The former company advertise treated lumber.

4. So far as we know, treatment of turnip seed is utterly useless in combating lice or aphids. Turpentine, or some such substance, is sometimes used to ward off the attacks of the turnip fly.

5. This depends upon the cow, and the price of the meal, upon the other feed comprising her ration, and also upon the kind of meal fed. From five to ten pounds should be a fair ration for an ordinary cow. Some follow the rule of feeding one pound of grain to every three pounds of milk given by the cow.

6. As a matter of business, the bank will notify the party before the note falls due.

### HAD READ THE SIGN.

Mayor Geary, of Toronto, told this one at the Graphic Arts dinner:

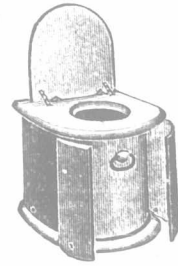
A sick Scotchman walked languidly into a doctor's ante-room to seek medical aid. On the wall he read a neat card which said: "First consultation, \$5; subsequent consultations, \$2."

When the doctor came in he found a beaming individual, who rushed forward with hand outstretched.

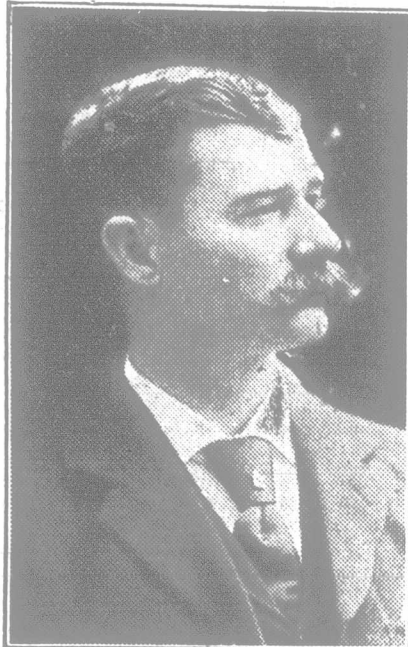
"Well, doctor," he exclaimed, "here I am again!"

## Red Cross Chemical Closets

No Water Required or expensive plumbing. Easily Installed anywhere in your home. Inexpensive to Operate and Positively Guaranteed. Odorless and Sanitary. Write for catalogue E.



Red Cross Sanitary Appliance Company  
(Inventors and Sole Manufacturers), GRIMSBY, ONT.



WESTON, ONT. BRANDON, MAN'

J. B. HOGATE

DIRECT IMPORTER

Percherons and Clydesdales

My barns at Weston and Brandon are full of Percherons—stallions, mares and fillies and Clyde stallions—the very best that money could buy, in both greys and blacks, ages from two to five years. The stallions weighing from 1,700 to 2,200 lbs.; the mares from 1,600 to 1,900 lbs., some safe in foal.

In order to get my Weston barn sold out, so that I may go to my Brandon barn, no reasonable offer will be refused. Write, and come early, and get a bargain in a first-class stallion or mare.

TERMS TO SUIT. For further particulars write:

J. B. Hogate, West Toronto, Ont.

## To Buyers Looking for a GOOD STALLION



I HAVE imported Percheron Stallions for years, always bought them from the best breeders in France, and beg to call the attention of prospect buyers to the fact that I have at the present time a better lot of Percheron Stallions in my barn than any barn in Canada. I have the big kind, the right kind, the kind that good judges are looking for. I won, as usual, more prizes at the leading fairs than all the Percheron importers put together. My horses are beautiful dappled-greys and blacks. Two to eight years old, weighing 1,700 to 2,200 lbs., with feet and legs that cannot be beat. Beautiful heads and necks. The kind that good buyers are looking for. I do not intend, and will not allow, if I can help it, anyone to give more quality and breeding for fixed price than I will. Come to the home of the Champion Prizewinners and judge for yourself.

JOHN HAWTHORNE, Simcoe, Ontario



## Nineteen Imported Clydesdale Stallions For Sale

My importation for November, 1911, are nearly all two or three-year-olds. They are ideal in draft character, with faultless quality of underpinning. They represent the best blood of the breed, being descendants of such horses as Baron's Pride, Hiawatha, Marcellus, Hiawatha Godolphin, etc. They will be priced right and on terms to suit. Farm two miles from end of street car line. Long-distance phone. Call me up and I will meet you in Guelph.

O. SORBY,

GUELPH, ONT.



## CHAMPION CLYDESDALES FOR SALE

I am now offering for sale the renowned champion stallions, Baron Gartley Imp. (4789), a bay, 11 years old, and President Roosevelt Imp. (7759), a bay, 9 years old. They are both champions and sires of prizewinners. They will be priced right.

ALEX. GRAHAM, Oro Station P.O.

## PERCHERONS AND CLYDESDALES

Full line of prizewinning stallions and mares always on hand.

HODGKINSON & TISDALE, Simcoe Lodge, BEAVERTON, ONTARIO  
Long-distance phone.

## BIG QUALITY CLYDESDALES

We have them on hand imported this year, Stallions and Fillies, many of them winners, the best blood of the breed, with size, character and quality. There are none better and no firm can sell cheaper.

R. NESS & SON, Howick, Que



## Imp. Clydesdale Stallions and Fillies

I have a big selection of both, from foals of this year up to 4 years in stallions, and 7 years in mares. Winners in Scotland and Canada. Bred from champions, that will make a ton, with lots of quality. Prices right. W. B. ANNETT, ALVINSTON P. O. AND STA., on G. T. R. and M. C. R.; also Watford Sta., G. T. R., 20 miles west of London.



## HORSE OWNERS! USE

GOMBAULT'S  
CAUSTIC  
BALSAM

A safe, speedy and positive cure. The safest, most BLISTER free used. Removes all bunches from horses. Impossible to produce scar or blemish. Send for circulars. Special advice free.

THE LAWRENCE-WILLIAMS CO., Toronto, CANADA

## SAVE-THE-HORSE



SAVE-THE-HORSE BOOK is an encyclopedia of practical and complete references. It is the latest, most reliable and highest authority. It is scientific but not technical. Takes in every scope and character of diseases causing lameness.

Tobias, Nebr., June 4th, 1911.  
Troy Chemical Co., Binghamton, N. Y.—A year and a half ago I had a bottle of your spavin remedy. I cured my horse with it and then gave what I had left of it to a friend who had a mule with a spavin, which veterinarians had failed to cure. My friend today says, "It's certainly a sure cure." Find \$5.00 for another bottle.  
Very truly,  
TASO, Kansas.

When discriminating, cautious, hard-headed bankers, farmers and business men write for information and then select "Save-the-Horse" from the mass of remedies presented, and these are the kind of men our testimonials are from, is there need to ask why?

Describe case. We'll advise frankly and clearly what to do.

\$5 a bottle, with a contract to absolutely and permanently cure Bone and Bag Spavin, Thoroughbred, Ringbone (except low), Cork, Splint, Capped Hock, Windfall, Shoe Rot, Injured Tendons and all lameness or related the money. No scar or loss of hair. Horse works as usual.

55 at all Druggists or Dealers and Express Paid.  
TROY CHEMICAL COMPANY  
148 Van Horn St. Toronto, Ontario, and  
Binghamton, N. Y.

Dr. Page's English  
Spavin Cure

For the cure of Spavins, Ringbone, Curbs, Splints, Windgalls, Capped Hock, Strains or Bruises, Thick Neck from Distemper, Ringworm on Cattle, and to remove all unnatural enlargements.

This preparation (unlike others, acts by absorbing rather than a blister. This is the only preparation in the world

guaranteed to kill a Ringbone or any Spavin, or money refunded, and will not kill the hair. Manufactured by Dr. Frederick A. Page & Son, 7 and 9 Yorkshire Road, London, E. C.

Mailed to any address upon receipt of price, \$1.00. Canadian agents:

J. A. JOHNSTON & CO., Druggists,  
171 King St., E. TORONTO, ONT

Fistula  
and  
Poll  
Evil

Any person, however inexperienced, can readily cure either disease with

Fleming's  
Fistula and Poll Evil Cure

—even bad old cases that skilled doctors have abandoned. Easy and simple; no cutting; just a little attention every fifth day—and your money refunded if it ever fails. Cures most cases within thirty days, leaving the horse sound and smooth. All particulars given in

Fleming's Vest-Pocket  
Veterinary Adviser.

Write us for a free copy. Ninety-six pages, covering more than a hundred veterinary subjects. Durable bound, indexed and illustrated.

FLEMING BROS., Chemists  
76 Church St., Toronto, Ontario

## ABSORBINE

Will reduce inflamed, strained, swollen Tendons, Ligaments, Muscles or Bruises, Cure the Lameness and stop pain from a Splint, Side Bone or Bone Spavin. No blister, no hair gone. Horse can be used. \$2 a bottle delivered. Describe your case for special instructions and Book 2 E free.

ABSORBINE, JR., the liniment for mankind. Reduces strained, torn ligaments, enlarged glands, veins or muscles—heals ulcers—alays pain. Price \$1.00 a bottle at dealers or deliverers.

W. F. YOUNG, F.D.F., 258 Lyman Bldg., Montreal, Ca.

## NOTICE TO HORSE IMPORTERS

## GERALD POWELL

Commission Agent and Interpreter  
Nogent Le Rotrou, France

will meet importers at any port in France or Belgium, and assist them to buy Percherons, Belgians, French Coach horses. All information about shipping, banking and pedigrees. Many years' experience; best references. Correspondence solicited.

MENTION "FARMER'S ADVOCATE."

## GOSSIP.

## WOODBURN BERKSHIRES.

Woodburn Stock Farm, the property of E. Brien & Sons, lies a short distance from the town of Ridgetown, Ont. Woodburn Farm is one of the most noted in Western Ontario, due to the large and high-class herd of Berkshire hogs that for many years has practically swept the boards at all the Western Ontario shows, and at the Guelph Winter Show. This year, at the latter show, in remarkably strong competition, they won a little more than their share in the breeding classes, and captured the premier honor in winning the prize for pen of three. The Woodburn herd is the largest herd of Berkshires in Ontario, numbering at the present time over 100 head, noted wherever known for their strength of bone, length and depth of body, and quality of general finish, conforming to a marked degree to the ideal bacon type the market demands. Just now there are in regular breeding about fifteen sows, all in nice condition, and well up in the hundreds in weight. The principal stock boar in service belongs to the ever-popular "Lee" tribe. He is a massive, deep, and lengthy hog, of fine proportions, while as a sire his worth is unmeasurable, his get winning wherever shown. Just now, for sale, are about an even 100 head of both sexes, and any desired age, pairs and trios not akin, a selection that for scope and quality cannot be duplicated in this country.

## SMITHFIELD CARCASS COMPETITION.

In the carcass competition at the recent Smithfield Fat-stock Show, the first, second and championship awards in the classes named were as follows:

Steer not over two years old—1 and 2, Aberdeen-Angus.

Steer above two and not exceeding three—1 and 2, Aberdeen-Angus; 2, Shorthorn-Angus cross.

Heifer not exceeding three years—1, 2 and reserve champion, Aberdeen-Angus.

Sheep.—One pure long-wool wether lamb not over 12 months—1, 2 and reserve champion, Cheviot. Long-wool wether over 12 and not over 24 months—1 and 2, champion, Welsh.

Short-wool wether lamb—1 and 2, Suffolk. Short-wool wether over 12 and not over 24 months—1 and 2, Southdown. Cross-bred wether lamb—1, Suffolk - Cheviot; 2, Southdown - Suffolk. Cross-bred wether over 12 and not over 24 months—1, Southdown - Norfolk; 2, Southdown-Kent.

Swine.—One pig not exceeding 100 lbs. live weight—1, 2 and reserve champion, Berkshire. One pig above 100 and not over 200 lbs.—1 and 2, Berkshire. One pig not over 12 months above 220 and not exceeding 300 lbs.—1, Large White (Yorkshire) and Middle White; 2, Berkshire. One pig above 160 lbs. and not exceeding 240 lbs. live weight, best suited for the manufacture of bacon—1, 2 and champion, Berkshire.

## QUESTIONS AND ANSWERS.

## Miscellaneous.

## REMODELLING BARN.

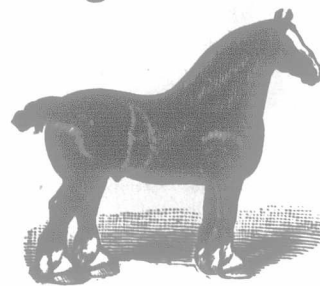
I wish to enlarge my barn. There is a shed on one side of it, which, as you know, does not give any room. There being a good foundation under the shed, would like to widen the barn, to make use of it. Five or six years ago, I noticed an article in "The Farmer's Advocate" on "Widening a Barn." Would be greatly obliged if you would republish it, as I have lost my issue containing that article in an unaccountable manner. The barn is only 16 feet long.

W. B. D.

Ans.—There are various methods of widening barns. Several articles have appeared in "The Farmer's Advocate" on remodelling old barns. We would suggest that you consult your carpenter or contractor and get his ideas. Some split the old barn and add to the center, while others add to the side of the old structure. Just which is best for your particular case your carpenter, being on the spot, would be able to decide better than anyone not knowing the conditions.

## IMPORTED

## Clydesdales of Quality



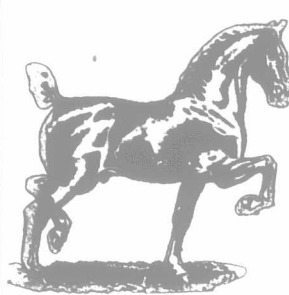
I have now on hand a stock of

Clydesdale Stallions and Fillies,  
Percheron Stallions, Shire  
Stallions, Standard-  
bred Stallions, etc.

Totalling over 90 head. I have more size, more quality, more style and better breeding than was ever seen in any one barn in Canada before. If you want a big, ton stallion, or a high-class show stallion, or a big, well-bred quality filly, let me hear from you.

TERMS TO SUIT

T. H. HASSARD, Markham P.O. and G. T. R. Station  
Locust Hill, C. P. R. Station. Long-distance phone.



## Union Horse Exchange

UNION STOCK YARDS,  
TORONTO, CANADA.

The Great Wholesale and Retail  
Horse Commission Market.

Auction Sales of Horses, Carriages and Harness every Monday and Wednesday. Horses and Harness always on hand for private sale. The only horse exchange with railway loading chutes, both G. T. R. and C. P. R., at stable doors. Horses for Northwest trade a specialty.

J. HERBERT SMITH, Manager

Ormsby Grange Stock Farm  
ORMSTOWN, P. QUE.

A full stock of CLYDESDALES, imported and home-bred, always on hand, at prices and terms to suit breeders. Correspondence solicited.

DUNCAN McEACHRAN, Proprietor.

## For Sale Clydesdale Stallion

ONE EXTRA FINE

Four years old, by Benedict. He is a beauty and sure foal getter.

AND TWO TWO-YEAR-OLD STALLIONS. VERY CHEAP.

Willowdale Stock Farm, Lennoxville, Quebec

## Clydesdale and Shire Stallions and Fillies



If you want a Clydesdale or Shire stallion or filly, or a Welsh pony, let me hear from you. I have the best blood of the breed. Horses over a ton in weight. Colts that will grow to the ton and over, with faultless characters, style and quality. I will not be undersold, and your terms are my terms.

T. L. MERCER, Markdale P.O. and Sta. L.-D. phone.

ROSEDALE HAS FOR SALE first-prize three-year-old, two-year-old and yearling imported Shire stallions at Toronto, 1911. Also first-prize three-year-old Standard-bred stallion at Toronto. A number of imported Clyde and Shire mares in foal. Also a few SHORT-HORN BULLS. For further particulars write:

Eight miles from Toronto by G. T. R., C. P. R. and electric railway. Long-distance telephone. J. M. GARDHOUSE  
WESTON, ONTARIO

## OFF FOR MORE CLYDESDALES!

We wish to announce to all interested in the best Clydesdales that about Oct. 1st we sail for Scotland for our 1911 importation. If you want a show stallion or filly, watch for our return.

BARBER BROS, Gatineau Pt., Quebec.

## Clydesdales, Stallions and Fillies, Percheron Stallions

My 1911 importation have arrived—20 Clyde stallions, 18 Clyde fillies, 6 Percheron stallions. I have many winners at Old Country shows. Big, choice, quality stallions and mares, bred from the champions, and the best Percherons in Canada. Prices right.

Long-distance phone. T. D. ELLIOTT, Bolton, Ont.

Shire Stallions and Mares, Shorthorn Cattle (both sexes); also Hampshire Swine. Prices reasonable.

Porter Bros., Appleby, Ont., Burlington Sta. Phone.

Bay View Imp. Clydesdales We have got them home, 11 fillies and 7 stallions, show horses bred in the and see us. Prices and terms the best in Canada. On the Toronto-Sutton Radial Line. John A. Boag & Son, Queensville, Ont.

## HIGH-CLASS IMPORTED CLYDESDALES

I have Clydesdale stallions and fillies for sale, every one of them strictly high-class in type, quality and breeding; stallions over a ton and very fleshy; fillies of superb form and quality. If you want the best in Canada, come and see me.

JAMES TORRANCE, Markham, Ont.

## CLYDESDALES (Imported) CLYDESDALES

SPRING HILL Top Notchers. Stallions, mares and fillies, 65 per cent. guarantee with stallions. Every mare guaranteed in foal. Ages, 3 years old and upwards.

J. & J. SEMPLE Milverton, Ontario, and La Verne, Minnesota

## Mount Victoria Stock Farm, Hudson Heights, P. Q.

We have for service this season the Champion Imp. Clydesdale stallions Netherlea, by Pride of Blacon, dam by Sir Everard; also Lord Aberdeen, by Netherlea, and the Champion Hackney stallion Terrington Lucifer, by Copper King. For terms and rates apply to the manager.

I. B. MACAULAY, Prop. ED. WATSON, Manager.



# CAUGHT HEAVY COLD.

Left Throat and Lungs Very Sore.

There is no better cure for a cough or cold than Dr. Wood's Norway Pine Syrup.

It is rich in the lung-healing virtues of the Norway pine tree, and is a pleasant, safe and effectual medicine that may be confidentially relied upon as a specific for Coughs, Colds, Bronchitis, Hoarseness, Sore Throat, Quinsy, and all Throat and Lung Troubles.

Mr. S. Monaghan, Charlottetown, P.E.I., writes:—"I certify that Dr. Wood's Norway Pine Syrup is an excellent medicine for coughs and colds. Last winter I contracted a heavy cold which left my lungs and throat very sore. I had to give up work and stay in the house for two weeks. I used several cough mixtures, but got no relief until a friend advised me to use Dr. Wood's Norway Pine Syrup. Three bottles entirely cured me, and I can recommend it as the best medicine for coughs."

Don't be imposed upon by taking anything but "Dr. Wood's" as there are many imitations of this sterling remedy on the market.

"Dr. Wood's" is put up in a yellow wrapper; three pine trees the trade mark; price 25 cents. Manufactured only by The T. Milburn Co., Limited, Toronto, Ont.

**\$15<sup>95</sup> AND UPWARD**

## AMERICAN SEPARATOR

SENT ON TRIAL, FULLY GUARANTEED. A new, well made, easy running separator for \$15.95. Skims hot or cold milk; heavy or light cream. Different from this picture, which illustrates our large capacity machines. The bowl is a sanitary marvel, easily cleaned. Shipments made promptly from ST. JOHN, N. B., and TORONTO, ONT. Whether dairy is large or small, obtain our handsome free catalog. Address: **AMERICAN SEPARATOR CO.** Box 1200, BAINBRIDGE, N. Y.



**Aberdeen-Angus Cattle**—For Sale: A choice young bull (15 mos.) of richest quality and breeding; also females. **Glengore Stock Farm, GEO. DAVIS & SONS, Props. Aitlen, Ont.**

**Balmedie Aberdeen-Angus**—For sale: 1 am offering for sale young bulls and heifers of the highest types of the breed. Show stock in show condition a specialty. Bred on the most popular lines. **Thos. B. Broadfoot, Fergus Sta., Wellington Co., Ont.**

**Aberdeen - Angus**  
Now is the time to buy a bull; eleven for sale; also females any age or price. **WALTER HALL, Drumbo station, Washington, Ont.**

**SHORTHORNS**  
About 14 head of bulls and heifers, good roans and reds, all from a milking strain. Also Shropshire shearlings and ram lambs. Barred Rock cockerels. Inspection invited. Prices reasonable. **JOHN RACEY, Lennoxville, Que.**

**Shorthorns and Swine**—Am now offering a very choice lot of cows and heifers, safe in calf, and some choice young bulls for the fall trade; also Berkshire and Yorkshire pigs; showyard material. **ISRAEL GROFF, Elmira, Ont.**

**Shorthorns, Shropshires and Berkshires**—For sale: I have young bulls and heifers, bred for milk production. High-class flock-heads, winners, and covered to the ground. Berkshires, both sexes of breeding age, show stock **W. Wilson, Brickley P.O., Hastings Sta., G.T.R.**

**Shorthorns**—Choice selections of bulls and heifers at all times for sale at very reasonable prices. **Robert Nichol & Sons, Hagersville, Ont.**

MENTION "FARMER'S ADVOCATE."

### QUESTIONS AND ANSWERS. Veterinary.

#### LUMP JAW.

Milking heifer has a hard lump on her face, between eye and nostril. Is her milk fit for use? **M. S.**

Ans.—This is lump jaw. Many cases can be cured by the "potassium-iodide treatment." It consists in giving potassium iodide three times daily. Commence with 1-dram doses, and increase the dose by 1/4 dram daily until she refuses food and water, fluid runs from eyes and mouth, and the skin becomes scruddy. When any of these symptoms become well marked, cease giving the drug. If necessary, repeat treatment in three or four months. The treatment will materially reduce the milk yield for a time. The milk of a diseased animal is not considered fit for use, but many claim that it is quite healthful. **A.**

#### Miscellaneous.

#### INDIGESTION IN PREGNANT MARE.

Will you please publish a recipe for a case of indigestion in a pregnant mare? **A. D. M.**

Ans.—The less medicine an in-foal mare gets the better. A purgative should be given if the mare were not in foal, but in this condition purgatives are dangerous. Give a laxative of 1 1/2 pints of raw linseed oil. Follow up with 1 dram each of ginger, gentian and nux vomica three times daily. Great care must be taken in feeding. Feed in small quantities and often, on good hay, rolled or crushed oats, bran of good quality, with a turnip, carrot or mangel daily. If the pain should become acute, give 1 ounce fluid extract of belladonna and 1/2 ounce of nitrous ether in 1/2 pint of cold water. If this does not effect a cure in a short time, send for your veterinarian, as there may be complications, and mistakes are especially dangerous with pregnant animals.

#### VALUE OF WOOD ASHES—REPRODUCING GRAPE VINES.

1. What is the value of hardwood ashes (unleached) as a fertilizer, and how much should be sown per acre with the spring grain?  
2. I have a good grape vine on one farm. How should I proceed to have scions from it grow in another place? **A SUBSCRIBER.**

Ans.—1. The value of ashes varies according to the wood from which derived, and the care they receive. Ten cents a bushel is a conservative value to place upon ordinary samples.

2. The propagation of grapes is done by means of hardwood cuttings, which are taken in winter, usually from the trimmings of vineyards. In ordinary cases, they are made of two or three buds' length, preferably three. As described in Bailey's Encyclopedia of Horticulture, the cuts are made a short distance below and above two of the buds, and the third is about midway between them. They are cut as soon as the vines are trimmed, tied in small bundles, and these are buried half their depth in damp sand in a cool cellar. It is mentioned that the main pruning of grapes is done when the vines are dormant in January or February in the north. By spring the cuttings will be more or less callused. They are planted in the open on the approach of warm weather. A loamy soil is selected, well and deeply prepared. The cuttings are inserted until only the upper bud stands at the surface of the ground. They are placed six or eight inches apart in rows, and for commercial purposes, in rows far enough apart to admit of horse cultivation. These cuttings may give plants large enough for sale the following fall, but usually are let grow until two years old before being put upon the market. Single-eye cuttings, with about an inch of wood on each side of the bud, are usually started in February under glass on green-house benches for transplanting in spring. Grapes may be grafted also with dormant buds, an ordinary cleft graft being the one usually employed. It is customary to make the graft below the surface of the ground early in spring.

# Ruptured People— Try this for Relief and Cure

No Loss of Time from Work— You Keep on Earning Money—No Belt, Elastic, Springs, or Leg-Straps to Wear—Sent on 60 Days Trial to Prove It

#### Curing Begins At Once

This massage is so beneficial—so curative—that 199 people out of every 200 begin to get better and stronger almost the minute a Cluthe Truss is put on—so beneficial that among the thousands of people completely cured by this truss are some of the worst cases of rupture on record.

#### Free Book Tells All About It

So that you can judge for yourself, we want to send you—free—our cloth-bound book of advice—it is full of facts for the ruptured never before put in print—facts we have learned during forty years of day-after-day experience.

It explains the dangers of operation. Explains why wearing ordinary trusses is simply slow suicide. Tells why drug-stores should no more be allowed to sell trusses than a schoolboy would be allowed to perform an operation.—Also exposes the fake "methods," "appliance," "plaster pads," "fake 'free cure,' etc.

And it tells all about the Cluthe Massaging Truss—how little it costs—how it ends all expense—how it is waterproof and can be worn in the bath how it has no belt, elastic band, springs or leg-straps—no "harness" of any kind. And it tells how you can get a Cluthe Truss on 60 days trial without risking a penny.

Book also tells—in their own words—the experiences of many who have tried this truss—gives the names and addresses of over 4,000—probably some of them right in your neighborhood.

Simply say in a letter or postal "Send me the book." Address us giving our box number—

**Box 109, CLUTHE COMPANY 125 East 23rd Street, New York City**

Don't fail to get this book—the minute it takes to write us may free you from misery and suffering for the rest of your life.

You can try this—the greatest boon to the ruptured world has ever known—without having to risk a single cent of your money. It's a way to get well while working. If you don't find yourself getting better right from the first, then it won't cost you a penny.

You Don't Risk a Penny

This is far more than a truss—far more than merely a device for holding your rupture in place. We are so sure it will work wonders for you just as it has for thousands of others that we want to make a Cluthe Truss or Cluthe Automatic Massager especially for your case and send it to you to test—

And won't cost you a cent if it doesn't result in improvement—if it doesn't keep your rupture from coming out—when you are working, exercising, etc., all day long.

Don't judge this by other trusses. This is the only truss guaranteed to hold. And in addition to that the Cluthe Truss provides the only way ever discovered for overcoming the weakness which is the real cause of rupture.

While taking all strain off the rupture, this truss is constantly strengthening the weak ruptured parts—

Does that by automatically massaging them—this soothing, healing massage does for these parts exactly what exercise does for weak arms—soon restores their lost strength—soon makes them so strong that a truss is no longer needed.

#### Trusses Like These Are a Crime



IMPORTED

## ABERDEEN-ANGUS CATTLE

We have a large selection of IMPORTED ANGUS BULL CALVES and YEARLINGS for sale. Also a few heifers and cows. These cattle represent the most desirable blood lines and families of this breed in Scotland, and are an exceptional lot of fine individuals.

### Prices Reasonable

This is an opportunity to introduce the best imported blood in your herd. Angus sires are noted for their prepotency, and thus are extremely desirable for improving and building up herds of grade cattle. You are cordially invited to inspect our herds and stock.

**Breeder and Importer**  
Clydesdale Horses  
Jersey Cattle  
Aberdeen-Angus Cattle  
Shropshire Sheep  
Berkshire and Yorkshire Swine

**LARKIN FARMS**  
Queenston, Ont.  
Canada

**J. D. LARKIN, - Owner**  
Buffalo, N. Y.

**ORCHARD GROVE HEREFORDS**  
Champions of 1911 shows, winning both senior and junior herds at Winnipeg, Brandon, Regina, Edmonton, Toronto and London; also fifteen championships. Young stock, both sexes, for sale at reasonable prices. Long-distance 'Phone **L. O. CLIFFORD Oshawa, Ont.**

**Scotch Shorthorns** FOR SALE: 14 blocky, low-down bull calves, from 6 to 11 months old, all from imported stock. 20 yearling and two-year-old heifers of best Scotch breeding; also one imported bull, an extra sire. Farm 1/4 mile from Burlington Jct. Sta. **Mitchell Bros., Burlington, Ont.**

**Pleasant Valley Farms Shorthorns**—For Sale: 7 good young Scotch bulls at prices to suit every one, sired by high-class bulls; also cows and heifers. Correspondence solicited. Inspection invited. **GEO. AMOS & SONS, Moffat, Ont.** Farm 11 miles east of Guelph on C. P. R., 1/2 mile from station.

**Shorthorn Bulls**—Special offering: Scotch breeding, full of flesh and quality, with plenty of scale and from good milking dams. **H. SMITH, Hay P.O., Huron County, Ontario.** Exeter Station, G. T. R., 1/2 mile.

## POLES OF STERLING QUALITY

Michigan White Cedar Telephone Poles

**W. C. STERLING & SON COMPANY**  
Oldest Cedar Pole Firm in Business  
Producers for 31 Years

1880 **MONROE, MICHIGAN** 1911



## Bone Spavin

No matter how old the blemish, how lame the horse, or how many doctors have tried and failed, use

**Fleming's Spavin and Ringbone Paste**

Use it under our guarantee—your money refunded if it doesn't make the horse go sound. Most cases cured by a single 45-minute application—occasionally two required. Cures Bone Spavin, Ringbone and Sidebone, new and old cases alike. Write for detailed information and a free copy of

**Fleming's Vest-Pocket Veterinary Adviser**

Ninety-six pages, durably bound, indexed and illustrated. Covers over one-hundred veterinary subjects. Read this book before you treat any kind of lameness in horses.

**FLEMING BROS., Chemists**  
75 Church St., Toronto, Ontario



Lump Rock Salt, \$8.00 for ton lots, f.o.b., Toronto  
Toronto Salt Works, 128 Adelaide St. E.,  
G. J. CLIFF, MANAGER, Toronto, Ont.

### WILLOW BANK STOCK FARM

#### Shorthorns and Leicesters



Herd established 1855, flock 1848, have a special good lot of Shorthorns of either sex to offer of various ages; also a grand lot of Leicester sheep of either sex—a few imported ones to offer.

**JAMES DOUGLAS**  
Caledonia, Ontario.

### MAPLE LODGE STOCK FARM

#### 1854—1911

Am offering a splendid lot of young Shorthorn bulls for sale now; good colors and choice individuals; several of them from high-class milkers. A few select Leicesters for sale vet.

**A. W. SMITH, Maple Lodge, Ontario**  
Lucan Crossing, G. T. Ry., one mile.

**OAKLAND SHORTHORNS**

We have another lot of young bulls ready for fall and winter trade, out of good breeding dual purpose dams and sired by our herd leader, Scotch Grey, 72692, one of the best bulls in Ontario; good cattle and no big prices. Will also sell a few cows and heifers; about 50 to select from.

**JOHN ELDER & SON, HENSALL, ONTARIO**

### Fletcher's Shorthorns and Yorkshires

Stock bull "Spectator" (imp.) = 50094 = for sale or exchange; also choice heifers. I also offer my (imp.) Yorkshire boar for sale or exchange.

**GEO. D. FLETCHER, Binkham, Ont.**  
Erie station, C. P. R.

### SPRING VALLEY SHORTHORNS

Herd headed by the two imported bulls, Newton Ringleader, = 73783 =, and Scottish Pride, = 36106 =. The females are of the best Scotch families. Young stock of both sexes for sale at reasonable prices. Telephone connection.

**KYLE BROS., - - Ayr, Ontario**

### Shorthorns of Show Calibre

I have only three young bulls left, but every one will be a topper; one of the greatest stock bull in Canada, Mildred's Royal, out of big, thick Scotch cows. For a show bull or show heifer, write us.

**GEO. GIER & SON, Grand Valley, Ont.**

### "The Manor" Scotch Shorthorns

Present offering: 1 choice yearling bull, an "Undine," 7-dam imp. Young cows in calf. Yearling heifers: Clippers, Minas, Wimples, Julias, etc. Inspector solicited. Prices moderate. 'Phone connection.

**J. T. GIBSON, DENFIELD, ONTARIO**

### WHY NOT SMILE.

Rubenstein once declared to someone that he was descended from one of the crusaders who accompanied Richard Cour de Lion to Palestine. "On the piano, presumably," was the smiling response.

## A TURKISH BATH ON THE FARM

FOLKS ON THE FARM—Are you missing one of SNAP'S best services? A dip in the tub and SNAP used instead of soap makes you feel as if you had enjoyed a genuine TURKISH BATH. It is thoroughly cleansing, removes the stain and grime of hard work, refreshes and invigorates as it cleans, and is soothing to the skin.

Be sure you get SNAP the original Antiseptic Cleaner.

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### QUESTIONS AND ANSWERS.

#### Miscellaneous.

#### CROP FOR GREEN MANURE.

I have bought a farm alongside of me that has been in the hands of a loan company for thirty years, and rented. Part of it is clay loam, and the rest sandy loam. It is covered with rag-weed. I intend to summer-fallow about twenty acres, but I have no manure to spare for it. I want to clean it and get it seeded down. Would it pay to sow buckwheat on it and plow down? What do you advise me to do?

W. A.

Ans.—Sow peas early and plow under, then cultivate thoroughly until time to sow the wheat. In the search for a green manuring crop, people persistently overlook the commonest crop suitable for this purpose, and the best. Tests at Guelph substantiate the logical inference that peas are much better for this purpose than buckwheat, rape, rye, or any other of the half dozen crops so often inquired about. The advantage of peas is so great as to much more than compensate for the extra cost of seed.

#### BLACKHEAD.

In your issue of November 30th, you had an article on "Blackhead" in turkeys and treatment for same. Kindly advise the symptoms of this disease, and how one is to know it. Last year we had a great number of turkeys and lost nearly all. Some of them moped around for several days, not eating—then died; others would apparently be all right in evening and would find them dead in the morning. We noticed that they had yellow diarrhea. Would this be the trouble? If so, kindly advise remedy, as they are commencing to die this year again.

C. E. M.

Ans.—The symptoms of blackhead are: 1. Lack of appetite, weakness, emaciation. 2. Constant diarrhea, usually from the first. This diarrhea is caused by inflammation of the caeca. 3. Half stupor, with an inclination to keep away from the rest of the flock. 4. In most cases discoloration of the head as the disease advances. This discoloration is not, however, always present. In "The Farmer's Advocate," issue of Sept. 7, 1911, there appeared an article on "Blackhead in Turkeys" which will answer your question thoroughly. See that issue.

#### TAPEWORM IN SHEEP.

Is there such a thing as tapeworm in sheep; if so, what is the cause? Is there a preventive or cure? Will other animals get it?

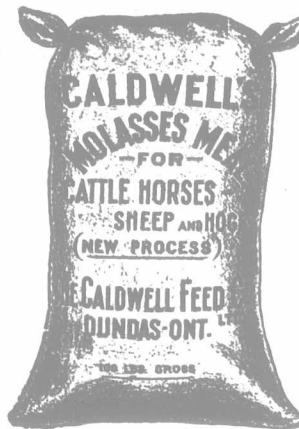
SHEPHERD.

Ans.—Our veterinary editor has found in his practice that sheep are bothered by tapeworm more than by any other kind of worm. Sheep pasturing on swampy or low ground, particularly on land on which hounds have been hunting the previous season, are frequently affected, as segments of the worm are dropped by dogs, remain over winter, and enter the sheep with grass in the spring. Turpentine, gasoline and benzine, are common doses; also pumpkin-seed decoction. Starve the sheep for twelve hours, make a mixture of one part oil of turpentine and fifteen parts sweet milk. Shake until thoroughly mixed, and give each ewe about four ounces of the mixture. Give nothing to eat for five or six hours longer. Keep enclosed, and gather worms passed and destroy them. Repeat treatment in ten days, and, if necessary, administer the third and fourth time. The pumpkin-seed treatment is as follows: Break the seed, boil in water, and allow to simmer for several hours. Give each animal the product of from two to four ounces of seed. Repeat after ten or twelve days. Keep the sheep off low-land pasture, and, if possible, on fresh seeding every year.

Willie—They say Dabbler has sold his painting, "The Retreat from Bull Run," that he has been trying to sell for years. How did he manage it?

Gallis—Easily. Simply changed the title to "Automobilists Returning Home."

## Write for Our Great Clubbing Offer



By taking advantage of our Clubbing Offer you can now buy Molasses Meal direct from the factory at wholesale prices. This will be good news to hundreds of stock, sheep and horse raisers who feed this wonderful meal regularly, but who have always bought it in the usual way. We have a booklet explaining everything about Molasses Meal, the wonderful results it gives, and full instructions for feeding.

## Caldwell's Molasses Meal

is 80 to 84 per cent. pure Cane Molasses. Clip out the coupon. Fill in your name and address. Put it in an envelope addressed to

**CALDWELL FEED CO., Ltd., Dundas, Ont.**

And we will send you particulars.

CUT ALONG HERE

FARMER'S ADVOCATE

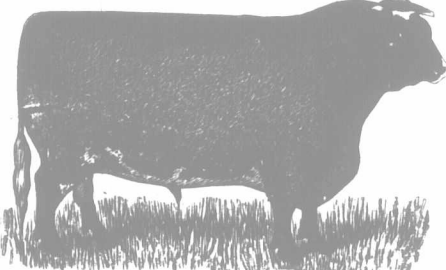
Please send me full particulars about your Great Clubbing Offer, explaining how I can buy Molasses Meal at wholesale. Also send booklet.

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PROVINCE .....



**ARTHUR J. HOWDEN & CO.**  
ARE OFFERING

### 15 High-class Scotch Shorthorn Heifers

At moderate prices, including Cruickshank Non-pareils, Cruickshank Villages, Marr Emmas, Cruickshank Duchesses of Glosters, Bridesmaids, Bruce Fames, Kinellars, Clarets, Crimson Flowers, and other equally desirable Scotch families, together with a member of the grand old milking Atha tribe, which have also been famous in the showing.

**Arthur J. Howden & Co., Columbus, Ont.**

### SHORTHORNS

Have now a choice lot of young bulls to offer; also with something nice in heifers. Catalogue of herd and list of young animals on application.

**H. CARGILL & SON, Proprietors, Cargill, Ont., Bruce Co.**  
JOHN CLANCY, Manager



## Shorthorn Bulls and Clydesdale Mares

If you are in the market for a young bull, write us for particulars, or, better still, come and see them. We have 13 young bulls, from 8 to 14 months old, of good breeding and quality. We also have four imported Clydesdale mares, safe in foal.

**W. G. PETTIT & SONS, Freeman, Ontario**

Bell 'phone.

Burlington Jct. Sta., G. T. R., 1/2 mile from farm

THIS IS A GOOD TIME, AND I HAVE A GOOD PLACE, TO GET A HIGH-CLASS SCOTCH SHORTHORN BULL CALF by my great Whitehall Sultan sire, or a young cow in calf to him, to start a herd that will be gilt-edged. SHROPSHIRE RAMS AND EWES, too, at low prices. CHILDREN'S PONIES, A CLYDESDALE FILLY, such as I can send you, is one of the best things any man can buy. Just write me and say as nearly as possible what you want, and I will surprise you with prices on goods that are genuine.

**ROBERT MILLER, STOUFFVILLE, ONTARIO**



### ELMHURST SHORTHORNS & BERKSHIRES

I have now a particularly choice lot of young Berkshires; over 50 to select from; bred from imported stock. Strictly high class, from breeding age down. Also choice young Scotch Shorthorns. H. M. VANDERLIP, Cainsville P.O., Langford Sta., on Electric Road, between Hamilton and Brantford.



**SALEM SHORTHORNS** Headed by (Imp.) Gainford Marquis, undefeated in Britain as a calf and yearling, and winner of junior championship honors at Toronto, 1911. Have on hand two yearlings and a number of bulls under a year for sale at reasonable prices.

**J. A. WATT, Salem, Ont. Elora Sta, G. T. R. and C. P. R.**

### Scotch Shorthorn Females for Sale

I am offering at very reasonable prices, females from one year to five years of age. The youngsters are by my grand old stock bull, Scottish Hero (imp.) = 55042 = (9065), and the older ones have calves at foot by him or are well gone in calf to him. Their breeding is unequalled, and they are show animals amongst them. **A. EDWARD MEYER, Box 378, GUELPH, ONT.**





# STEEL TANKS

Don't be deceived by a cheap price. A poorly-made tank is expensive at any price.

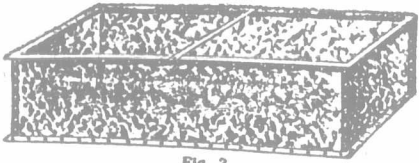


Fig. 3

We insist on quality and durability—best materials, properly put together, thoroughly galvanized, so they never rust, bulge, leak or strain.

For such tanks we ask a lower price than any other maker—quality considered. Write for free catalogue.

Ontario Wind Engine & Pump Co. Limited  
Winnipeg TORONTO Calgary

## MAPLE SOIL STOCK FARM

Holstein yearling heifers with A. R. O. testing over 20 lbs., got by Idalin's Paul Vee-man, his dam testing 24.798 lbs., served by King Segis Pieterte, his dam 30.51; also a few bull calves from 3 to 6 months old.  
Belmont Stn., C. P. R.

H. C. Holtby, Belmont, P.O., Ont.

## HOLSTEIN BREEDERS' CLUB

BELLEVILLE DISTRICT  
WILL HOLD

### Second Annual Consignment Sale

Belleville, Ont., April 3rd, 1912

### Welcome Stock Farm Holsteins

We have in our herd granddaughters of Pieter-tje Hengerveld De Kol (one of the greatest sires of the breed), in calf to the grandson of the Colantha 4th's Johanna, whose yearly record stands unequalled. We have also granddaughters of Pontiac Korndyke (the only sire having two thirty-seven pound daughters), bred to the best sires of the breed. Our herd bull is King Blanche Lyons, whose two granddams have a record of over 33 lbs. and 34 lbs., respectively. Address: C. Bollert and J. Leuszler, R. R. No. 6 Tavistock Ont.

## A GREAT COMBINATION

Bulls eight months old for sale, combining the blood of Pontiac Korndyke and Hengerveld De Kol, with five 30-lb. cows in their pedigree, whose milk contains over 4 per cent. fat. These are the two greatest Holstein-Friesian bulls in America.

A. A. Farewell, Oshawa, Ontario

**Purebred Registered HOLSTEIN CATTLE**  
The most profitable dairy breed, greatest in size, milk, butterfat and in vitality. Send for FREE illustrated descriptive booklets. Holstein-Friesian Assoc., F. L. Houghton, Sec'y, Box 127, Brattleboro, Vt.

### The Maples Record of Holstein Herd

A few choice bulls ready for service, sired by King Posch De Kol; also a few young bull calves, sired by Prince Aagie Mechthilde, whose dam was first at Toronto, 1911, and sire's dam first in dairy test at Guelph, 1908 and 1909; his three nearest dams average over 25 lbs. butter in 7 days.  
WALBURN R. VERS, FO. DEN'S, ONTARIO

### HOLSTEIN BULLS

Minsters Farm offers bulls fit for service in spring from Lakeview Burke Fayne, whose dam and sire's dam average 23.14 lbs. butter in 7 days, and R. O. P. cows; also cows for extended pedigrees. Write: RICHARD HONEY & SONS, Brickley, Ont. Also Yorkshires of both sexes

### NOTICE!

We are offering at the great sale on Jan. 2nd, males and females from sweepstakes winners; high % butterfat; for herd headers or foundation stock. Write, or come and inspect.  
M. L. HALEY, M. H. HALEY, Springfield, Ont.

### Maple Line Holsteins and Yorkshires

Herd headed by Homestead Colantha Sir Abbecker 2nd, whose dam, sire's dam, g. dam average 29.61 lbs. butter 7 days. For sale at bargain prices, choice bull calves from R.O.P. cows  
W. A. BRYANT, Middlesex Co., Cairngorm, Ont.

### Holsteins and Tamworths

For sale: One yearling bull and several bull calves. Two boars fit for service (prize-winners); sows bred to farrow in January; pigs ready to wean. Phone connection, via Cobourg.  
BERTRAM HOSKIN, The Gully P. O.

MENTION "FARMER'S ADVOCATE."

### TRADE TOPIC.

**HARD WORK MADE EASY.**—No line of machinery used on the farm has experienced a more rapid increase in sales than the litter carrier. It is not more than six years since we first heard about them, and now thousands of the best barns all over the country are equipped with them. Nor is it any wonder that they sell rapidly. Is there any harder or more disagreeable work about the farm than cleaning out the stables? With the better types of litter carriers made to-day, four large barrow loads of manure—about 800 lbs.—can be run out at a time. One trip instead of four, and on the level steel track it is easy to push a very heavy load. When the manure is taken right out to the field, all reloading can be saved by using a litter carrier, since the manure can be dumped directly into the wagon or sleigh. When the manure is left in the yard, it is a very easy matter to keep it a good distance from the stable with a litter carrier. In New York State, it is compulsory to keep the manure at least 50 feet from the stable. There is no doubt that the ammonia fumes from a manure pile have a bad effect on the health of the stock, and also on the woodwork of the barn, and on the implements stored in or near it. It pays to keep the manure well away from the barn, and with a litter carrier this can be done very easily. In a country like ours, where the cattle are kept in the stable over half the year, the care of them is a big undertaking. One good feature about the litter carrier is that, if well and strongly installed, it is almost a permanent investment; for, running, as it does, on a level overhead track, and with no complicated parts, it will last for many years. The litter carrier has certainly more than cut in two a very heavy task, and makes it possible for very light help to do a heavy job. Used, as it is, so many days in the year, no machine that we know of will pay better for the money that is invested in it.

### GOSSIP.

The latest importation reported of Clydesdales from Scotland, sailed on the Salacia, from Glasgow, December 14th, consigned to T. D. Elliot, Bolton, Ont.; A. L. Dollar, High River, Alta., and P. & W. M. Robertson, of the same place.

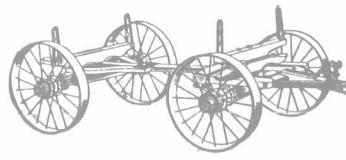
The annual Provincial Government sale of pure-bred cattle will be held in the Winter Fair Building at Guelph, on March 6th next. Make your entries to J. M. Duff, Secretary of the Guelph Fat-stock Club, Guelph, Ont. Entries will close on January 10th next.

### FAIRVIEW BERKSHIRES.

John S. Cowan, of Donegal P. O., Ont., the noted breeder of high-class Berkshire swine, and owner of the Fairview herd, was again this year at the Guelph Winter Show with a big entry of the type, quality and fitting that he seems to so well know how to bring out, and, as usual for several years past, carried off a goodly number of the leading prizes in what was probably the strongest exhibit of Berkshires seen in a Canadian show-ring for many years. Mr. Cowan has been breeding Berkshires for many years, and as everybody knows the type of hog for the Canadian market has undergone a radical change in recent years, and Mr. Cowan has certainly risen to the occasion, and by judicious selection and mating of his breeding animals, has produced a type that fills the bill both in the packing-house and in the show-ring. He has now in breeding a baker's dozen of specially selected brood sows, ranging in weight from 400 to 600 lbs., the produce of which he is shipping from one end of the country to the other with satisfaction to his many customers, and has now on hand either sex of any age, pairs not akin if desired. He is also offering for sale his senior stock boar, Concord Blucher, three years old, a boar that has sired prize-winners galore, and was never beaten himself wherever shown. Write Mr. Cowan your wants, Atwood Station, G. T. R., Milverton, C. P. R.

## DON'T DEPEND ON WOODEN WHEELS AND ORDINARY WAGONS

If you ever see a farmer coming down the road on a wagon and whistling a tune, you can make up your mind the wagon is a T.-K. Handy Farm Wagon with Wide-Tire Steel Wheels. The reason is that his wagon was loaded in half the time usually necessary with ordinary wagons, the load is greater by far, and the wheels take the ground (rocky or muddy) smoothly and without the least resistance.



Wide-Tire Steel Wheels and Handy Farm Wagons



This is the kind of equipment you want to haul your loads. T.-K. wagons with Indestructible Wheels will outlast two ordinary wagons. The steel wheels are best construction possible. They are made with staggered spokes, so the tires won't bend between spoke-heads, while the hubs never wear out. Letters from thousands of farmers testify to their superiority. Write for booklet and special prices.

TUDHOPE-KNOX COMPANY, Limited, Orillia, Ontario.

## Summer Hill Holsteins



The only herd in Canada where there are 7 cows average in 28 lbs. butter each in 7 days. Every record made on the farm. Present offering: 15 yearling heifers in calf; 10 imported heifers, some bred; 1 bull calf from a 31 1/2-lb. dam, 1 bull calf from a 29 1/4-lb. Junior, 4 years old, 1 bull, 8 months old, from a 25 1/2-lb. Junior, 4 years old. Come and make your selections now. Prices are right. Trains met when advised.



D. C. FLATT & SON, R. F. D. No. 2, Hamilton, Ont. Telephone 2471.

## LAKEVIEW HOLSTEINS

Young bull, sired by Count Hengerveld Favne De Kol, and out of Rose Rattler, 24.19 pounds butter in seven days. This calf was born 25th March, 1911, is well marked, about one-half black. Another, by the same sire, calved March 24th, 1911, out of Inka Sylvia 4th De Kol, 21 pounds butter in seven days, and 88 pounds in 30 days. Send for prices on these and several others equally good.

Telephone E. F. OSLER, Bronte, Ontario

## FAIRVIEW FARMS HERD STILL LEADS ALL OTHERS.

We own the world's champion cow, Pontiac Pet, 37.67 lbs. butter in 7 days. We have here her sire and over 50 of her sisters. We can offer you young bulls that are more closely related to her and to Pontiac Clothilde DeKol 2nd, 37.21 lbs., than you can get any place else in the world, and our prices are right. Nearly 200 head in herd. Come and look them over.

E. H. DOLLAR, (near Prescott) HEUVELTON, NEW YORK

## Silver Creek Holsteins

Officially backed on both sides. King Fayne Segis Clothilde, whose 7 nearest dams have 7-day records that average 27 lbs., is at head of herd. A. H. TEEPLE, CURRIES P. O., Ont., Woodstock Station. Phone connection.

## Centre and Hillview Holsteins

We are offering young bulls from Sir Ladie Cornucopia Clothilde, the average of his dam sire dam and grand dams is 662.8 lbs. milk and 30.58 butter, 7 days, and 2,750.88 milk and 114.5 butter in 30 days; also Brookbank Butter Baron, who is a proven sire. He is sire of champion 3-year-old 30-day, 2-year-old 7-day and 2-year-old 30-day. Long-distance phone. P. D. EDE Oxford Centre P.O. Woodstock Sta.

## Evergreen Stock Farm Holsteins

Herd headed by Prince Abbecker Mercena, whose eight nearest dams average over 25 pounds butter in seven days, and whose dam produced \$150 worth of milk at Toronto wholesale prices—in four months. We have taken a milk contract, and don't want to feed any calves, consequently we will sell young calves, heifers and bulls, at attractive prices. Our females, the dams of these calves, are equal to the best in the country. Bell phone in house. A. E. HULET, NORWICH, ONTARIO.

## High Grove Jerseys & Yorkshires

No better blood in Canada. Present offerings: Choice young sows due to farrow in March. Jerseys, all ages, both sexes. Arthur H. Turfts, P. O. Box 111 Tweed Ont.

## Don Jersey Herd

Offers young bulls and heifers for sale; heifers bred to Eminent Royal Fern. D. Duncan, Don, Ont., Duncan Stn., C.N.R. Phone Long-distance Agincourt.

## Brampton Jerseys

Bulls fit for service are getting scarce. Just a few left. Yearling heifers in calf are in great demand; 6 for sale; 6 now being bred. Brampton Stockwell the sire. A few good cows and some calves for sale. Production and quality. B. H. BULL & SON, BRAMPTON ONT.

## CRAIGALEA AYRSHIRES! HIGH-CLASS AYRSHIRES

Our record: Every cow and heifer entered in Record-of-Performance, and retained in herd until test was completed, has qualified. Heifers and young bulls for sale of show-ring form. H. C. HAMILL, BOX GROVE P. O., ONT. Markham, G. T. R.; Locust Hill, C.P.R. Bell phone connection from Markham

Stockwood Ayrshires are coming to the front wherever shown. This herd is now headed by White Hill Free Trader (Imp.) No. 32273, championship bull at Sherbrooke; also headed the 1st-prize aged herd. Stock of all ages for sale. Satisfaction guaranteed. D. M. WATT, St. Louis Station, Que. Telephone in house.

Calves Raise them without milk. Booklet free. CLOUGH & CO., Lennoxville, Que.

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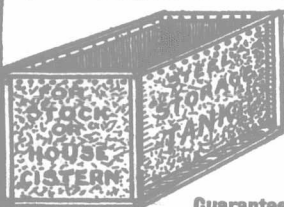
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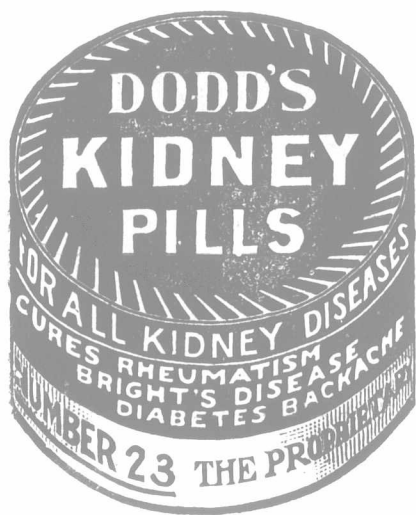
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Briggs—Here's a scientific chap who states that the eye of a fly can discern an object one five-millionth of an inch in diameter.

Griggs—I wonder if it can discern the soul of the fellow who wants to abolish Christmas.



### QUESTIONS AND ANSWERS. Veterinary.

#### RESULTS OF INTERFERING.

Mare interfered; leg swelled, broke, and discharged matter. The ankle is enlarged and hot. The enlargement is hot. The leg swells, but the swelling disappears when she is exercised.

J. M. McG.

Ans.—The cause must be removed, either by driving without hind shoes, wearing boots, getting shod so that she will not strike, or allowing her to go idle. Apply poultices of hot linseed meal until the acute inflammation is allayed. If pus be present, the abscess must be lanced and dressed with a five-per-cent. solution of carbolic acid three times daily until healed. After the inflammation is reduced, the enlargement can be reduced, at least to some extent, by rubbing a little of the following liniment well in once daily, viz.: Four drams each of iodine and iodide of potassium and 4 ounces each of alcohol and glycerine. As bunches of this nature are very hard to reduce, you will have to be very patient.

#### STOMACH STAGGERS.

Hackney driver has some serious trouble in his head. When driving, he takes spasms, throws his head around, and rears and goes sideways. The spasm lasts five minutes, and sometimes longer. He eats well, but is in poor condition.

M. B. A.

Ans.—This is called stomach staggers, or blind staggers, and is due to pressure upon the brain, either from congestion of the vessels as a result of stomachic irritation, or from a growth upon the brain. If from the latter, nothing can be done. If from the former, a gallon of blood should be drawn from the jugular vein, and a purgation of 8 drams aloes and 2 drams ginger be given. The purgative may have to be repeated occasionally when the attacks again occur. Care should be taken not to drive him soon after a meal. His condition may be improved by tonics. Give him a tablespoonful of the following three times daily, viz.: Equal parts sulphate of iron, gentian, ginger and nux vomica.

#### Miscellaneous.

##### PUMPING.

Well is 25 yards from house and is 28 feet deep. Could you pump water satisfactorily with an ordinary cistern pump; pump placed in pantry in house? There is a windmill over well which pumps to barn. It could be made do the work, but that would mean a tank in the house, and water would not be as fresh as if pumped by cistern pump.

G. B.

Ans.—It is a rule among pump-makers that the sucker must be within 25 feet of the surface of the water in the well for satisfactory work. If the sucker and valve in it were perfectly air-tight when it is being raised (that is when starting to pump), and the pump-log and cylinder were also air-tight, then, theoretically, the sucker might be from 32 to 34 feet above the surface, depending on the elevation above sea-level. However, these ideal conditions usually do not prevail. The sucker and valve in it are not air-tight, and consequently the practical rule is as stated—to have the sucker not more than 25 feet above the water surface. If the cistern pump in the pantry fulfils this condition, then you can pump from the well as indicated. You would need a foot-valve in the pipe in the well.

WM. H. DAY.

The late Joseph Pulitzer's idea of a great newspaper was once expressed by him in a cablegram to the staff of the New York World: "An institution which should always fight for progress and reform; never tolerate injustice or corruption; always fight demagogues of all parties; never belong to any party; always oppose privileged classes and public plunder; never lack sympathy with the poor; always remain devoted to the public welfare; never be satisfied with merely printing news; always be drastically independent; never be afraid to attack wrong, whether by predatory plutocrats or predatory poverty."

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BERLIN, ONTARIO, CAN. 7

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ARE EQUAL TO THE BEST.

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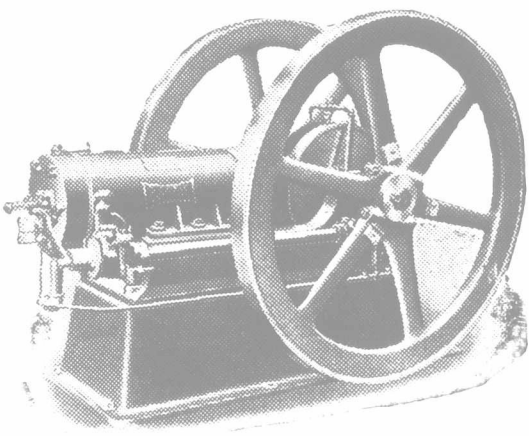
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### GOSSIP.

#### THE GREAT TILLSONBURG HOLSTEIN SALE.

As announced last week in these columns, and the advertisement of which appears in another column of this issue, the great Combination Sale of 135 head of strictly high-class Holstein-Friesian cattle, to be sold by public auction in a heated arena at the town of Tillsonburg, Ont., on Tuesday, January 2nd, 1912, is the occasion in the history of the breed in this country, for certainly never before in Canada were so many of so high a standard of individual excellence, of so high a standard of official production, and with so high official backing and breeding, been offered by auction. It is a sale established and intended to be held annually by a number of the leading breeders in Western Ontario, particularly from the County of Oxford, breeders whose reputation is above reproach, and whose herds represent away over half the winnings at the leading Canadian shows for many years past. We say this that parties interested from a distance may understand that every entry to the sale will be high-class, and that everything in connection with the sale will be strictly straight and above board. Of the 135 head to be sold, forty will be bulls, in age from calves up to two years, all sired by bulls with official R.-of-M. backing of a high standard, going back in several instances for several generations, and including among their nearest dams, world's champions. One of the young bulls is out of Lady Aaggie, winner of championship in the dairy test at Guelph, 1908 and 1909, with an average per cent. of butter-fat of 4.03. Two others, one four weeks, the other twelve months of age, are sons of Calamity Starlight Butter Girl, winner of championship at Guelph in the dairy test, 1910, whose butter-fat test was 5.05 per cent. One of them was sired by the intensely-bred bull, Grace Fayne 2nd's Sir Colantha, the other by a son of Queen's Baroness, winner of first prize in the Guelph dairy test, with a butter-fat test of 4.04. Another one-year-old is a son of Olive Schuilling Posch, winner of the championship in the test at Guelph this month. Her seven-day butter record is 27.5 lbs., and the record of the dam of the sire of this young bull is 27.55 lbs. Still another is out of the first-prize aged cow in the Guelph test of last year, with a seven-day record of over 24 lbs. Another is a son of the first-prize two-year-old at Guelph last year, whose record is 20.65 lbs. Another is a son of the senior champion cow at Toronto last fall, whose seven-day record is 22.47 lbs. Still another is a son of this year's first-prize two-year-old at Guelph, whose performance was 74 lbs. milk in 1 day, 215.1 lbs. in 3 days, which is 29 lbs. higher than was ever made before in the test by a heifer of her age. Her seven-day butter record is 18.16 lbs., and R.-of-P. test in 10 months is 14,650 lbs. milk. Another bull to be sold has the wonderful backing of his seven nearest dams, with seven-day records averaging 24 1/2 lbs., and two of them were tested as two-year-olds. Space forbids mention of the rich official backing of the balance of the young bulls, but those mentioned are representative of the entire lot. The females to be sold are gilt-edged in official backing. Two-thirds of them are in the official R. of M. or R. of P. records, several of them in both, their records running from 17 lbs. for two-year-olds, up to 25 lbs. for mature cows in the R. of M., and up to 20,000 lbs. in 1 year in the R. of P. tests, a very few of which can only be mentioned, such great cows as the Guelph champion of 1910, Calamity Starlight Butter Girl, with a butter-fat test of over 5 per cent.; Bessie Texal Pietertje, R.-of-M. record 25.40 lbs., R.-of-P. record 19,220 lbs.; Rettie De Kol, two-year-old record in R. of M. 16.54 lbs.; also four of her sisters, two of which, in milk, as two-year-olds, made in R.-of-M. tests 16.08 and 16.77 lbs. Among the lot is the dam and two sisters of the Toronto grand champion of this year. Those mentioned are just to show the quality of the animals to be sold. For full particulars of the breeding, records, etc., write for a catalogue to M. L. Haley, Springford, Ont.

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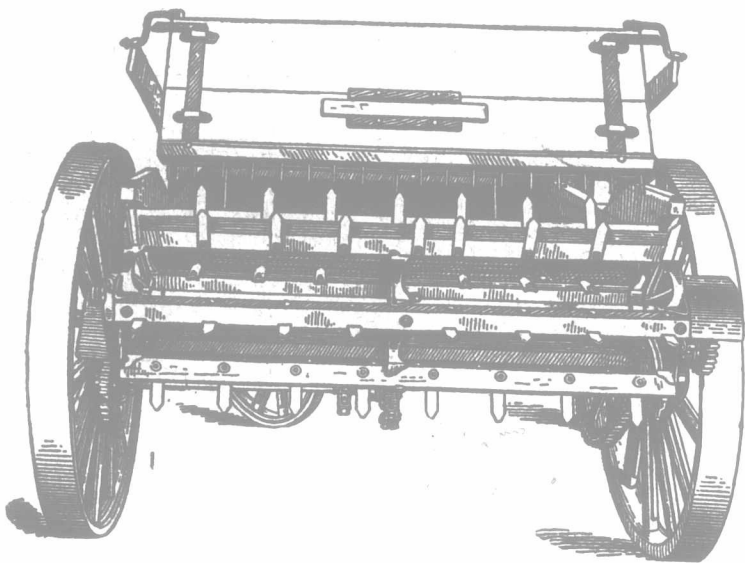
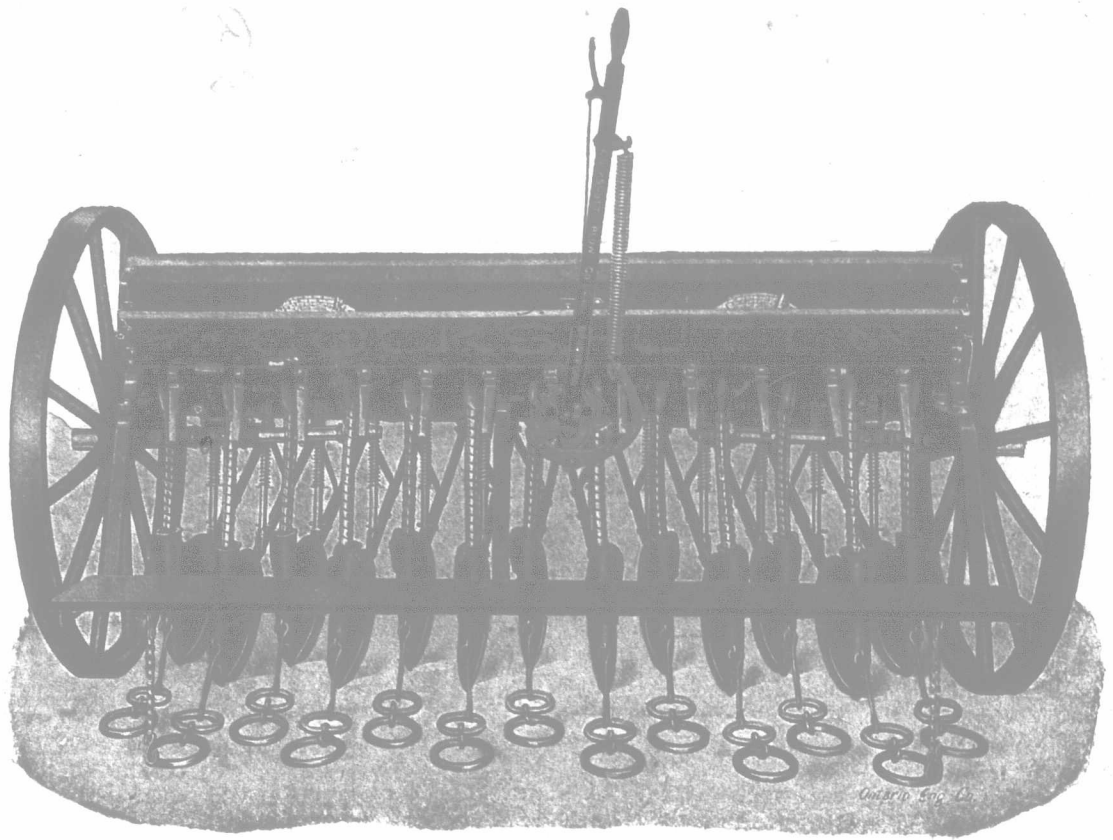
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