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THE FARMER'S ADVOCATE

AND HOME MAGAZINE

PERSEVERE
SUCCEED

Dairy and Cold Storage
Commissioners Dec 31, 14
Dept. of Agriculture

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

Vol. XLIX.

LONDON, ONTARIO, JUNE 25, 1914.

No. 1135

A Remarkable Telephone Record

18 out of 23 Municipal Systems Using Our Telephones

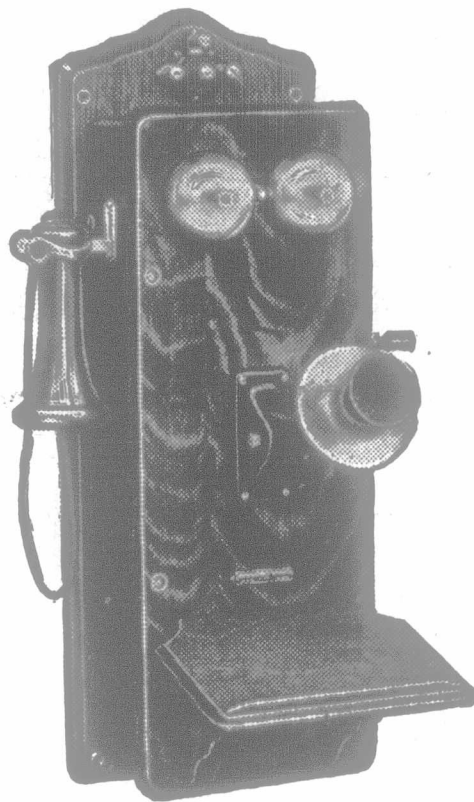
THE majority of the municipally-owned telephone systems in the Province of Ontario are using Canadian Independent Telephones and Equipment on their lines. This company got the telephone business of these systems in competition with all other telephone manufacturers. Our record speaks for itself. For example, take the latest twenty-three municipal telephone systems that have been built in Ontario. Eighteen are using our telephones. Here is the list:

Using Our Telephones

Tay
Medonte
Chingancousy
Huron & Kinloss
Oliver
Shuniah
Bruce
Hay
Brooke
Dawn
Euphasia
Beaver Valley
Floss
Moore
Waterloo
McDonald & Meredith
Fort Francis
Brighton

Using Other Phones

Vespra
Pelee Island
Osprey
Johnson & Tarbot
Dryden



Our Bulletins are FREE

SEND FOR THEM

The No. 3 tells how to build telephone lines—shows the most modern and efficient methods. The No. 4 describes our magneto telephones in detail.

If you would like to write to any of the municipal systems listed and get their experiences, we will be glad to furnish you with the names of the secretaries. Or we will be glad to help you ourselves by supplying you with full information as regards petitions, by-laws, steps to take to incorporate, cost estimates, etc.

The success of the Canadian Independent Telephone Company has been directly due to the superior quality of our telephones and indirectly to the fact that we are directly interested in the success of every locally-owned system. Our best advertisement is the loyal support we enjoy from our customers, who seemingly never miss an opportunity to say a good word for us and our telephone equipment.

Our telephones, switchboards, telephone wire and all kinds of equipment are fully guaranteed. The purchaser is protected in every way. The telephones, for instance, are sent for FREE TRIAL so that they can be thoroughly tested before risking the expenditure of a dollar.

Canadian Independent Telephone Company, Limited

20 Duncan Street, Toronto

Legions More Adopt Goodyear Tires

This Year's Increase So Far—55 Per Cent

Please mark this fact:

After men have tried millions of No-Rim-Cut tires, this year's sales jump 55 per cent.

After going by leaps from bottom place to the top, this tire in one year wins 55 per cent more users. And wins them, mark you, by the mileage test; for most users today meter mileage.

The Highest Court

This verdict comes from the highest court. There is no appeal from users. They bought last year more Goodyear tires than of any other tire in the world. On top of that, they this year buy one-half as many more.

That's because we ended rim-cutting in the only feasible way.

It is because we saved men countless blow-outs with our "On-Air" cure. And no other maker does that.

It is because one method—used by us alone

—lessens loose tread danger by 60 per cent.

It is because of our All-Weather tread—a double-thick, resistless anti-skid, which runs on dry roads like a smooth tread.

No other tire offers one of these features. And the verdict of users tells you what they mean.

Half Former Prices

No-Rim-Cut tire prices are about one-half what they were in 1909. Part of the saving comes in lower-cost rubber, but a very large part is due to quantity output.

There are 18 Canadian and U. S. makes of tires today which sell at higher prices—up to one-half higher. The cost of *three* of some of them will buy you *four* of Goodyears.

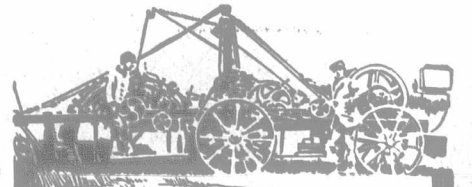
Yet we give you in all ways the utmost in a tire. And in four ways we give you more than any other maker offers.

If you consider these facts—with the verdict of users—you can't doubt what tire to buy.



THE GOODYEAR TIRE & RUBBER COMPANY OF CANADA, LIMITED
Head Office, TORONTO Factory, BOWMANVILLE, ONT.

For Sale by all Dealers



**The Money's There
Will YOU Get It?**

RIGHT in your own community there are thousands of dollars in ditch contracting waiting for the man who will be the first to get a ditching machine.

You can be that man. Others are earning \$15 to \$18 a day with a traction ditcher, making good land out of bad and at the same time saving money for the neighbors by reducing the cost of ditch digging.

**BUCKEYE
TRACTION DITCHER**

A perfect trench at one cut

This remarkable machine digs up to 150 rods of ditch a day. It works in practically all soils and every foot is true to grade. Twenty years of success behind it.

Figure out where you can make your own and other farms in your community worth more by tile drainage

Then write for the Buckeye Book of Facts "T"

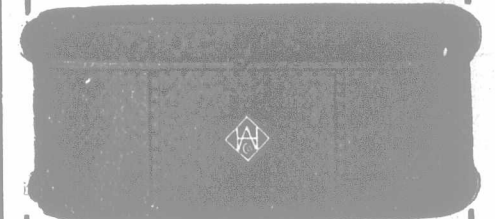
It will tell you what other men are doing and what you can do.

**The Buckeye Traction
Ditcher Company**

Findlay, Ohio
Builders also of Buckeye Open Ditchers and Gasoline Engines for farm service

**GALVANIZED
STEEL TANKS**

91 to 1,218 gallons



Our trade mark appears on all our tanks, guaranteeing the quality and workmanship.

If your dealer does not handle the H.-A. Co.'s, write for catalogue No. 24, showing over 700 different styles and sizes for ALL purposes.

THE HELLER-ALLER CO.
Windsor Ontario

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"Johnny-on-the-Spot," on skids or on truck, will take care of all your chores—pumping, separating cream, pulping, churning, washing, etc.

Stop wasting your time and energy in useless drudgery. Let "Johnny-on-the-Spot" do it—one of the famous Gilson "Goes Like Sixty" Line—a high quality engine at a low price. WRITE FOR CATALOGUE AND FULL PARTICULARS. ALL SIZES.

Gilson Manufacturing Co.
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2409 York St., Guelph, Ontario



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CHIMES AND PEALS**

MEMORIAL BELLS A SPECIALTY
FULLY WARRANTED
McSHANE BELL FOUNDRY CO.,
BALTIMORE, Md., U. S. A.
Established 1866



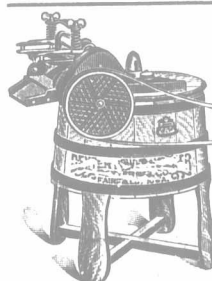
For poultry houses, pig-sheds and all the hundred-and-one other small buildings around the farm there is nothing better or more economical than

**SAMSON
ROOFING**

Samson must be good enough to back up the guarantee that accompanies every roll of it or we could not afford to so guarantee it. The life of a roofing depends on the thoroughness with which the fabric base is saturated with the waterproofing compound and the hardness of its surface. In the making of Samson Roofing special attention is given to these points. Bear in mind that Samson Roofing contains the qualities of economy, durability, and fire-proofness to the highest degree attainable by the use of the best of materials and the greatest of care in its making.

Write for our booklet "The Roofing of Farm Buildings." It contains many useful suggestions. Ask your dealer for Samson brand.

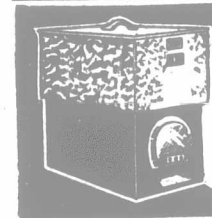
U. S. HOWLAND, SONS & CO., Limited
142 Front Street West Toronto



**WASH DAY
DRUDGERY**

is overcome. This machine will do your washing quicker, easier and better. A necessity in every home. Pays for itself in a short time. We furnish hand machines, power outfits with special engine, and electric outfits. Write for prices and catalogue.

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2709 York Street,
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FEED COOKER!**

Strong, galvanized steel tank, sits right over fire. Cooks quickly. Easy on fuel. Three sizes. Write for catalog.

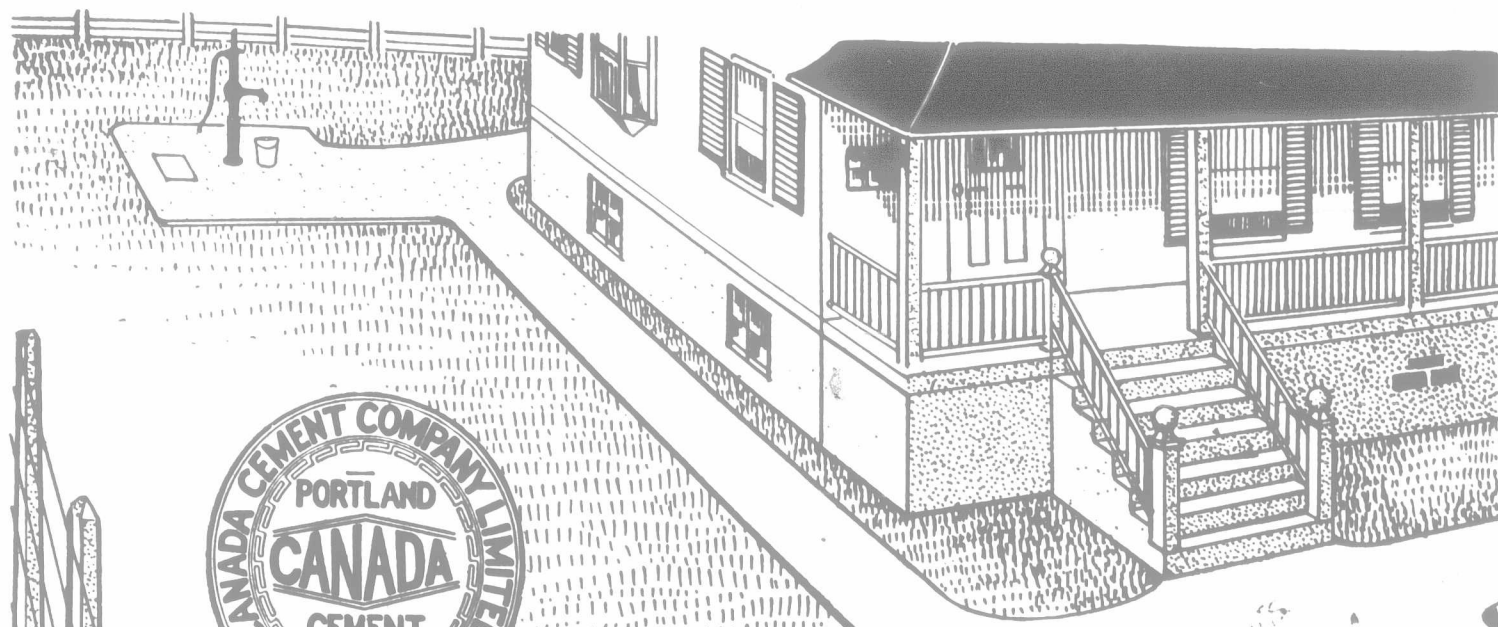
The Steel Trough and Machine Co., Ltd.
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Build Silos, Dwellings, or any class of building from Concrete Block. The London Adjustable Concrete Block Machine makes every kind and size of Block. High grade. Moderate price. We manufacture a full line of Concrete Machinery. Tell us your requirements.

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Visiting advertising agents for The Farmer's Advocate.



Concrete walks need no repairs

THEY are not only best at first but are cheaper in the end than any other kind of walk. They are clean, permanent and safe. There is nothing to become loose nor are they slippery. They improve the general appearance of a house and are a source of great satisfaction to every housewife because they keep children out of the mud, prevent colds from wet feet and prevent dirt from being "tracked in" on floors and carpets. Equally important is the fact that they never wear out and never need repairs.

This free book, "What the Farmer can do with Concrete," tells all about concrete walks and how to build them, and a score of other things needed on every farm. Write for it to-day.

Farmers' Information Bureau

Canada Cement Company Limited

559 Herald Building, Montreal



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York Street,
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NEED A
COOKER!

vanized steel tank,
over fire. Cooks
easy on fuel. Three
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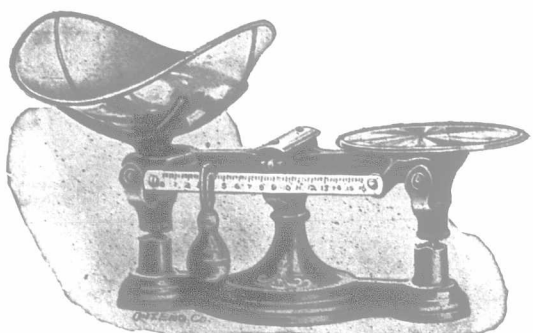
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Silos, Dwellings,
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Moderate price.
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CHINERY CO.,
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4-lb. and 10-lb. Even-Balance Scale

With Brass Side Beam



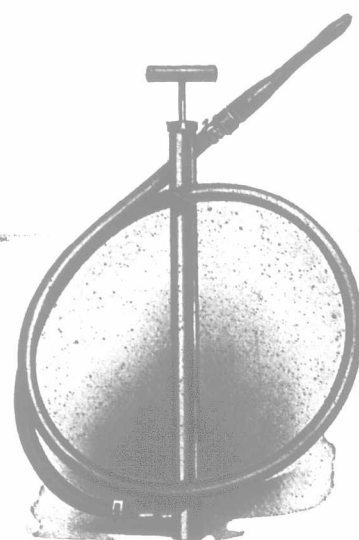
Government Certificate accompanies each scale. Delivered at your nearest Express Office in Ontario.

4-lb.....\$3.10
10-lb..... 4.00

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Aylmer Veterinary Pump

No farmer or stockman can afford to be without one—it being all brass and lasts a lifetime. Price \$5.00, complete with hose and nozzle, delivered at your nearest Express Office. WRITE US TO-DAY.



AYLMER PUMP & SCALE CO., LIMITED
AYLMER - ONTARIO

DO YOU Wish to Secure The Greatest Heat At the Least COST ?

PEASE "ECONOMY" FURNACES

We might go into great detail in describing the many mechanical features that make Pease Furnaces superior, but after all is said we come back to the main question that is most vitally important to YOU:

"Will I get the greatest heat at the least cost if I instal a Pease Furnace?"

The experience of over 70,000 users during the past 36 years says "YES" so strongly to this question that no one considering the purchase of a heating system of any sort can afford to overlook the Pease System.

For instance the fire-pot in the new 700 Series Pease Furnace is so constructed that you can always have a clean fire and use every possible unit of heat generated from the Coal. This one feature alone makes the Pease "700 Series" Furnace 50% more efficient than the ordinary heater.

There are many other money-saving, labor-saving features about the Pease that YOU will be glad to know about.

Don't wait until Fall to instal a Pease. Do it just as soon as possible this Spring when there is plenty of time to make the most perfect installation.

The Pease Furnace has justly earned its slogan

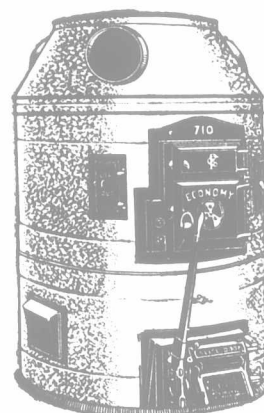
"Pays for itself by the Coal it saves."

Write for illustrated booklet to-day; sent free.

PEASE FOUNDRY COMPANY.

TORONTO, ONT.

BRANCHES: HAMILTON, WINNIPEG AND VANCOUVER.
WORKS: BRAMPTON. 1241



FREE LAND for the settler in NEW ONTARIO

Millions of acres of virgin soil, obtainable free and at a nominal cost, are calling for cultivation.

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

For full information as to terms, regulations and settlers' rates, write to

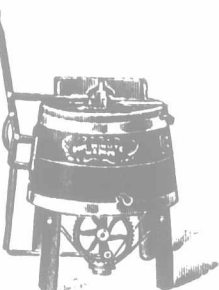
H. A. MACDONELL
Director of Colonization
Parliament Bldg. TORONTO
HON. JAS. S. DUFF
Minister of Agriculture
Parliament Bldg. TORONTO

One Minute Washer

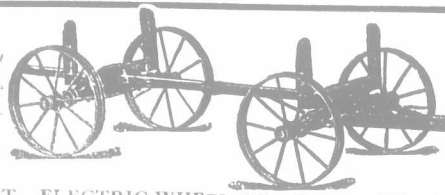
Best Machine Made—Easy to Operate
Washes Clean—Moderate in Price

Write to-day for Catalogue

ONE MINUTE WASHER COMPANY, Toronto



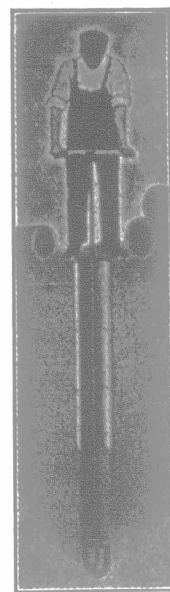
\$27.00 FARM TRUCK
28" to 30" 4 x 3/8"
plain or grooved tire
wheels 4000 lbs. ca-
pacity.



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Write us to-day, and learn how you can start a profitable business, digging wells for others, on an investment of but \$12.00. Works faster and simpler than any other method. 100-foot outfits at \$25.00.

Write us for full information.

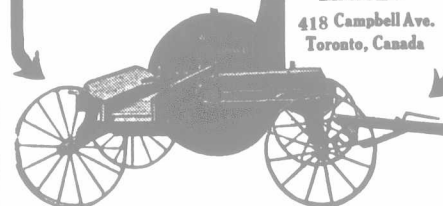
Canadian Warren Axe & Tool Co. Limited
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Our "B" machine, built especially for the farmer. A combination machine—it will cut and deliver green corn into the highest silo or dry straw or hay into the mow. 12-inch throat, rolls raise 6 inches and set close to knives—solid, compact cutting surface. Can change cut without stopping. Can be reversed instantly. Direct pneumatic delivery. Knife wheel carries fans. No lodging, everything cut, wheel always in balance. Steel fan case.

Made in two styles—mounted or unmounted. We also make larger type machine for custom work. Ask your dealer about this well-known machine and write us for new catalogue showing all styles.

THE BATEMAN-WILKINSON CO., LIMITED
418 Campbell Ave.
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We start you in the

WELL DRILLING BUSINESS

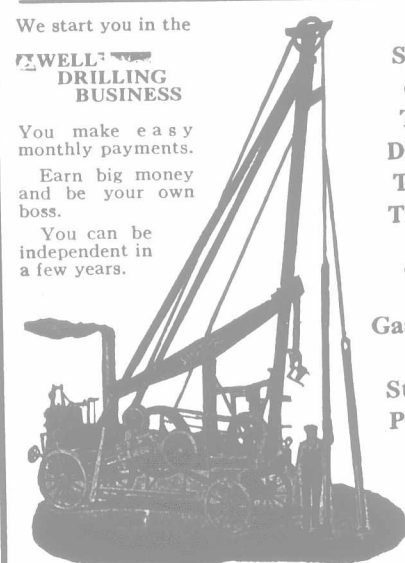
You make easy monthly payments.

Earn big money and be your own boss.

You can be independent in a few years.

Sent on Ten Days' Test Trial.

Gasoline or Steam Power



Write at once for illustrated catalogue and specifications.

THE STAR DRILLING MACHINE COMPANY
478 Washington St., Akron, Ohio.

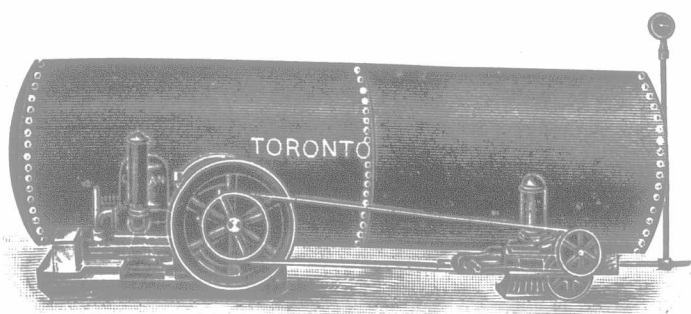
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everywhere to ride and exhibit a sample 1914 Hyslop Bicycle with coaster brake and all latest improvements. We ship on approval to any address in Canada, without any deposit, and allow 10 DAYS' TRIAL. DO NOT BUY a bicycle, pair of tires, lamp, or sundries at any price until you receive our latest 1914 illustrated catalogue and have learned our special prices and attractive proposition.

ONE CENT is all it will cost you to write us a postal, and catalogue and full information will be sent to you Free Postpaid by return mail. Do not wait. Write it now. **HYSLOP BROTHERS, Limited**
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OH! THE JOY OF IT

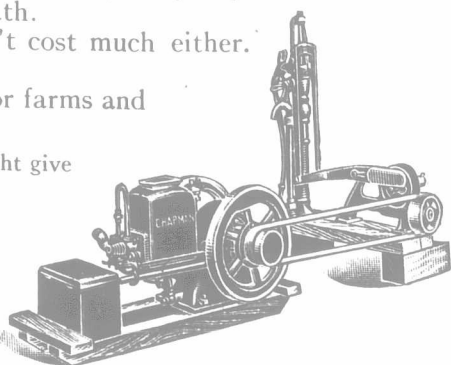


Did you ever come home after a hot, dusty day in the field and get into a nice refreshing bath. You can do it, and it doesn't cost much either. We know how. Water System Specialists for farms and suburban homes.

Write for our Catalogue. It might give you some good ideas.

MANUFACTURERS OF

Windmills, Gasoline Engines, Feed Grinders, Saws, Frames, Pumps, Tanks, Water Basins, Stanchions, Stalls, Well Drills, Pressure Tanks.



Write for Catalogue L

Ontario Wind Engine & Pump Co. LIMITED

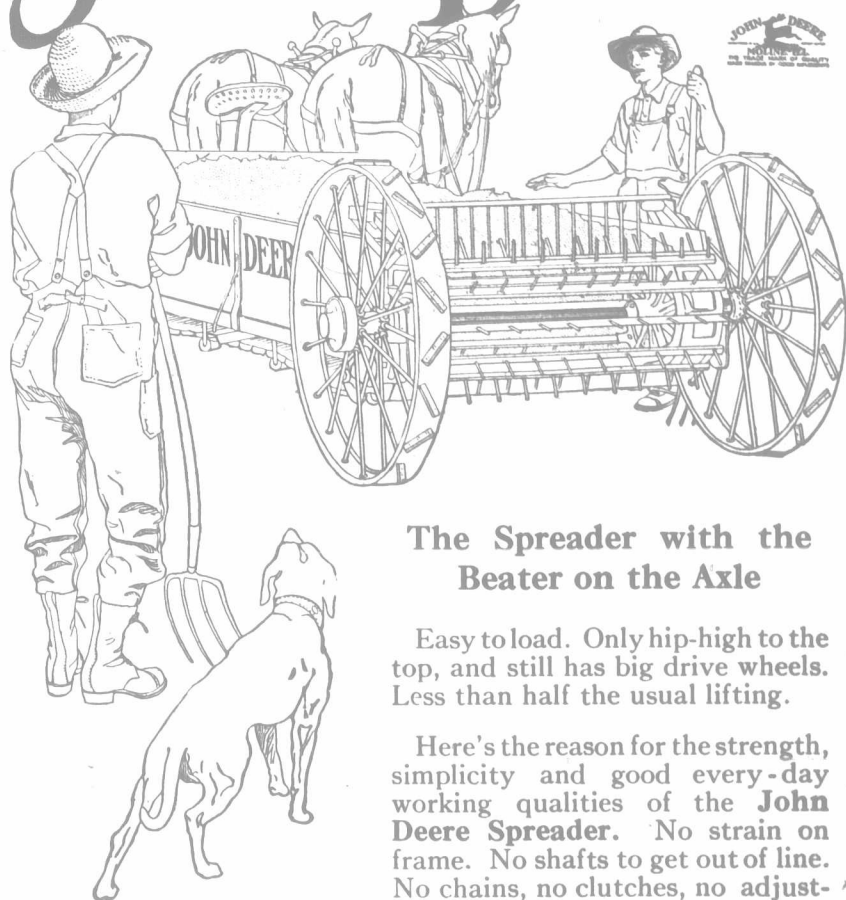
67 Liberty St., Toronto, Ont.

Factories—Dundas, Ont. and Toronto, Ont.

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JOHN DEERE



The Spreader with the Beater on the Axle

Easy to load. Only hip-high to the top, and still has big drive wheels. Less than half the usual lifting.

Here's the reason for the strength, simplicity and good every-day working qualities of the John Deere Spreader. No strain on frame. No shafts to get out of line. No chains, no clutches, no adjustments. Only half the parts heretofore used on the simplest spreader.

Light draft because of few parts, the roller bearings and the beater and apron being driven directly from the rear axle. Built of steel, securely braced.

BOOKS FREE

Every farmer who asks about the JOHN DEERE SPREADER will also receive "Farm Manures and Fertilizers." This book tells all about manure, how to apply it and how to double the value of each load by a proper system of top-dressing.

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ROOFING

"George" and "Oshawa" Steel Shingles, Corrugated and Corro-crimp Sheets, Painted or Galvanized Siding, Trough and Pipe, Ventilators, Corrugated Culverts, Metal Buildings.

Don't wait to ask the price—we assure you the best prices going. You know our high standard of quality. You can entrust your building needs to



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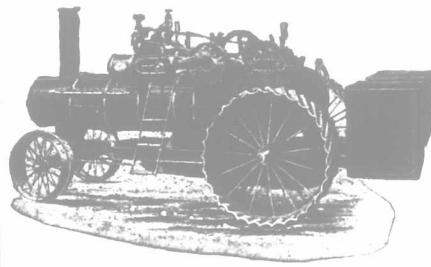
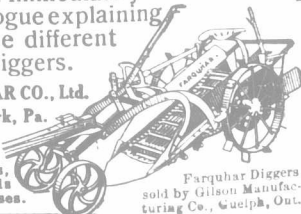
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The Farquhar Elevator Potato Digger does the work of a crew of men. It frees all the potatoes from the soil and puts them on top ready for sacking. If you raise potatoes for profit, it will pay you to send immediately for new illustrated catalogue explaining all about the different Farquhar Diggers.

A. B. FARQUHAR CO., Ltd.
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We also manufacture Engines, Saw-mills, Reapers, Drills and Cider Presses.



TRACTION ENGINES

New type rear-mount, also rebuilt traction and portable engines and threshers. Some splendid bargains in rebuilt outfit. Send for rebuilt list.

The Robert Bell Engine & Thresher Co., Ltd.
Seaforth Ontario

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July 20 to 24, 1914

The Exhibition that always pleases. Growing bigger every year. It's the great agricultural and live stock exhibition of the West. A premium won at Brandon counts for something.

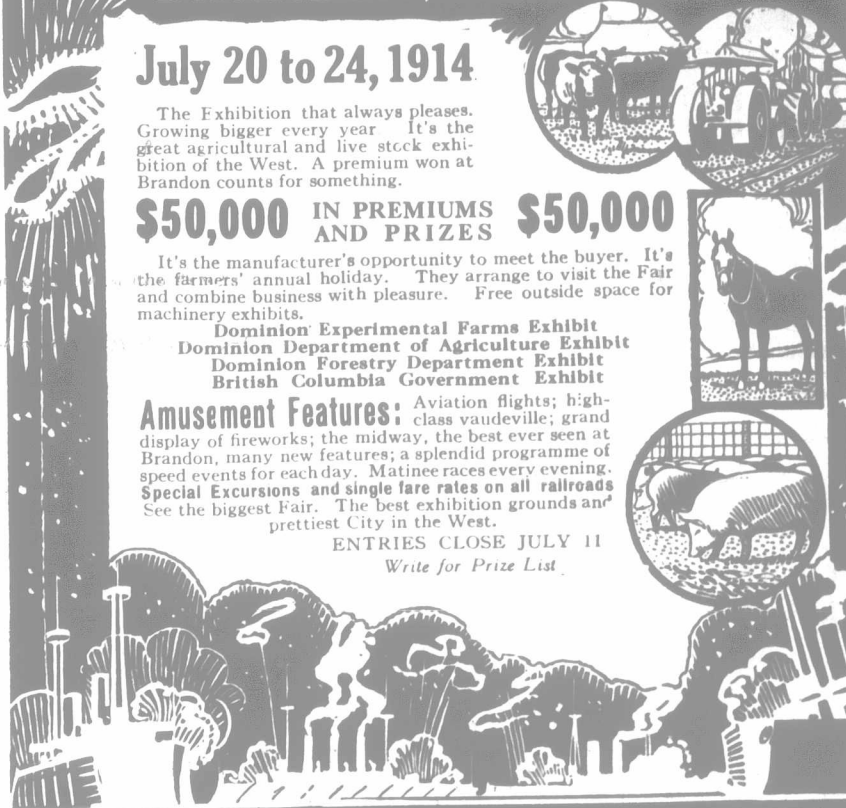
\$50,000 IN PREMIUMS AND PRIZES \$50,000

It's the manufacturer's opportunity to meet the buyer. It's the farmer's annual holiday. They arrange to visit the Fair and combine business with pleasure. Free outside space for machinery exhibits.

Dominion Experimental Farms Exhibit
Dominion Department of Agriculture Exhibit
Dominion Forestry Department Exhibit
British Columbia Government Exhibit

Amusement Features: Aviation flights; high-class vaudeville; grand display of fireworks; the midway, the best ever seen at Brandon, many new features; a splendid programme of speed events for each day. Matinee races every evening. Special Excursions and single fare rates on all railroads. See the biggest Fair. The best exhibition grounds and prettiest City in the West.

ENTRIES CLOSE JULY 11
Write for Prize List.



J.S. GIBSON, President

W.I. SMALE, Sec'y and Mgr.

When writing advts. please mention The Advocate.



**DICK LEVER
PLOW WHEELS**

will fit nearly all plows. They are superior to all other makes. Let us tell you why.

Your boy can do as good work with the assistance of this attachment as the best plowman.

Drop us a card to-day for full particulars.

**Dick Agricultural Works,
Bolton, Ontario**



**FREEMAN'S
BONE
MEAL**

BEST ON EARTH

MORE PHOSPHORIC ACID TO THE DOLLAR'S WORTH THAN IN ANY OTHER FERTILIZER

Send for Booklet on Fertilizers and Fertilizing with Guaranteed Analysis

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Via LIVERPOOL on the palatial steamships:

MEGANTIC, JULY 4
CANADA, " 11
LAURENTIC, " 18

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★ CANADA AND EUROPE ★

SEND for wholesale catalogue to Lancashire's Cheapest Drapery Warehouse, and learn how to increase income. Make money selling British goods, tablings, towellings, ready-mades, dress materials, ladies' overalls, pinafore muslins. Cochrane's Warehouse, Victoria Bridge, Manchester, England.

You need a New DE LAVAL CREAM SEPARATOR NOW

1st If you are still using some gravity or setting process of creaming—

BECAUSE your waste is greatest and quality of product poorest in mid-summer, when the milk supply is greatest.

BECAUSE time is of greatest value on the farm at this season, and the time and labor saving of the good separator counts for most.

BECAUSE the skim milk is poorest without a separator in hot weather and often more harmful than helpful to calves and young stock.

2nd If you have a very old De Laval or an inferior separator of any kind—

BECAUSE the losses of the poor separator from incomplete skimming and the tainted product of the difficult-to-clean and unsanitary separator mean most when the bulk of milk is greatest.

BECAUSE of the great economy of time at this season in having a separator of ample capacity to do the work so much more quickly.

BECAUSE an improved De Laval Separator is so much simpler and more easily handled and cared for than any other, and you cannot afford to waste time these busy days "fussing" with a machine that ought to have been thrown on the junk pile long ago.

BECAUSE the De Laval Separator of today is just as superior to other separators as the best of other separators to gravity setting, and every feature of De Laval superiority counts for most during the hot mid-summer months.

These are all facts a De Laval catalogue, to be had for the asking, helps to make plain, and that every De Laval local agent is glad of the opportunity to prove to any prospective buyer. If you don't know the nearest De Laval agency, simply write the nearest main office, as below.

De Laval Dairy Supply Co., Limited
MONTREAL PETERBORO WINNIPEG VANCOUVER
50,000 BRANCHES AND LOCAL AGENCIES THE WORLD OVER




DIRK'S RED MITE KILLER

One application KILLS all Mites and prevents their reappearance during the season. Keeps fowls free from body lice. Makes scaly legs bright and clean. Keeps lard, pastry and sweets free from ants. Bedbugs will give no trouble where used. Write to-day for special trial price. Booklet free. Marshall & Marshall, Niagara Falls, Ont.

SPECIALLY MADE FARM FOOTWEAR

\$3 Delivered to you



Here is a light weight, durable and comfortable working shoe specially suitable for farmers, woodsmen, millmen, trackmen, laborers—all who require extra strong, easy footwear for working in. We make them of the splendid oil-tanned Skowhegan waterproofed leather that has made Palmer's "Moose Head Brand" famous for almost forty years. No need to suffer with tired, sore, aching, burning feet. Get a pair of these and find ease and comfort. If your dealer doesn't carry them, send us his name, enclosing \$3, and we will ship you a pair, all charges paid, to any address in Canada or U. S. Remit (stating size) by postal or express order. Same style as shown, 8 eyelets high, \$3.50. Write for catalogue.

JOHN PALMER CO., Limited,
Fredericton, N. B., Canada. 18

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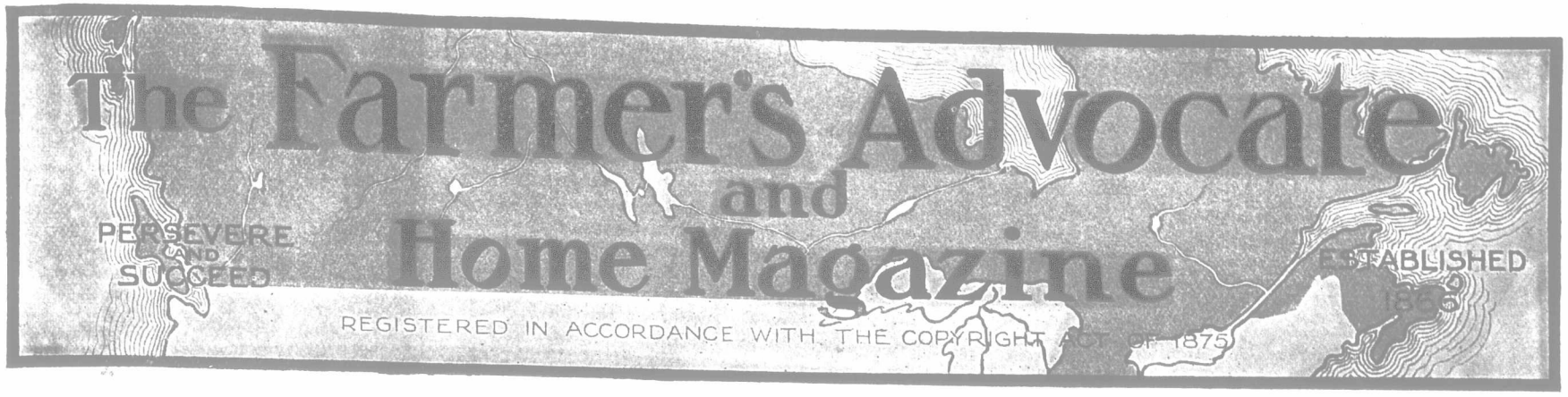
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VOL. XLIX.

LONDON, ONTARIO, JUNE 25, 1914.

No. 1135

EDITORIAL.

Feeding value is lost by letting hay get too ripe. Do not delay haying operations.

Each cultivation made at this season increases the tons of silage and the bushels of roots.

Pigs like clover, and they do better to get right out in the paddock and pick it. Give them a chance.

A good hint is given to makers of dairy utensils in Prof. Dean's article this week. They should advertise.

Read how to make dairying pay in another column. It pays in Oxford County, it will pay in your county.

If you see a weed pull it, spud it, hoe it out, cut it or cultivate it to death. It matters not how you kill it as long as you kill it.

When the mercury soars to 95 or 100 degrees F. in the shade do you not wish you had put in some ice last winter to keep the milk and cream sweet until delivered?

If you do not know what a District Representative is you should get acquainted with the one in your district. A correspondent gives an outline of his experience elsewhere in this issue.

We recently heard this remark, "Anybody can grow good crops in a favorable season." Can they? We do not think so, and besides there is a great difference in so-called good crops.

The time is at hand when a new leaf will have to be turned in hay culture if creditable records are to be made on many farms in the older Canadian provinces. Timothy and clover fields are this season holding out distress signals like this: "More nourishment and better tillage wanted."

With the increasing area and attention devoted to vegetable and fruit crops, the hazards of June frosts become more serious. An efficient system of frost warnings from "Old Probs" of the meteorological service, during the critical periods, would be appreciated by gardeners and farmers.

The authorities having used the baton, prison, starvation, forcible feeding and ridicule without avail on the English suffragettes, why not try about the one remedy left, viz., give them what they want, the ballot? They would make less trouble with it than they are doing now, and it is only a question of time anyway when they will vote.

Another war in the Balkans seems imminent. Most people think a war so far away is not likely to affect us in North America, and yet financiers tell us that the late Balkan war had much to do with the financial stringency of which we have heard so much recently. War is always carried on at the expense of the people and generally affects people other than those of the nations actually engaged.

What Parliament Did.

The Dominion Parliament recently prorogued after a somewhat long-drawn-out session, in which the game of politics figured very largely as did also the Canadian Northern Railway kings of the country. There were no such bitter fights staged as was the case during the session the previous year when the Naval Bill was the bone of contention which kept both sides snarling at each other until the Senate finally quashed it and the fight was over.

Among the commendable features of the past session was the passage of the Dairy Industry Act, a strenuous fight for which was put up by "The Farmer's Advocate" and the various Dairymen's Associations. The new Act bars all forms of butter substitutes, and no doubt will remain effective for years to come. It also provides fully for the punishment of those who attempt to manufacture renovated butter, and it is now possible by regulation to control the classification, marking and branding of the products of the dairy. Hon. Martin Burrell, Minister of Agriculture, brought in the bill, and he with parliament must be congratulated upon placing on our statutes such an Act to preserve and encourage the great industry of dairying, and do their just part in placing it upon even a firmer basis than it has heretofore been.

A good sister to the Dairy Industry Act was passed to regulate the manufacture and sale of maple syrup. If the new regulations are strictly enforced all imitations and adulterated products must be truly labelled, and the word "maple" can only be used on the pure product of the maple tree. Canada's maple industry was, until this amendment to the Adulteration Act, in rather a precarious condition. The good old name "maple" was being used on all kinds of products to the detriment of the business. Producers and consumers alike join in their praises of the passage of these regulations which also cover honey.

The Government also saw fit to increase the Federal aid to agriculture in the Provinces which money will be used to better equip the educational institutions, to spread agricultural information and increase interest in farming generally through a better understanding of the business.

We do not wish to comment one way or the other on tariff changes more than to state that what the farming communities asked by way of a reduction on farm implements and also for free wheat was little heeded. The latter was not conceded, and the implement reduction amounted to a very small cut on two or three machines only. Manufacturers seem to hold the whip hand when it comes to a tariff revision, and while the general trend is downward the movement is slow and governed pretty much according to the views of moneyed manufacturers. However, the cut that was made on implements was in the right direction. More would have been appreciated by users.

Readers of these columns know where we stand on the question of militarism. There was little excuse for the increased expenditure, as brought down by the Minister of Militia in his budget speech. Everyone expected that this statement would show increased outlay, but few thought that the Opposition would sit complacently by and allow everything in it to pass without more than a very feeble and indifferent effort to show

conditions in their true light, and prove the folly of making Canada a military country. The Opposition missed a good chance to justly criticize. As time goes on we are more than ever convinced that members of either party think more of buying votes with new armouries in their constituencies than they do of earning them by supporting good legislation and opposing that which works harm to their constituents. Where will this military expenditure end? The Government and the Opposition alike are to blame for the big start which has been made toward an armored and red-coated Canada, an expensive form of making millionaires out of a business with no utility to support the contentions made in favor of it. Technical education might have had a little more than the sympathy of the representatives, and technical schools would be much more profitable in most cases than armouries.

Towards the close of the session the incessant lobbying of Mackenzie and Mann came to a head in the form of a \$45,000,000 Aid Bill. It seemed that aid could not be avoided, but nevertheless criticism of the methods of these financiers was in order, and the business of parliament was to get the best possible security for the people's money. The C. N. R. got the money. Its promoters still hold a controlling interest, and are in an excellent position to further fatten their purses at the expense of the Canadian people. What could parliament do? The road must go on, and once again it was demonstrated that one or two clever financiers with money behind them can just about rule this wide Dominion. The joke of it all was the attitude of the Senate. One day the majority of the Senate came out against the aid and asked for more security. Simply bluff. The next day the men who led in asking for further security were the first to vote the aid in full. Opposition to the Bill was weak throughout with the exception of the stand taken by two government supporters Nickle and Bennett, the one bright spot in the debate, and the one indication that sooner or later independence is going to show itself in strength in our politics, and lobbyists will be gradually driven from our parliamentary halls.

Last came the Farmers' Bank Bill which passed the Commons, but was given the hoist by the Senators, who, as described last week by Peter McArthur, did some clever political manoeuvring to make it possible for each side to successfully place the blame on the other. It is a great game this political game, and the past session has demonstrated some really clever playing of it. We need more independent men on both sides of the House. The session was concluded by the Senate displaying their devotion to the principle that self-preservation is the first law of nature.

The Summer-Fallow.

A good summer-fallow is expensive, but a poor one over-run with weeds of all kinds is far more costly. This is the season to get after the weeds growing on the dirty run-down field which is or should be given clean cultivation in preparation for winter wheat this fall. We agree that summer-fallowing is expensive farming but if a field is very dirty sometimes it is almost absolutely necessary to follow the practice in order to clean it and bring it up to suitable tilth to go ahead and produce profitable crops.

If it is not dirty it should not be summer-fallowed and if it is it must get frequent cultivation

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else the field is left bare of a crop to no purpose and weeds gain even a stronger foothold than if a spring cereal or hay crop had been grown upon the land. To be in the best condition the summer-fallow should be worked rather lightly, but frequently. We would cultivate it with the broad-share cultivator almost as frequently as corn ground is worked. It is necessary to retain moisture and it is absolutely imperative that weeds be kept below ground to weaken and destroy them. Many summer-fallows are a disgrace to their owners and not worthy of the name. They should be kept just as clean as the corn and other hoed crops are kept. If this is impossible it is not the wisest practice to summer-fallow.

Nature's Diary.

A. B. Klugh, M.A.

More erroneous ideas prevail concerning snakes than in regard to any other group of Canadian animals. I have already mentioned the idea that all our snakes are dangerous to man and indicated how far this is from the truth. Another very common belief is that the forked tongue of a snake is its "stinger."

In regard to the Rattlesnakes several incorrect notions are prevalent. In the first place, Rattlers are supposed to be far more abundant in certain localities in the east of Canada than they really are. Two of these localities are Niagara Glen in the gorge of Niagara River and at the upper end of the Bruce Peninsula. In the former place I spent several days, always on the lookout for these reptiles and did not see a single specimen. At Tobermory, at the head of the Bruce Peninsula I was told of a place where Rattlesnakes were very common. I went through and through this piece of country, hoping to secure a specimen, but not one did I see. Rattlesnake Harbour, on Fitzwilliam Island, was so named because these snakes were supposed to be so common there, but I could find none. Now it is highly probable that in earlier days there were Rattlers in these localities, but to-day, if not

entirely extinct, they are extremely rare. In fact the only place where I have seen a wild Rattler is near Go-Home Bay, Muskoka.

Another erroneous idea is that a Rattlesnake may be rendered harmless by extracting the fangs; but the fangs are normally shed at intervals of about three months and there is always a new pair ready to take the place of those extracted. The poison apparatus of the Rattlers consists of two long, hollow fangs, provided with an elongated orifice at their tips, and connected with a gland, situated behind the eye, which contains the venom. The fangs are fastened to a movable bone of the upper jaw. When the jaws are closed the fangs fold back against the roof of the mouth. As the jaws are opened they spring forward, ready for action. The ejection of venom is caused by the contraction against the glands of the muscles which close the jaws, and is purely voluntary, as the jaws may be closed without contracting these muscles sufficiently to force venom from the glands. The fangs are covered with a sheath of thin, white, membranous flesh, which is never withdrawn from them except in the act of striking. In striking the jaws are opened to such an extent, and the fangs so elevated, that their tips point almost directly forward. The mouth is not opened until the head has started forward, and it is during the latter part of the blow that the jaws are thrown open to their widest extent.

The Rattler can strike a well-aimed blow only at a distance of one-half its own length, though when greatly enraged it may strike wildly at two-thirds its length. It never springs bodily at its enemy, as is frequently supposed, such a feat being a physical impossibility for a snake.

The belief that the age of a Rattlesnake can be told from the number of rings in the rattle, and that each ring stands for a year is entirely erroneous. Up to a certain age the number of rings does tell the age of the snake, but in a totally different way to the popular supposition, as we shall see when we study the growth of the rattle.

When the young Rattlesnake is born, it is provided with a soft button at the end of the tail, which though vigorously shaken in imitation of the parents rattle produces no sound, as it is rigidly attached to the tail. Within a few days it sheds its skin, then grows rapidly and in about two months sheds its second skin, when the first ring of the rattle is uncovered. Immediately after shedding the skin this ring is black and soft. It loosely encloses the base of the button, and after a few days, when the ring has become thoroughly dry and the tail is shaken, a faint, buzzing sound is produced, this being caused by the loosely attached button rasping against the dry segment to which it is fastened. Every succeeding ring is produced in exactly the same way, and as in the following years of its life the Rattler moults three times a year, in spring, mid-summer and fall, we see that if the button is still present, and we allow the button and first ring for the first year, and three rings for each succeeding year we can ascertain the age of the snake. Even if the button and some rings have been lost, but the rattle still tapers towards the tip, we can estimate the number of lost rings and arrive approximately at the age. But if the rings are all of uniform size we can tell only that it is a fairly old snake.

The sound made by a Rattlesnake, can hardly be described as a "rattle" it is more like the rasping sound made by rubbing the edges of two dead leaves rapidly together.

When cutting the hay, it is good practice to have a man with a good sharp scythe mow all the herbage in the fence corners around the field, and also in those of the adjoining fields. There is no way by which weeds and weed seeds are spread to a greater extent than by allowing all kinds of them to grow and mature in the fence corners. Besides getting rid of the weeds considerable good cow hay is produced in this manner and cut the corners add greatly to the appearance of the place. Get after the sow thistle, Canadian thistle, quack grass, curled dock, burdocks and dozens of others in this manner. It would be better as a general thing to have fewer fences, but where they are the next best thing is a careful mowing of all fence corner growth.

Some countries are crying out for emigration and others for immigration to cure their local ills. Quack remedies both of them. There is hardly a country in the world to-day physically desirable for human habitation, which is really over-crowded. What they need is conditions that will spread their populations over the land.

THE HORSE.

Indigestion in Horses---VI.

Enteritis or inflammation of the bowels is one of the most rapidly fatal inflammatory diseases to which the horse is liable, often causing death in a few hours. Many of the diseases of the digestive organs, some of which have already been discussed in this series, result in enteritis, but we will now discuss it as a primary affection. Any portion of either the small or large intestine is liable to be the seat, and in some cases the greater part of both is involved. The inner or mucous coat is usually first attacked, but the inflammation extends and involves the middle or muscular and also the outer coat, and there is often an extravasation of blood into the canal, due to rupture of the small blood-vessels.

Causes.—The principal causes are fatigue, exposure to cold, standing in a cold draught, or watering with cold water when heated, but, like other intestinal diseases, it frequently occurs without well-marked cause.

Symptoms.—The first well-marked symptoms are usually those of abdominal pain, evidenced by uneasiness, stamping of the feet, whisking of the tail, looking around towards the flank, a desire to lie down, etc. These symptoms are, however, usually preceded by some degree of constitutional disturbance (which may pass unnoticed) as shivering, acceleration of the pulse and respirations, repeated evacuation of small quantities of semi-liquid faeces and general depression; the mucous membranes soon become deeply congested, the mouth dry and hot, the tongue contracted and sometimes of a brownish color; the appetite of course is lost; the pulse is hard, strong, wiry and frequent; the abdomen is tender upon pressure; the abdominal muscles more or less contracted. In some cases slight bloating is noticed. In a variable time the symptoms of dullness and depression give way to those of pain and excitement; he stamps with his feet, strikes at his abdomen, lies down, but usually does so very carefully, often making several attempts or feints, and then goes down very carefully; will probably endeavor to lie on his back; turn his eyes toward his flank, pant, blow and perspire freely. There are no sharp paroxysms of pain with periods of ease as in cases of spasmodic colic. The pain is constant, distressing and agonizing, but to some extent varies in intensity, the body is usually covered with perspiration. In some cases he will stand for hours with his head in a corner, and paw persistently with one or both feet. In other cases he will walk aimlessly around the stall or paddock in a circle, apparently almost blind, knocking his head against the wall or fence. The pulse is at first hard, full and frequent, varying from 80 to 120 per minute, but generally decreases in strength and fullness, and becomes thready and almost or quite imperceptible. He sighs or groans from pain and perspiration drops off the body. The skin is seldom dry, at one time hot and another cold, the countenance becomes haggard, the eyes expressive of delirium with the pupils dilated. He may now throw himself about in a dangerous manner, but usually stands as stoned, or moves aimlessly about; then stand and balance himself as long as possible, when he will fall and expire with a few convulsive struggles. In other cases the symptoms of pain subside and he will stand quietly, even drink a little water or endeavor to eat, and his breathing becomes more or less tranquil. This leads the owner to think that recovery is taking place, but the symptoms indicate that mortification is commencing; the haggard expression remains, the pulse continues imperceptible at the jaw, cold sweats bedew the body, the abdomen becomes bloated, he trembles, ears and legs become cold, mouth and breath cold and often foul smelling, the lips drop pendulous, the eyes become glassy, and in a varying period he drops and dies, the bowels usually remaining inactive to the last. If, however, in three or four hours from the commencement of the attack, there is some abatement of the symptoms, if the surface of the body becomes dry, if there be a passage of faeces or gas, the pulse becoming softer and less frequent, and the characteristic anxiety of expression disappears, a favorable termination may be looked for.

Treatment.—As the mucous tract of the bowels is the primary seat of trouble treatment must be directed with a view to checking peristaltic action until the inflammatory action has ceased, and although there usually is an inactive condition of the bowels purgatives or laxatives must on no account be given. Treatment must tend to relieve pain and check movement of the intestines. For these purposes opium must be administered in large doses. In the early stages, when the pulse is full and strong, if depression be not well marked, it is good practice to take three or four quarts of blood from the jugular vein. From 2 to 4 drams of powdered opium should be given in a pint of cold water as a drench, and rather smaller doses repeated every two hours until the symptoms are relieved. Cloths wrung out of hot water should be applied to the abdomen continuously for an hour or two

and care must be taken to clothe the patient well afterwards to prevent too great reaction. If after abatement of the symptoms the bowels remain torpid (as they generally do) the removal of this torpidity must not be attempted by the administration of drastic purgatives. Very small doses of raw linseed oil, say 4 to 6 oz. with 2 drams nux vomica may be given every eight hours, and the contents of the rectum removed by injections of soapy warm water occasionally. When appetite returns the most easily digested food, as bran and boiled linseed should be given, and the eating of dry food prevented until the bowels commence to act; and then solid foods should be given in small quantities for a few days.

WHIP.

Where Is the Horse Business Going?

It is no use saying "the horse business is as good as ever," because any one acquainted with the trade at all knows that to be untrue. However, we should not get too pessimistic, as prices for good animals still remain firm on our leading horse marts. Motor power has usurped as it were the place that ordinarily would have been occupied in the growing trade of towns and cities by the horse-drawn vehicle. Chicago is a city teeming with electric and gas-propelled conveniences for transportation and from April 30, 1911 to April 30, 1914, auto delivery wagons and auto trucks increased from 799 to 4,207 or 3,408 in all. During the same time, horse-drawn vehicles decreased from 58,114 to 54,429 or 3,685 in all. Where short, heavy hauls are necessary the horse will still hold sway. It is the long weighty cargo that makes the truck a profitable means of transportation. This circumstance in itself does not explain the weakening of the trade in horses, but other cities have a like tale to tell and although Chicago does not present the displacement of horses that one would expect the numbers are none the less significant.

More acres coming under cultivation and more intensive farming now being practiced necessitates a greater number of horses, and when the autocar becomes common in our towns and cities it will lose a part of its advertising value to its owners. The up-to-date, horse-equipped vehicle, many even have a greater value in that regard, and when they are at a par in that respect decision will hinge upon economical operation. When that time comes we are led to believe that the battle will be more equal. Tractors will plow and seed the prairies, but when it comes to cultivating we must depend on the horse. This is no idle dream for the mining system of farming in the West is gradually yet surely moving backward from the railroads. In proof of this the twenty carloads of Western hogs recently offered on the Toronto market is substantial evidence. The West will eventually, no doubt, look after its own horse business, for they are breeding good horses there in numbers. However, the Eastern States of the Union are now taking a considerable number of our eastern-bred animals, and they are willing to pay a fair price. The horse has without doubt seen a period of slight depression, but circumstances do not warrant any extreme pessimistic view for the future.

LIVE STOCK.

Our Scottish Letter.

May has gone, and taking the two months, April and May together it may be said generally that seldom have the farmers of Scotland had a better seed-time. The genial warmth of the second half of April is not likely to be soon forgotten. Hill farmers have had an extraordinary lambing time, and arable farmers an abnormal seed-time. The only drawback at present on the second day of June is that we could do with more moisture accompanied by greater warmth. The air in the evenings is still chilly, and in some places the growth of turnips is slow through lack of moisture. It is of doubtful expediency to sow swedes in April. May has an evil reputation for cold "snaps" and such a thing as a May frost which blights the early potato crop is not at all unknown. This season the genial warmth of the second fortnight in April was tempting, and men rushed forward the work taking full advantage of the balmy atmosphere. The fickle character of the weather in May has done some damage. The growth of the roots is not so strong as one would like it to be and in consequence the fly is having some encouragement in his attacks on the tender blades of the swedes. Nothing so overcomes the tactics of the fly as the rapid growth of the plants and now that June has come it is to be hoped genial warmth and moisture may go hand in hand.

We are having somewhat exciting times with what is called the carrying out of the policy of re-colonizing Scotland. We are endeavoring to get the people to come back to the land, and a

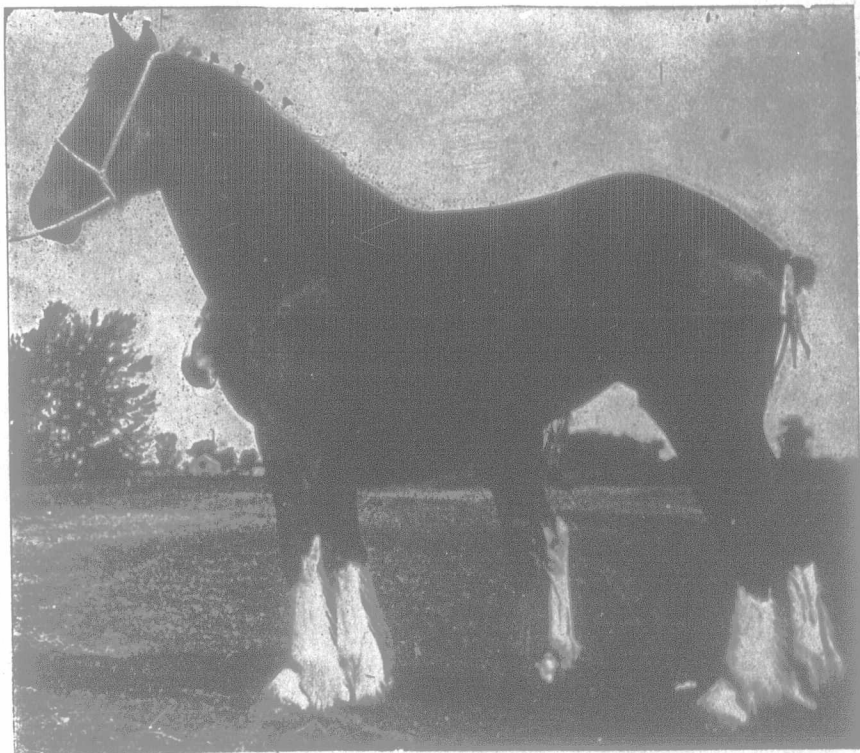
number of settlements have been made. Several large farms in different parts of the country have been broken up, and where one farmer cultivated the soil eight or nine have been planted. But in carrying out such a scheme there is bound to be displacement of capital, and cases involving nice claims for compensation are being tried. Of course these involve a deal of work for the legal profession, and expenses are being piled up. There are two kinds of cases for compensation—cases in which the Board of Agriculture for Scotland is called on to pay compensation to the landlord for depreciating his property, and cases in which the Board is called on to pay compensation to the big tenant who is being displaced in order to make room for the eight or nine smaller men who are to occupy his fields. The former type of case is much worse to settle than the latter. The amount of damage caused is to a large extent hypothetical. There is such a thing as sentimental damage. A large farm near to a country residence is taken. The landlord maintains that in such a case his property is seriously lessened in value. A tenant, who might rent his mansion-house, shootings and fishings, when his nearest neighbor was a tenant farming on a large scale, and socially the equal of the shooting tenant, would think twice before renting a place for sport, when his nearest neighbors were eight or nine small holders, none of whom was at all likely to be socially his equal. Besides, it might be urged, the tenant of the mansion-house and shootings might be sceptical about the bona fides of his eight or nine small tenant holders. They might be tempted to try a shot or cast a line themselves, and in the eyes of a British sportsman the worst of all crimes is poaching. Let a man be brought before a country magistrate for beating his wife, he may get off with an admonition or at worst a fine, but let him kill a pheasant, and he is punished with the utmost rigor

strued so as to inflict injury on the very class which it was the common desire to get back to the land. But this is exactly what has been done in one or two cases, and they do not look well when the facts are brought to light in the courts.

Another piece of recent legislation which gives rise to trouble is the National Insurance Act. It was passed hurriedly and has already been once amended. An intelligent member of the legislature was this week telling a meeting of one of the great Friendly Societies that there will be an amending Act every year. The prospect is not cheering, and the spokesmen of two of these great Friendly Societies—the Shepherds and the Odd-fellows—have recently declared in no uncertain terms that the compulsory thrift of the Act has wrought havoc with the spirit of independence which was the great feature of the thrift fostered by these splendid institutions when run on a voluntary basis. Scarcely a week passes during which circulars are not issued setting forth some features of the Act and its operations which were unintelligible: and in not a few cases these circulars are more unintelligible than the problems they are designed to solve. The experience of the National Insurance Act is a pointed lesson to the legislature not to rush things, but to consider well what they are doing before they crystallize opinion in an Act of Parliament.

A feature of the times is the attention that is being paid to the working classes in agriculture. The day was when the two great National Societies of England and Scotland took no notice of the great army of agricultural laborers—male and female. Now both Societies have inaugurated a system of reward for long service. Some of the cases brought to light are phenomenal. On the farm of Abbington Grange, near Cambridge, there is an old servitor who has been earning his bread there for 72 years. He began work when he was nine years of age, and has not once been out of

harness all these years. Old Joe as he is affectionately termed, has seen six tenants go out of the farm, and seven enter, and he has continued loyally to serve each of these successive tenants. A portrait has been published showing "Old Joe" and his white mare which is 86 years of age standing in one of the Cambridgeshire lanes. They are certainly a wonderful pair, and both are greatly valued by their present employer, Thomas Nesbitt. Old Joe has received one of the Royal Agricultural Society's Long-service Medals, and he well deserves it. We have had none with quite such a long record in Scotland, but still we have had one with over sixty years' service, and quite a number, both male and female, with the half-century to their credit. These have received the Highland and Agricultural Society's Long-service Medal, and that institution never spent money to better purpose.



Aberdeen's Grace.

Champion Canadian-bred Clydesdale mare at the recent Ormstown Show. Owned by R. Todd, Geneva, Quebec.

of the law. Hence there is a good deal of room for speculation as to the amount of compensation which may be due to the proprietor of a farm taken under the conditions briefly outlined.

There is another drawback to the work of the Board of Agriculture in settling men on the land. In some cases the proprietor of a comparatively small place, may be a poorer man than his tenant. Two such cases are in my mind. The owner desires to resume possession or occupancy of his own land and houses, and notifies the tenant accordingly. Thereupon the tenant, who does not wish to move, applies to the Land Court to have it declared that he is a statutory small holder. This is a type of tenant created by statute in order to prevent a man who has done something to improve his holding being turned out without compensation. Such a man is not helped to find a new place. He is told that he should remain where he is, but in a case like one of those now before the country, the smaller of the two men is debarred from resuming possession of his own property until he has paid the other man out. A case of this kind leaves a bad taste in men's mouths, and on points of law, raised in one case of the kind in the Court of Sessions, the Land Court has been severely handled, and its methods in measure denounced. The Small Holdings Act should never be con-

Long-service Medal, and that institution never spent money to better purpose.

The International Horse Show at Olympia, London, has opened its gates to-day (4th June) and is to be kept open until Tuesday, 16th inst. This is a very bold venture. The show for the first few years of its existence was a phenomenal success. Last year it was not so successful, and it remains to be seen how it will fare this year. Whatever else it may fail to do, it has this to its credit that it greatly fostered the breeding and "making" of harness horses and ponies. The depression in that class of stock is sufficiently marked, but it would have been much worse had it not been for the International Horse Show. A great disaster has befallen the ranks of the breeders and fanciers of harness horses and ponies in the death of William Foster, Mel Valley, Worcester, without doubt the most accomplished judge of a harness pony in the world. He died very suddenly, and last week his stud was dispersed, the average being very high. One pony, only 13.1 h.h. made the extraordinary figure of 1,150 gs., or fully \$6,000.00. It is not likely that we shall ever again see an artist in pony management to equal Mr. Foster, and "Mel Valley" will remain the high-water mark of pony culture in Great Britain.

Two recent Hackney sales did not reveal much

in the way of improvement in the outlook for that class of stock. At the Londesborough sale in Yorkshire, 38 head made an average of £53 8s 3d, and at Fallside, Bathgate, in Scotland 45 head including a number of ponies, made £47 4s. 6d. Of course these figures represent paying results, but they allow nothing for losses and depreciation. One rather turns from that dilettante department of stock breeding to the utilitarian, and in the more homely Ayrshire, and Clydesdale find a return in ways and means which leaves a profit to everybody.

We have had some very fine exhibitions of these classes of stock this spring. At Kilmarmock, Ayr, Glasgow, Dunbarton, Rothesay, Paisley and Hamilton, all in the Clyde valley, the exhibits of both cattle and draft horses have been unusually high-class. A very successful breeder of Ayrshires has been Mrs. McAlister, Meikle Kilmory, Rothesay. She has won the Ayr Derby for three-year-old queys two years in succession, and this year she not only won the Derby, but she also exhibited another quey of the same age of her own breeding which beat her Derby winner. She thus had two queys at the top in the three-year-old class, a very fine feat to be performed by one herd, and that not at all a big one. Another herd which sent out excellent Ayrshires, was that of T. C. Lindsay, Aithenbrae Monkton, Ayrshire. He exhibited some grand specimens with great bodies showing constitution, and first-rate teats. The championship at Ayr, however, went to neither of these herds but to James Lowrie, West Newton, Strathaven, who has long been in the fore-front with the show-yard type and now he is combining both the show-yard and the milk-record type with success. Ayrshires are now a much more useful and utilitarian breed than they used to be. The Milk Record classes at Ayr contained splendid dairy cattle, and we are prepared to supply the world with the best in that line. As a general-purpose dairy cow the Ayrshire holds the record. The Jersey can beat her for butter, and the Holstein can beat her for milk yield alone, but for the combined dairy requirements of milk, cheese and butter, on economical feeding, the Ayrshire stands unrivalled. What she lacked was the Milk Records and these she has now got on a sound and trustworthy basis.

As for our Clydesdale exhibits the winning sires this year are Baron of Buchlyvie and his son Dunure Footprint, and Apukwa. The Dunure Main's stud has been greatly in evidence with some truly magnificent animals, especially mares. At Ayr, Mr. Dunlop showed three brood mares which led their class, all in foal to the fine young horse, Dunure Stephen. These were Dunure Chosen, which has never been beaten, Dunure Toby, and the fine old mare Sarcelle. A full brother of Dunure Footprint and Dunure Chosen, which unfortunately died last year, viz., Dunure Index was breeding extra well. There was a splendid show of yearling fillies after him at Hamilton, on Wednesday, 3rd inst. Happily there is another crop of foals from him this year, and if they prove to be at all like the crop of 1913, the Hamilton tenantry who hired the horse will have reason to congratulate themselves. There has been a good deal of in-and-out judging among the Clydesdales this year, but that is nothing new. Unfortunately there is very little export trade, and after the stirring times of the past four years the quietness is depressing. Let us hope the tide may turn.

SCOTLAND YET.

The Silo vs. Shock Corn.

Time has not yet eliminated the argument whether it is more profitable to ensile corn or feed it from the shock. Circumstances, however, arise which point very strongly to an abandonment of the old-time way of feeding. In former years a larger and older kind of stock was used for feeder cattle, and it was not a general practice to raise store cattle to butcher stock without graining; neither is it customary to-day, but the experience of a Middlesex County feeder with his young stock and silage demonstrates the possibilities of a more economical way of producing beef.

The grazing season of 1913 was severely dry in the County of Huron and southern part of Bruce, and cattle were selling fairly cheaply. Several feeders in more favored parts of the Province took advantage of this circumstance, and Edgar Bogue, of Middlesex County, was one who secured a carload of heifers from that locality. They were quite thin, and did not show the breed and well-doing qualities which they really possessed. After being on grass for a while in the fall they were put into the stable along with his home-grown stock. Eight of these heifers at that time averaged 800 pounds each, and were then about two years of age. After going into the stable they received hay, silage and straw, but no grain and were fed thus all winter. One

pure-bred heifer raised on the farm never saw grain in her life, and, although she is not exceedingly large, yet she is in the very best growing condition one could desire to see. The herd was not turned out very early, but when they finally left the stalls to go onto grass they were in the pink of condition. Mr. Bogue does not know that his silage was any better quality last winter than formerly, but never, he says, did the stock go onto grass in any better condition to thrive and lay on flesh. The cattle have not been on grass over a month, but they have received some grain since going out, and a short



A Silage-fed Individual.

time ago the eight heifers would, in our estimation, tip the scales somewhere between 1,050 and 1,075. The single individual illustrated in these columns is one of the good ones of the bunch, but the group picture shows them to be no mean lot.

After graining through the winter and even on grass many feeders consider 300 pounds of gain up to the tenth or fifteenth of July as satisfactory, but these heifers will do almost as well with the cost of the winter grain eliminated. The silage must be credited with the greater part of this thrift in the stock, and feeders do not yet altogether appreciate the value of silage and roots. Mr. Bogue, however, realizes the boon the silo has been to him, and is loud in its praises. When men who have fed corn under all conditions come out strongly in favor of ensiling the crop they weaken the arguments of those who still adhere to the shock or dry-corn method of feeding. If thickly-sown corn will store up the same amount of food constituents in stalk and leaf as the fully-cobbed corn conveys, it will have a much higher percentage of digestible nutrients, and when ensiled will produce a fodder of increased value. This carried to its practicable possibilities may yet alter feeding operations



Some Beef that Edgar Bogue Made with Silage.

and make a still better fodder, but with the present system few can depreciate the value of the silo where milk or beef is desired. The uprising against it has been gradually yet effectually vanquished.

Providing Fresh Meat in Hot Weather.

Editor "The Farmer's Advocate":

There are comparatively few farmers who provide themselves and their families with good, fresh, tender meat during hot weather. In some localities the meat wagon visits the vicinity about once a week, and the district that gets good, fresh meat from these wagons is very fortunate. As a rule the meat supplied is tough, stringy and unpalatable. Farmers ought to either refuse to buy such meat or demand that they get good meat. The best plan is for farmers to kill their own meat. Some country butchers make it a very profitable end of their business to have a meat wagon that will distribute such meat as they cannot sell in town.

In my locality we have a "meat club," that is, a number of us farmers co-operate in killing beef, hogs or sheep raised on our own farms,

and thus keep ourselves supplied with the best quality of meat during the heated term. At present the club is composed of twenty-eight members. Of course, turns are taken in supplying the meat, and, as each member knows when his time is to come for furnishing an animal, he can have it in good condition for slaughtering. When an animal is dressed the meat is weighed, and a record kept of the number of pounds. Each member's share is also weighed, and a record kept of the weight of each share. At the end of the season the shares of each member are added up and compared with the meat he has furnished, and it is easy to tell whether he owes the club or whether the club owes him. There are usually some small differences, but they are easily and amicably settled.

Our "slaughter house" is simply a large shed, at one end of which is a sort of meat shop, a large hench, knives, etc., being kept there for cutting up and distributing the meat. The slaughtering is done on a certain date, so each member knows when to come for his share. This plan works nicely, and besides each member getting perfectly fresh meat of good quality, it creates a considerable saving in the meat bill. Farmers in every community would do well to adopt such co-operative plans.

Perhaps something may be said with regard to slaughtering that will not be amiss. The most important factor for the keeping quality of the meat is proper bleeding at time of killing. Otherwise the blood in the veins will start putrefaction at once, and the meat will not keep fresh. In butchering a hog our method of sticking is as follows: First, the hog is pulled up by one hind leg high enough so that the animal is off the ground. It is then stuck straight in under the breast bone, the sharp side of the knife being toward the head. As the knife enters the throat the blade is turned toward the heart and pushed in, cutting toward the heart, opening a slit about four inches long, and deep to the windpipe. A hog killed in this manner will struggle until the heart ceases action, and it is this very struggling that forces out the blood. I think this method of sticking should be followed in every case of hog butchering.

In sticking a beef the throat is cut open to the breast bone, then the knife is turned toward the head, and a cut is made directly from the breast bone to the windpipe and toward the head. In stunning a beef it is best never to shoot the animal, for this will stop the heart action before the blood is pumped from all parts of the body, and consequently the meat will not keep.

The method followed by our club in killing a sheep is to lay the animal on its back in a V-shaped trough, which is made for the purpose, its head extending over the end and immediately break its neck. A slow butcher or an amateur should not attempt to butcher a sheep and expect to obtain

good tasting mutton, because the killing of a sheep is a process that cannot be done too fast, the faster the better. During the process of killing there are gases given off by the stomach and intestines. These are absorbed by the meat, and unless the pelt is taken off hurriedly in order that the stomach and intestines may be removed as soon as possible, there will be enough gas absorbed by the meat to give it a bad flavor, besides the meat will become sour very soon. In butchering any kind of an animal in warm weather as little water should be used as possible.

Meat consumed while fresh is more palatable and nutritious than is salted meat. It is, as is well known, very difficult to keep meat fresh without the use of ice for a period of more than five or six days in warm weather. Where a family refrigerator can be kept at a temperature of 40 degrees or less and be kept dry, meat may be kept fresh for two weeks. Moisture in a refrigerator is very detrimental, and for that reason it should be well ventilated. A dish of calcium chloride will absorb the moisture of the air in the refrigerator.

A good plan for keeping meat fresh, where one has an ice-house, is to partition off a portion of the house, keeping the meat in this partition, and when a fresh piece is wanted it can be had. Care must be taken not to let the doors remain open, and if a light is taken in it should not be kept burning any longer than possible. Too much care cannot be exercised in keeping the refrigerator dry. It will be found that meat is more easily kept fresh when the

temperature is around 50 degrees and dry than where the temperature is 40 degrees and damp. Johnson Co., Ill. W. H. UNDERWOOD.
 [Note.—This club plan is something after the beef-ring plan so common in some districts of Ontario. It would, however, provide a change of meats that is welcome during hot weather. We all agree that farmers should co-operate to supply summer meat.—Editor.]

THE FARM.

Farm Engineering.

CONCRETE BUILDING BLOCKS.

Concrete block walls have the advantage of cheapness and ease of construction by unskilled hands over walls formed in place from newly-mixed concrete. The blocks are handled somewhat in the same way as brick, being larger than brick and cheaper. In fact, concrete block construction, all things considered, is cheaper than any other form of building with the possible exception of wood in those parts of the country where lumber is comparatively cheap. In addition, block construction is practically fireproof and is extremely durable.

The building of blocks properly placed has numerous advantages over any other obtained at near the same cost. The walls are as strong as brick. The blocks, being hollow, do not allow moisture to penetrate readily when they are carefully laid, and, therefore, permit of plastering directly on the wall, if desired, particularly after a precautionary waterproof coating. The air retained in the spaces within the blocks aids in insulating the interior of the building, making it cooler in summer and more easily heated during the cold weather. In most cases pipes, wires and other conduits may be laid in the hollows of the building blocks, a thing desirable many times, although extremely undesirable where frequent repairs or changes are contemplated.

The individual blocks are of various and widely different shapes. Not all of them are the shape of hollow brick, although that shape is possibly the most common in farm construction. The essential things are that the blocks shall be easily molded, economical in material, easily interlocked or bonded, of dimensions which may be somewhat varied to meet changing conditions, and of pleasing appearance.

There are two main types of block construction, the wet and the dry. The difference is merely in the consistency of the concrete when molded. In the wet construction considerable water is used, and the blocks have to be left in their molds until dry. In the dry or "semi-wet" type, just enough water is added to make the mixture damp, and the block readily retains its form after the mold is removed. The wet process blocks are far superior, but the dry process is universally used because of the lower investment in molds required, and the more rapid production of blocks. Practically all, if not all, of the concrete block machines produce the dry process blocks.

The "cast stone process" is really a wet block construction, the molds being made in sand. The sand absorbs the surplus water from the wet mixture, and somewhat accelerates the drying process. Its disadvantage is that a new mold must be formed for each block, thus making slow and expensive production. Ornamental blocks are frequently turned out in this way.

The making of dry blocks in the block machine or without a machine, is extremely simple, a 3- or 4-inch layer of the mixture being placed in the mold and well tamped with quick, sharp blows until the surface is slightly puddled. Another layer is then placed, and the operation repeated until the mold is filled. In some machines used by large contractors, the molds are filled and then pressed or tamped hydraulically and released almost at once.

In the wet process the mold is poured full of the wet mixture, slightly tamped, and then set aside to dry or "cure." This curing process is important with all types of blocks. It should continue for at least a month and longer if possible before the blocks are used, because the longer the block is cured the harder it will become.

The main cost of blocks is, of course, the cost of the material. It is cheaper than solid concrete, because, being hollow, less material is used. The usual mixture is 1 part cement to 4 parts of sand and gravel, although a 1 to 5 proportion is common. With a 1 to 4 mixture a barrel of cement will give 14.5 cubic feet of solid concrete. The openings in the block may be from 30 to 50 per cent. of the total volume so that a barrel of cement will give practically 20 cubic feet of blocks with 50 per cent. opening and 20.7 cubic feet with 30 per cent. opening. From these figures the price of common-

sized blocks is given below, using \$2.50 as the price of cement per barrel.

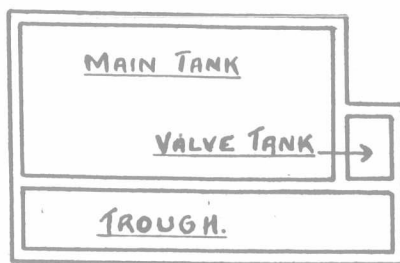
Size of block.	Price each.
8 x 9 x 32 (1-3 opening)	17 cents.
8 x 9 x 32 (½ opening)	12½ cents.
12 x 9 x 32 (1-3 opening)	25 cents.
12 x 9 x 32 (½ opening)	19 cents.

Nova Scotia. R. P. CLARKSON.

An Up-to-Date Watering Trough.

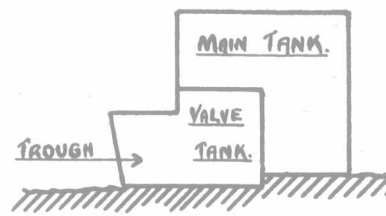
Editor "The Farmer's Advocate":

The accompanying illustration represents a tank and watering trough built on my farm last fall and put to use this spring and it works so



Ground Plan of Watering Trough.

satisfactorily that I thought some of the readers of the "Advocate" might gather some suggestions from it. The storage tank is 6 feet by 11 feet inside and 5 feet high. The floor is 6 inches higher than the valve tank and trough. The



End View of Watering Trough.

valve tank is 3 by 2 feet and the trough is 14 by 2½ feet high. It is eighteen inches wide at the bottom with a flare of about 6 inches. These dimensions could be modified to suit any circumstances.

Huron Co., Ont.

A. C. DAMES.

Green Manuring.

Editor "The Farmer's Advocate":

So far Canadians have not suffered to any considerable extent from what reduced many parts of New England to the verge of ruin—desolating soil depletion. Thanks to the class of settlers who occupied our farms from the early days, the soil has for the most part been well nourished. Mixed farming has done its share in the way of returning to the soil almost an equivalent to what has been taken from it. The standard of cultivation has been high, and the judgment ex-

ercised in cropping has been good. The discovery of the place of clover as a crop and soil renovator has been of incalculable value. Added to this is the fact that the growing cities have demanded enormous quantities of milk. In this way the dairy business has come to have an important place in soil maintenance. The expediency of cattle and hog feeding as soil nourishers requires no argument.

But has not the time come when the question of green manuring should be squarely faced? No one argues that any system that has been of advantage in soil building in the past should be abandoned, but has not the day arrived when the old standbys should be supplemented by green manuring? The best of soil is none too good. A score of reasons press forward for providing for the largest possible returns from every foot of the farmer's arable land. Labor is scarce and dear. The money value of land has risen immensely during the past few years. The farmer's whole plant is costly. He has but one yearly return as a rule from his field. Unless that one return is of the largest possible kind he finds it hard to make any progress.

Hence the importance of making every part of the farm as fertile as possible. Take the corn field for an example. Corn is a gross feeder, and unless the soil is carefully nourished the land is bound to suffer. Yet such land has been made to increase in fertility by green-manuring alone. The practice has been to sow rye and hairy vetch among the corn late in August or in September. The early rains insure a quick start and yet the growth is not sufficient to interfere with the corn harvesting. The covering of rye and vetch insures the extermination of any weeds that may have escaped the last cultivation. By May of the following Spring this green crop will be in ideal condition for plowing under. The rank growth of the rye will add an immense amount of humus to the land, while the vetch will have added a great deal of humus as well as nitrogen.

The same holds for the care of the field that has been sown to a cereal. As soon as the cereal has been harvested it is good practice to plow it with a broad-share plow and to sow to rye and hairy vetch. By spring this crop will be ready for pasture. By May it will be an ideal field for humus-making.

Those who are afraid to experiment with vetch will make no mistake in sowing their newly-plowed fields to rape. This crop sprouts readily, matures rapidly and is ready for pasturage the fall it is sown. A flock of sheep will do well on rape, while the herd to be fed for the winter, fat cattle will come into the stable from such a field in splendid condition for putting on flesh.

In making a beginning in green manuring it is best to make the change gradually. Do not trust wholly to the vetch, but use a small quantity with other seed. In this way the soil becomes inoculated with the vetch nodule-forming bacteria and when the inoculation once takes place there is no doubt but that the sowing of the vetch with very considerable liberality will yield large financial returns.

York Co., Ont.

J. A.

Why Is a District Representative?

Editor "The Farmer's Advocate":

The work of the four-score Doctors of Agriculture, as Dr. G. C. Creelman, President of the Ontario Agricultural College, almost invariably calls the District Representatives of the Ontario Department of Agriculture and their assistants, is very much in the limelight of late. Truly, these men are doing a great work for themselves and for the country. It was the chance to develop his knowledge of scientific agriculture and to bring farmers, with whom he might come in contact, up to a better appreciation of their calling, and incidentally enhance their chances of success that led a certain young man, fresh from his third year at the agricultural college, which he entered after several years on an Ontario stock farm, to accept the rather precarious, often thankless, (as far as officialdom and the general farming community are concerned) and always indefinite and unremunerative position of assistant to one of the best Representatives that ever took up the work for the Department. The position of assistant, as this young man experienced it, was one of the best opportunities to do good that ever came across his trail. The Representative labored even more strenuously, and there was always more to do. Representative work is, as most of those who advise a young man to take it up term it, "a great experience." No better cognomen could be given it. Talk of its performance of a sixteen-act vaudeville amusement hall or a five-ring circus with numberless clowns and thrillers could not offer more laughs, sometimes at one's own foolishness, sometimes at that of those whom circumstances have thrust across the path of duty. It is not

all funny, the serious side of the "JOB" as the boys call it is work in all forms from dissecting tubercular chickens and naming the white spots on their livers to working the handle of a spray pump, and all the while explaining to the questioners roundabout why leaves curl up on certain trees, why cows chew bones, why the goose, which in reality was a gander, did not lay last spring, why the fertile eggs in the incubator did not hatch, why the calves were spotted when they should have been a solid color, and why the colt's legs were not straighter when foaled. A non-partisan government official is looked upon in rather a peculiar light by most farmers who connect party with all things governmental, and expect an official to know a great deal more than he very often does.

However, it is to relate some experiences that "Bill," as he has decided to call himself, is writing now. There is a vast difference in taking in agricultural information by osmosis, that slow process by which the intensely practical is replaced in part by the intensely scientific and theoretical until the cells composing the all too small brain of the student become distended, and his head is just about as big as that of a horse suffering from osteo porosis, and allowing all this information to pour out in about five minutes in such a stream of intelligent conversation that the farmer understands every word and can put the advice to practical use. Generally the information pours out all right, but often by the wide gulf of lapse of memory, or, perchance, in a string of scientific names which cause the listener's chin to drop in astonishment, and usually when this is the case the estimation of the educated agriculturist falls lower than his

mandibles, and as soon as the silly scientist has disappeared a hearty ha! ha! is indulged in by the practical man at the expense of the lad trained at the agricultural college.

"Well what do you fellows do in that office over there in the town, all dressed up in your laundered shirts and good clothes? Who pays you anyway? The people are burdened enough already without paying the salaries and expenses of a lot more worthless and lazy young striplings going about the country endeavoring to teach farmers how to farm. It is just a farce. What do you educated kidlets know about growing crops and feeding stock. No, I refuse to awaken my husband from his usual after-dinner nap."

Just a salute from the wife of a farmer whom the assistant was sent out by the Representative to help. The good woman was as good as her word and did not disturb the man of the house from his peaceful slumber, evidently about the only peace he gets on this earth, but after a little suave persuasion, some small talk, a little blarney and unmerited praise, and after assuring the good woman that what she paid towards his salary and that of the Representative would not buy her a one-cent stamp her manner changed slightly, and the desired information was given and the lad departed for the next farm. It is strange how people think they are going to be robbed by every stranger who enters their gate, but no one can blame them. To-day this woman and her husband are enthusiastic over the work of the Representative. You cannot always tell by the looks of a frog how far he can leap, but you can always bank on it that when a farmer's wife jumps at you that she goes as far as she can in the first breath and lands with all her weight the first time, and if you survive, the rebound is likely to be so great a shock that before long her attitude will have entirely changed. It pays to get on the right side of the women for the severest female critic once convinced is worth a hundred indifferent men or women, and once she sees the value of the work she is just as loud in her praise as she was in her disparagement.

"Good afternoon madam," is Mr. ——— at home."

"Yes."

"Could I talk with him a few minutes about his orchard?"

"No you can't. We don't want any more apple trees, and besides he's asleep, and I would not call him to talk to a tree agent, so you might as well go and don't forget to shut the gate after you."

Glancing toward a ten-acre orchard neglected from every standpoint Bill decided that the woman was right. It would not be worth while to talk to a man with an orchard which might have been yielding him easily \$1,000 yearly, but who preferred to let blight and brush, insect and disease place it in the entirely unproductive class while he slumbered valuable time away on the dining-room sofa.

"Do not call him under any consideration," said Bill, "let him sleep on; an orchard would be little use to him."

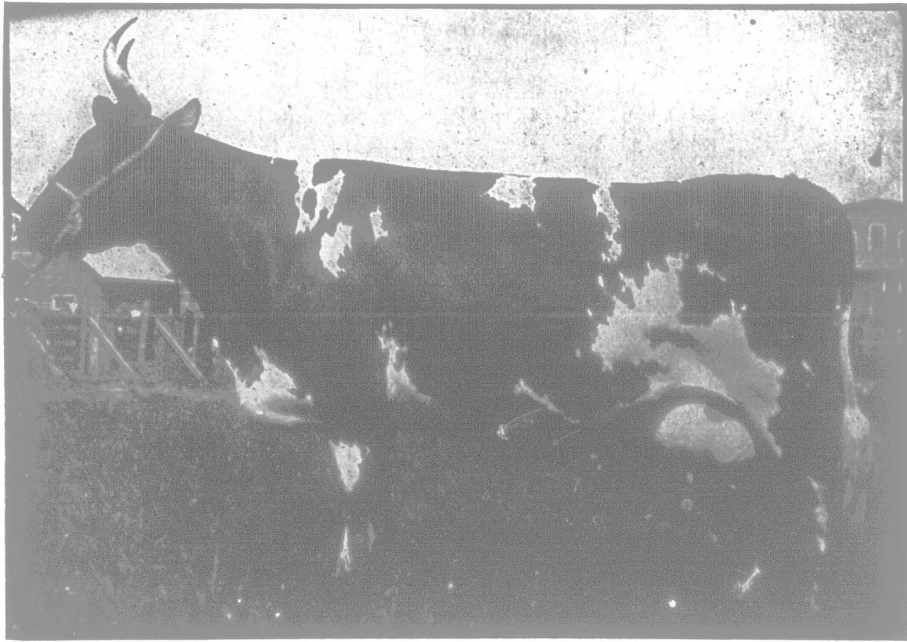
She looked as if she would have liked to have hissed "scat" as Bill backed his rather thin livery horse around and made for the gate which he was not to leave open and he didn't. A livery horse may be slower but takes better with the people, and is not so hard on the traveller as the bumpety bump motor cycle now supplied to many of the offices.

It is great fun to drive two horses on a buggy, especially when one pulls incessantly on the bit while the other tries to get in the buggy to ride, two typical livery horses. Such a team had Bill and the Representative on one occasion to drive over twenty miles on a hot day and through sand. One horse lugged and the other lagged, yet the destination was reached, and after holding a very successful drainage demonstration where the advantages of underdrainage were reiterated and the methods of laying out a survey explained and demonstrated, showing how to determine fall and lay the tile to grade, a further drive of eight miles lay ahead with a big surveying job waiting for Bill. It was a great place. We arrived for dinner. The daughter of the house, about seventeen years of age, barefooted and decidedly untidy, was hustled off upstairs on our arrival and she reappeared at the dinner table dressed, not in the latest from Paris, but in the latest from somewhere. It was decidedly late anyway, but this did not matter. She seemed so prim in contrast with the dinner, and much cleaner than the house and the woman thereof. Bill was single but no particular bit was made, and after one meal he decided to do a day and one-half's work in five hours and search for further fields to conquer. Accordingly at six o'clock, upon the arrival of his chief from a trip farther north, they pulled up stakes and started a seven-mile drive for the next job.

Oh what a difference! The binder had broken down, and in repairing it supper had been delayed so we were "just in time." Such hospitality as only good farmers and their wives can show was extended, and after watching the girl milk a few cows and the boys feed as fine a

bunch of pigs as it has even been our privilege to see, we sat down to a meal from which we could scarcely rise, having partaken time and again of ham and eggs, hot cakes, home-made bread, home-canned fruit and deep apple pie with sundry side dishes and all delicious. These people were glad to see us, and we were more than pleased to see them, and it made our eyes fairly water to watch our formerly receding shirt fronts fill out once more as we filled the receiving stations which we carried under them with the best of life's necessaries. We did this surveying job; answered numberless questions; our work was appreciated and we learned something as well as did the people whom we went to help. We got a wholesome meal which our stomachs could digest, but at the next place we were expected, and what a feast was there! The neighbor girls were in to entertain and be entertained, and all the best cook books had been exhausted in an effort to feed these poor bachelor boys enough. We were exhausted, or at least all available space was, before we had nearly finished the spread. The kindness of these people was immense. Not only did they feed us but they played and sang to us and asked us so many questions that we were put to it to find answers, and surely for a while the job was a very pleasant one. When everyone is agreeable no one knows how much good may be done.

One old Irishman for whom we surveyed and where we finished at noon proffered a drink of good old hard cider in a mug more like a half-gallon jug. Innocently thinking it to be sweet cider Bill drank a quart or so on an empty stomach without stopping to taste it, and the Irishman's neighbor never had such a half-day's surveying done before or since. Bill handled the instrument and was seeing things all the afternoon, nevertheless the underdrains were put in and the fields dried, so it takes more than cider to upset a student of experience, even though the crosshairs in the instrument looked like a crooked rail fence. Funny thing how hard cider hastened that farm to a drier state.



Auchenbrain Hattie 6th Imp.

Champion Ayrshire cow at the Ormstown Show. Exhibited by McMillan & Leggit, Huntingdon, Que.

These expert agriculturists are the "big" men in the towns in which they live. They are invited to attend all the social functions such as Ladies' Aids, Women's Institutes, Sewing Circles, Church Dinners and Literary Society Entertainments, and are supposed to be able to talk on everything from supplying pure milk to the babies up to the possibilities of church union. It must be great fun also for Representatives who are able to play such strenuous games as tennis, golf and croquet, for their evenings are greatly taken up, and the fair ones seem to be incessantly calling "thirty love" until the poor boy more accustomed to handling a hoe or a fork than a tennis racket believes that there are about thirty of them drawing in around him, and bats the ball over the back fence to end the confusion and escapes to that wonderful pastime golf where he slugs and tramps hours by himself and has a great time. Croquet is all right, but the best game for the Representative if he has time to indulge is bowling.

The work looks vastly different from the inside looking out than from the outside looking in. As a usual thing those who work as assistants have little money when they start, and sometimes less yet when they quit or get moved up to the Representative position in another county. Even there it is no get-rich-quick "job" as some none too sympathetic farmers seem to think. The lad usually leaves college "broke" or worse. He finds himself in a strange town where he must work one month, he believes, before pay day, but this is generally much longer than a calendar month. He is informed that it

will likely be the middle of next month before his check arrives, and lives and hopes, all the time footing travelling expense bills. Then he finds out that the appropriation is exhausted, and he must exist for possibly three months and pay his board and other expenses until more money is at the Department's disposal. This is always very discouraging to Representative and assistant alike, and they hope on that salaries and expense money may come more promptly. They know that "pay day" comes like clock work in private enterprise, and cannot understand why it should be delayed. If either were working for anyone else but His Majesty's Government he would demand an explanation, and would insist upon prompt payment for services rendered. His intense loyalty is all that saves trouble, and besides there is the eternal dunning coming from business people who have accounts against the office and who have to wait weeks and months for payment. This becomes annoying.

A new man is green on sending in accounts, and Bill like the rest forgot to fully itemize one or two less than forty-cent purchases for office needs, and for this reason payment was further belated. It is not conducive to extreme happiness to have a land-lady worrying about board bills unpaid and perchance threatening to seize your old trunk and battered suit-case with what few clothes you can scrape up, when you only have a stub of a lead pencil left from examination time, and the first Yankee cent your father gave you in your pocket, and are waiting for that long-delayed pay day. You often wish you were somewhat more agricultural than a Representative.

What does District Representative work consist of? Just everything. You test milk and cream until the cows turn pale in the face at sight of you, start to tremble and leak rich strippings because they wish to demonstrate fully that they are not the "boarder" cows which you, by test, would send to the butcher's block. Some buyers of milk and cream by test get almost as scared as the cows, for they know that every

dairyman for miles around gets the office to keep tab on their tests, for farmers fear factorymen, and the Representative must be careful that he gets fair samples to test else there will surely be trouble. The land is surveyed for miles of underdrains, many of which are put in and the land brought up to a profitable basis, but field after field is gone over and extensive plans made which almost stagger the owner, and in some cases he decides to puddle away rather than pay out good money to get tiles buried on his property. The Representative shows him where and how to drain; if he decides not to do it that does not lighten the work of the Representative. Bad weeds must be recognized at sight, and methods

of eradication explained on a moment's notice. The Representative must know how to kill all diseases and insects of farm and orchard, and by demonstration must show that he can. He must be an expert on soils and crops; must know the right rotation for each farm; must be able to repair spraying outfits and farm machinery and plan stables and house construction, lay out fields and advise on farm power of all kinds; must be able to teach young boys and older practical, experienced farmers; must know how to feed all kinds of animals on all kinds of feed and get results. He must know six chemistries, all the botany of the farm, geology, entomology, bacteriology, agronomy, animal husbandry, dairy husbandry, physics, arithmetic, poultry husbandry, mechanics, English literature, veterinary science and all of these in their many branches, together with anything else which may happen to come up, and with all this he must be on the "job" all the time and must get permission to do many things where his own judgment he considers is just as valuable as that of those who do not understand conditions in his county as well as he does himself. He must not wander far from home. The county map in his office shows him the boundaries of his county, and if he is caught outside without permission something may happen.

Bill did not fit in entirely. He had some sharp edges in his square form which could not be planed off to fit the round hole in which he must bury himself, so he decided not to offer his services for the work any longer, (maybe they would not have been accepted anyway) so he

drifted into another line, more strenuous, more definite and more of a good many other things which draw away from District Representative uncertainty.

County work is a great work. Why is a District Representative? Because the county needs an organizer. District Representatives have done and are doing more effective organization work than any other factor working to this end.

BILL.

Weights of Vegetables and Other Articles.

Considerable comment has been made of late about the selling of potatoes and such vegetables by the bushel or bag there being a difference of opinion as to what constitutes these measurements. A recent amendment to the Inspection and Sales

Act, which comes into force on January 1st, 1915, gives the following weights for the following vegetables and commodities.

A bushel by measure is specially agreed upon shall be the following :-

Artichokes, 56 lbs.; beans, 60 lbs.; beets, 50 lbs.; bituminous coal, 70 lbs.; blue grass seed, 14 lbs.; carrots, 50 lbs.; castor beans, 40 lbs.; clover seed, 60 lbs.; hemp seed, 44 lbs.; lime, 70 lbs.; malt, 36 lbs.; onions, 50 lbs.; parsnips, 45 lbs.; potatoes, 60 lbs.; timothy seed, 48 lbs.; Turnips, 50 lbs.

And a bag shall contain:—artichokes, 84 lbs.; beets, carrots, onions and turnips, 75 lbs.; parsnips, 65 lbs., and potatoes, 90 lbs.

Persons selling or offering for sale these articles not up to required weight will be liable to a fine of \$25 on the first offence, and not exceeding \$50 for each subsequent offence.

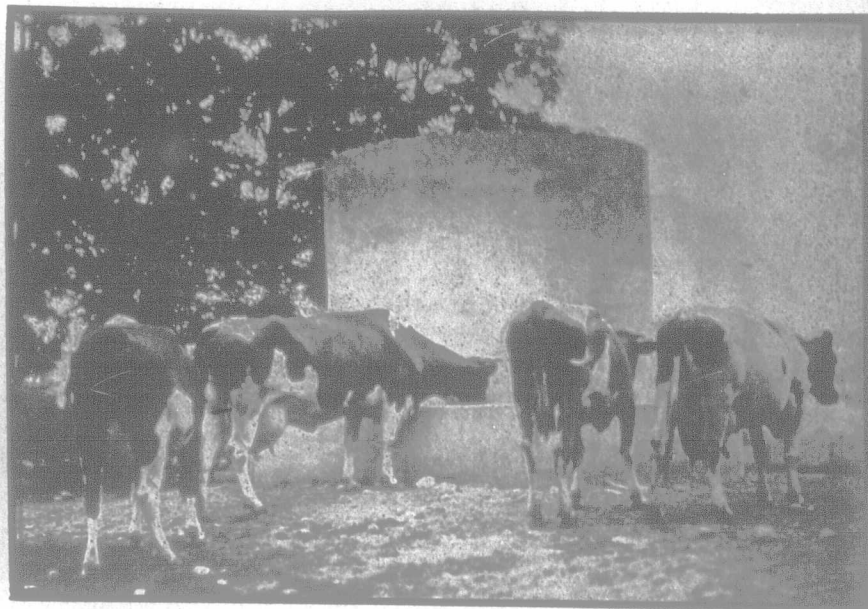
The same Act defines a barrel of flour as 196 lbs., and a half barrel as 98 lbs.; a barrel of meal 196 lbs., and a half barrel, 98 lbs.; rolled oats must weigh 180 lbs. to the barrel and 90 lbs. to the half barrel, and rolled wheat, 100 lbs. to the barrel, and 50 lbs. to the half barrel.

THE DAIRY.

Prof. G. L. McKay, formerly of Oxford County, has been given honorary degree of Doctor of Science by the Iowa State College. Prof. McKay was formerly at the head of the Dairy Department of that institution and is now Secretary of the American Association of Creamery Butter Manufacturers, whose members manufacture over one-third of the butter produced in the United States.



Home.
The residence of Fred Goble, one of Oxford County's Dairymen.



Four of a Kind.
Four cows that are giving T. H. Dent, of Oxford County, three hundred pounds of milk per day.

Phases of Dairying in Oxford County, Ontario.

These three questions might arise in one's mind when travelling through Oxford County, Ontario: are the farmers generally dairymen because land is valued high; is land high in value because of dairying; or is dairying almost universal because it is a profitable enterprise? Purchasers of dairy products, consumers particularly, would answer the last question in the affirmative, but the majority of dairymen and some who have studied minutely assure us that it is no get-rich-quick enterprise and that a professional practice or a thriving real estate business is more remunerative.

It is an intricate problem but one thing is evident that the proper kind of stock must be kept, that up-to-date methods and practices must be put into vogue, and the market must be sought, cared for and satisfied else the path of the dairyman may be strewn with thorns. The man who ploddingly keeps abreast of the average should make one desperate sprint and get into the van and by this we mean operations such as are carried on by T. H. Dent on the Springbank Dairy Farm in Oxford County.

There are 350 acres in this farm but that is no larger than many of our Ontario farms. Because it is large it is not allowed to lie idle and produce weeds neither is it almost entirely devoted to pasture. Residents of Oxford County cannot afford to farm thus on land worth over one-hundred dollars per acre. It must be farmed and farmed properly. Over ninety head of cattle are domiciled on this holding and they are the kind that consume a lot of feed and give corresponding returns. The cattle are not sustained on a maintenance ration for the bottled-milk trade supplied by Mr. Dent is not spasmodic in its demand; it must be supplied day in and day out, summer and winter. There are some who might rebel at this relentlessness and grind, but a man in the business for profits rejoices in such an unwavering patronage.

The dairy end of Springbank Farm has its manager and so has the farm proper but everything is pooled, so to speak, manufactured into milk by fourty-five dairy cows and sold in bottles—this is the finished product.

SILOS PLAY IMPORTANT PART.

Dairy cows consume a lot of roughage and Springbank Farm supplies a quality that

produces milk. Built inside the barn is a rectangular silo and on the outside is a concrete silo forty feet by fourteen, their combined capacity is about 400 tons. Thirty-five acres of corn usually suffice to fill both but in addition to this eight acres are devoted to turnips and mangels which provide succulence and variety.

Turnips have the preference as milk producers for they have proven themselves superior to mangels when being fed to cows in the record of performance test. Here the milk was weighed and there could be no mistake. Neither is there any complaint from the patrons on account of tainted milk for the roots are fed at noon so they are all cleaned up and the peculiar odor dissipated before milking time. Mr. Dent cannot be considered orthodox regarding his corn for the silo. Heavily cobbled corn in the glazed stage is not desired on the Springbank Farm. Even after coming through the silo the kernels pass through the cows undigested and, so to speak, are lost. To avoid this difficulty the corn is sown in drills at the rate of two pecks to the acre which precludes the development of large cobs. Immature corn that will sour in the silo is not the outcome of this practice. The crop appropriates the same food constituents but stores them in a more palatable form in the shape of leaf and stalk. Mr. Dent claims in this connection that it does not pay to grow grain to ensile, giving preference to a decrease in the area devoted to corn and growing oats for instance on that diminished area. This, in his opinion, is preferable to producing a large area of corn where maturity and development of cob is desired. Alfalfa is a favorite, but with him red clover has lost none of its prestige for it forms a part of all seeding mixtures. The increased value of the first crop of hay, says Mr. Dent, more than counter-balances the price of clover seed over timothy.

HEIFERS FRESHEN AS TWO-YEAR-OLDS.

The stable and farm are in harmony with each other and a good crop is not wasted on poor cows. They are raised from the first day with one aim in view and that to produce milk. When two days old the calves are taken from the dams and fed on whole milk for a month and then gradually introduced to the skimmed product which they enjoy till about ten months old. At first they are given a little scalded oil cake in

their milk but when two months old the milk is supplemented with oat chop, silage and bran. With this fodder and intelligent care they are fit to freshen at two years of age and a cow now in the herd from which over 20,000 pounds of milk are expected this lactation period and which gave 17,000 pounds as a junior three-year-old has the record of freshening under twenty-four months of age. Few breeders would recommend under thirty months of age as the proper time, but there are other individuals in this same herd giving upwards of seventy pounds of milk that gave birth to their first calf before twenty-four months had passed by. It depends on the care and fodder they receive during those first two years and apparently the young heifers on Springbank Farm are so reared that they can qualify at two years old.

The average producer in this herd receives about 45 pounds of silage and twenty pounds of roots as succulent roughage. For concentrates oat chop, dried brewers' grain, oil cake and bran make up the ration. The cows are first given their silage and grain in the morning which is followed by a feed of hay; the roots are fed at noon and at night the silage, grain and hay are fed in the same manner as in the morning. This is the practice followed for the average individuals of the herd while those under test receive different feed and care. A milking machine is installed and while the cows are eating the silage and grain two men go forward with the milking using three units and completing the operation in about one hour and a quarter. During this time forty-six cows are milked and the process of cooling commenced. The water for the dairy is pumped by four hydraulic rams from springs up to a large concrete supply tank. This water runs through the cooling tank which also contains ice and quickly cools the milk so a good product may be bottled.

HOW THE PROFITS COME.

Farm a place as you will, manage a stable in the most up-to-date manner and have a good market, yet if the cows are not the producing kind the ledger will not show very long figures on the profit side. On this particular farm, the cows give milk. They are being kept for that purpose and the illustration in these columns of four cows taken at mid-day is not deceptive for

these four individuals are giving 300 pounds of milk per day.

The appearance of the farms in Oxford County would not lead one to believe that the farmers were losing money very quickly, and it is cows of this type that make times prosperous for the dairymen. This farm under discussion is no company-owned scheme financed by capitalists in a far-away country. Mr. Dent is a farmer, but he has carried on the enterprise according to business principles and used sound, common sense—two requisites for success in dairy farming.

The Bull Does the Chores.

Editor "The Farmer's Advocate":

Just mention dairy farming and most people will laconically reply "the chores." If their lips don't move you see the expression in their eyes. This dread of chores is inherent in most of us owing to the fact that our parents allowed power that existed about the farm to go to waste. For thousands of years the Niagara River flowed over the falls, appreciated only for its grandeur till some utilitarian mind more materialistic than esthetic conceived the power each moment being dissipated in the fall. Eventually it was harnessed and it is now doing the chores on many Ontario farms. Fred Goble of Oxford County could not wait for Hydro so he harnessed his bull and now it does the chores. Both morning and evening this animal is led into a tread mill and the brake taken off. A milking machine begins to work, the separator commences to hum, the pulper starts and for half an hour the scene resembles a modern factory. This unique power is not to be discounted. Usually the eighteen cows are milked in one-half hour and the separating is well under way, the roots are pulped for the day and all the hard work done by the individual that was usually idle and suffering in consequence. It required a little persuasion to instil into the mind of the bull the necessity of continual action for he delighted in seating himself upon the cross-bar, stopping the mill and surveying the scene of his accomplishment. This he would do when the operator was in the dairy room, but upon his return the bull would resume his journey up the grade as though there had been no cessation. However a few sharp tacks in the cross-bar behind dispelled any desire to rest and now he works away patiently until the chores are done.

This power does not compare in scope or extent with Hydro, but with the stock-raiser it is not to be neglected. Three units are operated by this milking machine which Mr. Goble has installed and while a representative of this paper was standing by twenty-four pounds of milk were taken from one cow in four minutes. The other two units were working at the same time and the milk was being separated in the dairy room. The bull in use is five years old and weighs between eighteen and nineteen hundred pounds. Considering the work being done and the speed of the machinery the animal must develop about two horse power.

MARKETING IMPORTANT FACTOR.

There is nothing in the dairy business that surpasses in importance the marketing of the product. Mr. Goble has a well thought-out scheme. For customers he has a boarding school and some ice cream caterers in the town. In the winter the school is in full swing and requires a

large amount of milk, but in the summer or vacation time the demand for ice cream grows and Mr. Goble then diverts his product into that channel. The plan is an admirable one and works very advantageously for the farm.

The illustration of Mr. Goble's home in these columns shows that if the chores are sometimes strenuous he has a pleasant abode in which to rest when they are done and that there may be some profits in dairying after all. A little initiative and ingenuity on the part of most farmers will often reduce the hours and severity of their labors and the mention of this unique power on the farm might act as a suggestion to many.

* * * *

Ships Whole Milk to Toronto.

As one would expect, all the milk produced in Oxford County is not consumed locally, neither is it all manufactured into products within the county. A. H. Teeple represents a class of dairymen who are contributing to the milk supply of the city of Toronto. He has recently moved onto a new farm and has a herd of cows which have been picked up, so to speak. However, he has retained to head this herd his old King Fayne, Segis-bred bull and is building up another herd of milk producers. This milk is shipped every day to Toronto with prices that vary during the summer, autumn and winter months. The calves are raised on milk until they are from three to six months of age, but during this time they have become acquainted with chop and silage and calves only two months of age look for silage just as anxiously as do the older cattle and do not feel that their rations for the day have been complete unless they have been supplied with this material.

Mr. Teeple has not yet installed a milking machine but from his remarks we gather that it will soon become a part of his farm equipment and that the herd will grow as he becomes equipped to milk them. Sixteen cows are now in their lactation period and it is the aim of Mr. Teeple to maintain fifty head of stock on this one-hundred-acre farm.

Taken together the milk and butter trade of the towns and the ice cream business, the creameries, factories and condensers with the milk and cream that is daily shipped out of the county, the whole constitutes a wonderful business from which the farmers of Oxford County are building up their places and in most cases receiving fair remuneration. The homes and farm buildings testify to the prosperity of the county and the fairly high value which is placed upon Oxford County farmland is evidence that the revenue per acre is larger than in most farming districts. It is true that this land, judging from its character and topography, and climatic conditions, which accompany the same, is no better than in many other counties of Ontario, but the general prosperity and the up-growth of the farm industry are seemingly dependent upon the dairy enterprise, which contributes we believe to the prosperous out-look in the county and to the progressive and well-to-do character of the farmers who labor within its confines.

Special Points in Milk Testing.

Editor "The Farmer's Advocate":

Because of the fact that practically no other test than the Babcock test for milk-fat is familiar to the dairymen of Canada, the special points we shall deal with in this article will relate to the Babcock. The lactometer for determining the specific gravity of milk is used to some extent for testing milk, but its practical use is rather limited, and except in the hands of an expert, may easily lead to very erroneous conclusions.

We are frequently asked three questions by dairy farmers: "What size tester would you advise buying?" "What will such a testing outfit cost?" "Where can it be obtained?"

For the ordinary farm, we should advise a four-bottle tester, with two pipettes, two acid measures, six whole-milk bottles, two cream bottles, and two skim-milk bottles. The extra glassware is for emergencies, so that if pipette, acid measure, or some of the bottles become broken, which they are very likely to be, testing can be done without having to wait for glassware to be shipped. We frequently have requests to send a testing outfit, or parts of glassware, as parties say they do not know where to get them. This, of course, we cannot do. A person who is clumsy with the hands—whose "fingers are all thumbs," as farmers say, should not attempt to test milk or cream, as they will break more glassware than the owner can afford to pay for. To successfully change from handling a pitchfork to handling a pipette is too much for the average man. Women are more likely to be expert testers than are men, because more adroit with the hands.

The cost of a four-bottle outfit complete, without extra glassware, and including sufficient acid to make a number of tests, is about five dollars, so that the first cost is not very great. These small machines will give as good results as the larger ones, if run at proper speed, and for the required length of time. The cost for the acid varies a great deal. We used to get commercial sulphuric acid by the carboy for two cents per pound, but recently the price has been raised to four cents per pound. A pound of acid will make about fourteen tests, so this figures at a cost of about three tests for one cent. The only other expense in making the test is the labor and hot water.

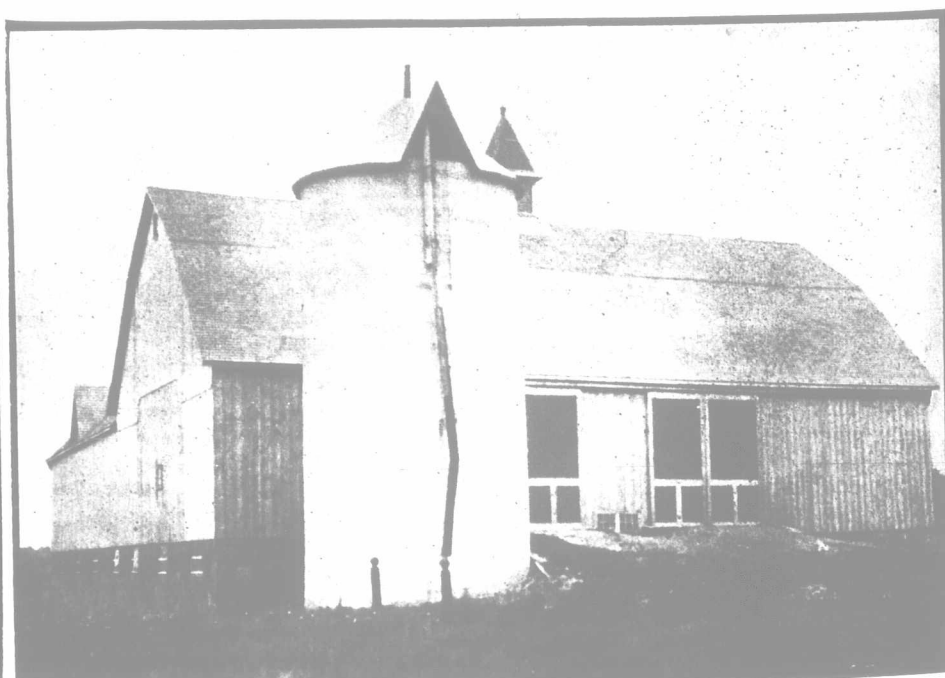
The testing outfits can be obtained from any firm selling dairy supplies. (By the way, dairy supply firms do not seem to advertise their goods so freely as they might in farm journals. We get dozens of letters each year from farmers wanting to know where they can buy testers, churns, printers, etc. These parties say they do not find these articles advertised in their farm papers.)

STANDARD TEST BOTTLE NEEDED.

A great deal of confusion has arisen among students and others regarding the bottles for testing. It is quite a usual thing to find students using a skim milk or cream bottle for testing whole milk, or the reverse. It is little wonder that the man on the farm becomes confused when he has so many different kinds of milk-test bottles to deal with. The writer thinks that someone will evolve a bottle that will test whole milk, skim milk, buttermilk, cream, whey, cheese and butter, and thus do away with all but one of the at least dozen different kinds of bottles now on the market. We have taken the matter up with a large manufacturing concern, but they seem to think it practicable, naturally, they



Where Milk is Made.
A significant scene on A. H. Teeple's farm.



A Well Laid Out Dairy Barn.

do not wish to change from present methods. The greater the number of kinds of bottles needed, the more money for the manufacturer, and the greater the capital outlay, and repair expense for the operator.

It would seem as if the first step is to reduce the size of the sample for a test. There is not, and never was, any good reason for taking 18 grams of milk for a test, as compared with a smaller weight, say, 4 or 5 grams. We are at once met with the argument that the smaller weight is not so likely to be a representative sample. So far as we can see, there is little or nothing in this. A five c.c. pipette full of milk is just as likely to be representative as a 17.6 c.c. measure. In the Hart casein and in the casein-fat tests, five c.c. of milk are used with satisfactory results. One advantage of using less milk for a sample would be a reduction in cost for acid, as we find a number of farmers doing official testing, who object to supervisors testing samples in duplicate, because of the extra cost for acid.

Whether or not this change will ever be made, no one can say. Man is so steeped in the "Traditions of the Elders" that nothing much short of an earthquake can cause him to arise and shake the grave-clothes of superstition which shackle him as effectually as iron bracelets.

THE COMPOSITE SAMPLE.

The tendency among cream-collecting creameries is to do away with the composite sample, and test each and every delivery. Those who follow this plan have lost faith in the composite sampling method, but as a matter of business, they find it better satisfies their patronage to test each delivery and report same to patron, and if necessary accompany it with cheque or money order for the shipment of cream. This is certainly an excellent plan where the creamery has sufficient help to do the testing, and a book-keeper to make out results.

However, for the benefit of those patrons of creameries where samples of cream or milk are taken from each delivery and the composite tested bi-monthly or monthly, we may say that this method gives practically the same results in total pounds of fat credited at the end of the month or season, as where each delivery is tested. The only danger is in having the samples so badly moulded that a correct sample cannot be got at the end of the test period. There is need of a good preservative for cream composite samples—one that will not only keep the sample sweet, but one which will prevent mould spores growing on the cream. One of the creamery inspectors advises not shaking the sample when adding a fresh charge, and not allowing the cream to touch the side of the composite bottle when adding the sample, in order to prevent mould on the composite. Tests made indicate that there is probably a good deal in what he says. It is worth trying by our creamerymen.

Two other points should be observed, the composite sample bottle should be kept tightly stoppered, and it should be kept as cold as possible—preferably in the refrigerator. If the bottle be not stoppered there is evaporation, and the tests will be from one-half to one per cent. too high, depending upon the amount of evaporation which has taken place.

Up to the present the best preservative we have found for composite samples is a mixture of three parts bichromate of potash and one part bichloride of mercury, using about what will lie on a five-cent piece for pint samples in ordinary weather, and double this amount in hot weather.

Formalin and cresote are also very good. The former tends to toughen the curdy matter, making it difficult of solution, and the latter is rather expensive. It also has a very pungent odor which might be objectionable in a creamery.

READING THE TESTS.

A variety of practices has grown up with reference to the reading of tests. Some read at the temperature as it comes from the centrifuge, whether hand or steam turbine. The correct plan is to set all samples in hot water at a temperature of 140 degrees F., and read only at this temperature.

Some read to the bottom, some to the middle, some to the top of the meniscus or curve on the fat column. In whole milk bottles, read from the bottom to the top of the column of fat, reading as if there were no curve or meniscus. In cream samples all are not agreed. It depends upon the diameter of the bore of the bottle. If using a large, 40 to 50 per cent. 18 gram, six-inch cream bottle, the plan of reading to the bottom of the curve is advised by some, while others read to the middle of the curve. So far as we can see it makes little difference which plan is adopted so long as all samples are read in the same way, although we favor reading to about the middle of the meniscus as a rule, especially with the 9-gram, 50 per cent., six-inch bottle, which we believe is the best form of cream bottle on the market at present.

Some use colored oils to remove the meniscus entirely, when the question arises, what becomes of the curve? Is it dissolved, filled up, or

what? If the fat curve is merely dissolved, we may as well read to the bottom of the curve and be done with it, saving the expense and labor of adding coloring. If it is filled with some substance to the level of the tips of the curve, we may as well read to the top as in whole milk samples.

There is need for more uniformity of bottle and methods in testing cream, which is admittedly more difficult than the testing of milk.

Finally we would call attention to the fact that all Babcock glassware must be stamped correct by the Testing Branch of the Department of Inland Revenue, Ottawa, before it may be lawfully used for testing. There appears to be considerable glassware in use, not so stamped, and users are liable to a fine for neglecting to comply with the requirements of the law on this point.

O. A. C.

H. H. DEAN.

HORTICULTURE.

The Fruit Crop Outlook.

The fruit crop report recently issued from the Commissioner's Branch at Ottawa confirms the reports of former dates. Apples, except in isolated sections are considered a good crop, but there are a few portions of the Annapolis Valley which have been seriously injured. The pear crop in Ontario especially will be a light one. Keiffers are particularly abundant, but other varieties, especially in Eastern Ontario were badly winter-killed and will not be up to the average. Plums, as will be remembered, blossomed very fully, but the set was not what would have been expected and the crop will be below the average. Japanese varieties particularly have suffered in some sections and in Eastern Ontario winter-killing very materially injured the buds of most varieties. In British Columbia conditions are generally favorable and a crop considerably larger than last year is expected.

The Essex Peninsula and a small section of Lambton County will produce some peaches, but the greater portion of the peach belts in Ontario will not have many peaches to offer and prices will undoubtedly be high. Tomatoes have been planted extensively to off-set this loss in the peach crop. The area is above that of any previous year and British Columbia has also increased on her already growing acreage. Cherries will be an abundant crop in the Niagara district and from the Southern and Western Counties of Ontario. In some sections the sweet varieties will yield only a light crop, but the report is extremely good for all other varieties. There is seldom any doubt about the grape crop and this year it is estimated between medium and large. As a general rule the strawberry crop will be below the average and prices will run high. Owing to winter injury and in some instances the drouth of 1913, the plantations have been so weakened that the plants are not up to the desired vigor. This coupled with a cold, wet spring of 1914, and the consequent lack of proper fertilization of the blossoms will cause the crop to be below the average. Recent cablegrams from London, England, predict only half a crop of apples and state that the present season is regarded as the most unfortunate for many years in that country.

Prepare Raspberries for Next Year.

There is one operation on the raspberry plantation that should be carried into execution immediately after the crop is harvested, and that is to remove the old canes. If disease and insects are in the patch at all they will likely be found on the wood that has borne the crop, and since it is of no further value it should be removed at once and burned. Anthracnose is becoming a common enemy and this system of control is the most practicable yet put into use. As for clipping back the young canes, it is optional whether it be done in the autumn or spring, and each time has its advocates for reasons based upon local conditions. However, the cleaning up of the old canes is a practice to be carried out as soon as possible after harvesting the crop and this followed by cultivation and fertilization will give a healthy well-nourished plantation for the succeeding year.

Trees Have Been Root-Killed.

Prof. J. W. Crow, of the O.A.C., writes as follows:

"We are getting numerous inquiries concerning trees which leaf out and then die more or less suddenly. These are the customary symptoms of root killing, although a great many fruit growers do not seem to be aware of this form of winter injury. We have investigated a number of cases and always with the same results."

"If any of your correspondents have been losing trees in this way, we shall be very glad to send a man to investigate the same and report."

FARM BULLETIN.

The Trail of The Colonizer.

Editor "The Farmer's Advocate":

When I was a child my chief delight was to hear my mother tell me how my great grandfather and his family drove overland in a covered wagon from Bucks County, Pa., to settle in the Colonel Talbot Colony in Upper Canada after the close of the Revolutionary War. Quakers my forebears were, and better people were never driven out of a country than these founders of a new colony, whose religion forbade them to bear arms, and whose thrift had accumulated well-stocked farms that were the envy of their whig neighbors. When peace came and they found their loss unbearable—their best horses and cattle being hamstringed, their stacks and barns burned, and even their lives threatened—they gathered what they could together and started for a peaceful life and a home under the British flag which was assured them in the fertile province to the north. They crossed the Niagara River by ferry at Black Rock, and the next morning when my grandfather went out to drive in their sole remaining cow he found her carcass lying on the rocks of the lake shore while the wolves were snarling and feasting on her remains. Not a very auspicious welcome to a new country. How I wished I could have been with them!

When my father took me on his knee and told me how he and my mother started housekeeping down on the "Old Plank Road" that ran from Port Dover to Jarvis, where the trees were so high and the underbrush so thick that they had to carry a lighted candle to show them the way to the nearest neighbor, while the wind roared overhead and every now and then a big tree or a branch would come crashing to the ground near them; when their only roads were corduroy, and the wild cats and the wolves were nightly visitors, while the deer often yarked with the cattle—I used to think of our level, well-tilled fields in the pleasant valley, and wish that I, too, could pioneer.

As I grew older the wish grew stronger, the wanderlust was with me, smothered for many years only to break out after a very long, severe winter and a summer that was pretty much all late in the spring.

"This six months winter is too much of the good thing," remarked my husband, and I agreed with him, for it meant a great deal of darning and mending of boys' stockings and mittens, and I was longing for "barefoot time."

"Guess I'll send for this," he added passing me the magazine he was reading and pointing to an advertisement, the chief feature of which was a big, fat baby sitting on a monster watermelon and surrounded by some very catchy reading matter concerning one particular spot in Texas. We sent.

In short order came a book about the Gulf Coast. A huge branch crammed full of big, juicy, yellow oranges adorned the cover; Gulf Coast oranges they were too (by that same token they were bigger than the oranges I have seen down here, and more plentiful), and then there was a nice little bit of poetry,

"Where the Gulf breeze blows,
Where the jasmine grows,"

and then something about "the rose," I've forgotten just what it was, but it sounded good to me.

We fell for the seductive and persuasive literature the word juggler sent us, and fell hard. My husband went on ahead and found everything looking lovely, soil looked good on top, beautiful slope, pretty bayou, live oak trees festooned with "grandpa's whiskers", numerous people coming from all quarters of the globe—everything lovely. So I went along in February, 1913, a pioneer, like great grandmother setting forth from the Promised Land. Instead of the covered prairie schooner of grandmother's time we travelled in pullman sleepers, and in place of having to camp and cook meals we had a well-appointed service. There was also the telegraph to send word to the Promised Land folk of my arrival, and in place of finding my cow dead there was my husband already there waiting to kill the calf for me. That was where I had it easier than great grandmother. But after paying high prices for meals for four at the railway restaurants I came to the conclusion that was one place great grandmother had less expense than I had experienced, for she could have grandfather catch her meals while she cooked them whenever they were hungry. Another place great grandmother was ahead—she could whip her children if they did not behave, or could otherwise correct them without having a carfull of people making comments on their behavior or hers.

All journeys however long have an end. We arrived at our destination, the land of milk and honey, but so far it has been condensed milk and strained honey. It was the last of February, 1913, green onions, lettuce, growing cabbage and mustard, made a brave show in the gardens; the fields were green, everything was green. The little village that had been set down in the

midst of a cattle range had growing pains and a couple of new houses about as big as this page, were being composed. "Built" or "erected" is too large a term to describe the process of putting them together. A man with the use of both hands can put up an ordinary "colony house" in a day and a half.

Well, I had primed myself with facts and figures concerning cattle, horses, all kinds of live stock, including ticks and tick fever, and just when I was wondering where all the fine cattle were someone exclaimed aloud. Picture to yourself the head, neck and hump of a buffalo, the huge horns cut off about a foot each side of his head. The brisket extra heavy and large and an immense dewlap added to the size of the beast. The color was red-black, like a dark Jersey. Had he been light in color one could have seen through him he was so thin. This was the cause of the exclamation.

While he plodded along looking furtively to the right and left in order to dodge a missile or a hard word, I was enlightened as to his biography. He was a cross between a Sacred Brahma and a Jersey. This mixture is immune to the fever tick that has been the bane of Texas stockmen. Anything that can stand the hard words said of him, that this bull did, can live anywhere. I have heard some very severe things said about him and by a refined gentleman too, but that was after he unfastened the back gate after dark and ate the top out of a \$5.00 arbor vitae tree, and did some other stunts in the hotel garden. While in town this bull made the rounds of all the back yards, investigating empty barrels and boxes, cleaning out garbage cans and eating everything a goat would. But though so ugly in appearance he was as mild a mannered bull as ever opened gates or spoiled a garden.

Theoretically he and his kind (the Brahma-Jersey cross) are all right. They are fine beef cattle, and as nearly tick proof as it is possible to be; practically they are an offense to the artistic eye, and a blot on the landscape. They have large horns like a Hereford and these are cut off about a foot each side of the head,—a heavy, low-browed, ugly-looking face, thick neck, heavy brisket, large fore quarters, and a big camel-like lump weighing 25 or 30 pounds back of the shoulders. (N. B.—This hump is considered a delicacy, but our butcher never had any.) The beast is somewhat sway-backed, and a heavy dewlap which both male and female possess makes the hind quarters look small in comparison with the Buffalo-Camelesque front of this new beef breed. The color is a dark Jersey. The cows possess good milking qualities, and they are all of amiable disposition.

Enthusiasts claim to have developed a tick-proof breed. Personally, I think cultivation of the land will be the most satisfactory tick eradicator. Apropos of ticks we noticed a couple of house flies acting in a drunken staggering manner one day, and on investigation discovered they were laden down with ticks,—conclusive proof that the typhoid fly has another black mark on its scutcheon.

It was February 23, 1913, when we landed in Danbury, "the town that does things," as the company literature delighted to put it, and the things it did were a plenty. It was soon to boast an electric road, telephone, a canal connecting it with Galveston and an "everything that was going" to believe the company literature that continued to pour in upon us. But I am digressing? To return to our cattle; I had expected to see fat, sleek cattle and horses, but never did I see up north so many unthrifty scrubs in all my life as I saw drifting over the prairies exposed to the heavy rains and bitter winds of winter. They were all sorts, kinds, sizes and colors, brindled, spotted, speckled, and tick-infested. There were numerous long horns—the old native breed that is fast disappearing along with the free range.

We stopped at the hotel while our house was being built, and found people there from all quarters of the globe. Alaska, Mexico, Hawaii, Alberta, Ontario, Kansas, Illinois, Washington, Pennsylvania, Wisconsin, Oklahoma and California were represented. Everyone was enthusiastic, the land appeared to be all right, and a ready-made colony was to be seen in every mind's eye. The majority of those coming in had accepted their lands and were breaking up and improving their tracts.

The field manager of the company was very agreeable, and stood well with the colonists. He was so busy we could not see much of him for two or three days, but one day at noon I asked him when we could be driven over to our tract about five miles distant.

"Sometime this evening," he answered.

I thought, "Well, this is a great idea to show land after dark," but I soon found out that the Texas people have only two divisions to the day. "Morning" until 12 o'clock noon, then "evening" until morning comes again. The country seemed very flat, and there were no trees only along the bayous (pronounced by-oh) as the small rivers are called. The trees are draped with Spanish moss, and the palms along by the water present quite a tropical appearance. The general appearance of the land was promising. Our tract

bordered on the bayou, where the fishing seemed remarkably good. The boys were anxious to catch a string, but dig as they would they couldn't find a worm. However, after the ground was broken up and cultivated we began to find small ones, but when first plowed there was nary a worm.

We built a house, bought a fine team of horses, acquired some low-grade furniture at high-grade prices and started in to make a crop. Then came on a dry spell, and work we did in earnest, trying to get a crop off the land that had been idle for centuries. On twenty acres we worked, cultivating and disking enough to have put 100 acres in condition back north. Melons and cotton were to be the crop, with sorghum and corn for the team and chickens. And then when things were going nicely came the mosquitoes. The Gulf brand they were, and they came by millions on the Gulf Breeze we had heard so much about. Much has been written about the mosquitoes, but the Gulf mosquitoes have never had full justice done them and never will have. The air was thick with them—tiny little pests about one-third the size of an ordinary mosquito and with an appetite as big as an elephant. The first warning you get of his approach is when he leaves, as he stings first and then buzzes. He is never satisfied with one bite, but will take three or four and then buzz a farewell. Three days the mosquito storm lasted, and the timely appearance of a "norther" as they call the cool stiff breezes from the north, drove the Gulf mosquito back to his lair in the salt marshes. But before leaving this tiny pest let me assure you that he is the worst ever, and believe me, the hair cloth shirts and lashes of the good old "padres" had nothing on the Gulf mosquito. The next time the mosquito plague came it stayed with us for more than a month.

The bayou and the Gulf Breezes were a source of delight to the boys. Every day or so a launch or oil scow would go past to the rice farms, and would come so near the bank one could almost jump aboard. More colonists came in, some bringing a piano and other luxuries, and all biding on the big crops they were going to raise on this fertile soil that had won the prize for fertility at the Paris Exposition.

"Pecans will be my main dependence said an engineer from Sudbury, and while they are growing into bearing I'll plant cotton and canteloupe." He had a canvas, knock-down house, a piano, and many comforts, and a wife and baby boy two years old. They also had the same boundless enthusiasm that we had, and we used to compare notes nearly every Saturday when we met coming from town.

We planted our canteloupe and they came up finely and grew well in spite of the drouth. The corn and garden truck also started well, and so did the jackdaws, magpies and rabbits, both cottontail and jack. These drawbacks coupled with the dry weather and the high cost of living in a land where such abundance was promised by the land company began to worry the colonists, and murmurs of dissatisfaction were heard throughout the colony. This was made worse when the company summarily and without cause dismissed their very efficient field manager, and put in a new man.

"The town that does things" was the way the company styled it, and what it did to us! However, we had planted and worked faithfully so no fault could be laid at our door, and I must say our crops looked well.

Early one morning in April, looking off over the skyline towards the Gulf we noticed in the clouds an exact reproduction of the Galveston Causeway. It was the first time I had ever seen a mirage, and breakfast dishes and everything else went unheeded so long as this beautiful luminous picture remained in the clouds. Soon we could see a train crossing the Causeway, and then slowly the sun showed itself and the wonderful picture faded from sight. Contrary to my ideas of a mirage this was not upside down. Another natural phenomenon we observed later in the year was the rainbow at night.

Texas.

HOWARD KENT.

Haying on in Middlesex.

Fields of red clover were cut in parts of Middlesex County, Ontario, on Monday, June 15th. Except in isolated cases, the fortnight's dry weather over considerable areas, it is believed, will seriously lessen the yield of hay below what was hoped for at an earlier date. It is believed that cheap hay is not yet in sight. Heavily stocked pastures were also showing its effects and this in turn has begun to tell on the milk flow in the dairy sections. Some dairymen have already been drawing heavily on mill feeds to supplement herbage. The oat and barley crops are strong in color and have made a good start. Fall wheat headed early and the weather and moisture at the time of corn planting were just right for germination and the subsequent abundance of sunshine was most favorable for weed-killing, though the cool nights were not ideal for corn growth.

The Orchard.

By Peter McArthur.

I suppose the spring work may be considered finished when the pumpkin seeds are planted. The last pumpkin seed went into the corn-field yesterday afternoon, and I feel that I am entitled to stop and look things over for a day or two before beginning at another job. When laying out the work for the season I had no idea that the young orchard would take so much work, but it is planted and there is corn planted between the rows and pumpkin seeds planted in the corn. There should be a crop of some kind next fall. It almost seems like over-working a patient field to arrange for a crop of trees, corn and pumpkins in the same year, but as there was a clover sod ploughed under last fall and a coat of manure put on a large part of it this spring, it ought to do all right. The ground has been disced eight times, and in a few days we shall be starting in with the hoes and the cultivator. I am not afraid of the thistles and weeds, but there is some kind of wild grass in the low spots that promises a lively tussle. Although it has been disced out of sight several times it is beginning to show up fresh and green among the corn. But we are prepared to go at it vigorously for the sake of getting the young orchard good and clean at the start.

Now that I have had a chance to go over the young orchard carefully I find it a joy. Last year I thought I did quite well to get ninety per cent. of the apple-trees and one half of the cherry trees growing, but of the two hundred and sixty one apple trees and two hundred and sixty cherry trees that were planted this spring I have not found one that is not in full growth. They are all bursting with vigor. Besides putting out leaves they are all putting out a growth of new wood and there is every reason to hope that all of them will live. One little Wealthy, no thicker than my finger was so ambitious that it put out blossoms and now shows a little apple the size of a marble. I think that must beat the record for a young orchard coming into bearing. While on this point it may be a guidance to others who are intending to plant out orchards in the future to put on record a hint that I got from a visiting expert—after it was too late for me to act on it. He said that in securing young trees from a nursery one should try if possible to get trees that had been grafted from fruit-bearing wood. In some nurseries they graft from the young trees they have growing on the place. The trees grafted with fruit wood will come into bearing several years earlier than those grafted from nursery shoots. This is certainly a very important matter, for it takes a long time to get an orchard into bearing at the best. If I had known about this in time I should have insisted on a guarantee that I was getting properly grafted young trees, but the young Wealthy that has started bearing on the year of planting leads me to hope that I have the right kind. They are so satisfactory in every other way, having been dug this spring instead of being brought out of cold storage, that I hardly think they would be lacking on so important a point as proper grafting. Anyway they are planted and now begins the patient job of bringing them into bearing as soon as possible.

The old orchard shows an excellent set of fruit though the trees are not going to be loaded as they were a couple of years ago when Mr. Clement had charge of them. Only a fair percentage of the blossoms fertilized. I am wondering if that was because we had an unusually heavy rain and wind storm just after they came in bloom. It pounded off most of the petals and perhaps that stopped the bees and insects from completing their work. All the trees, except one Baldwin that yielded eleven barrels last year, show what will probably prove to be a sufficient crop. The Spies are well-loaded and I shall probably have to do some thinning on them. I am glad to find that the Peewaukee with the freak branch that has been yielding dark red apples while the rest of the tree yields the ordinary striped fruit, is well loaded this year. The experts have promised to make a study of it this season to discover if possible why that branch should be different. If orchardists could find out how to stimulate the color of apples (they would make great progress towards developing the most popular varieties. It is almost as necessary to please the eye as the palate, but as far as I am able to learn it is not known how to produce more color except by pruning the trees so that the apples will get as much sunshine as possible. I also understand that the apples produced in orchards that are allowed to run to sod are usually more highly colored than those yielded by cultivated orchards, but the why and wherefore of this is not clearly understood. If

our freak branch acts as it has on the past couple of years they may be able to find some clue to the question of color. There must be some reason why that branch which seems to be entirely healthy and in no way different from the rest of the tree should give apples that are almost purple. Something is stimulating the color, but what? It is not another variety that has been grafted on the tree for all who have examined the apples are sure that they are true Peewaukees.

It is also pleasant to find that the apples are as yet entirely free from scab and I have found only a couple of side-worms. This year we put on the lime-sulphur spray and arsenate of lead as strong as we dared and it looks as if we had done right. A crab-apple tree that could not be sprayed because it stands near the house, and the wind was in the wrong direction when we were spraying is loaded with fruit that is covered with scab. This shows us what we would have had in the orchard if we had not taken steps to control the blight. Of course it is too early to be sure that we have escaped entirely, but at this time a year ago our apples were black with scab.

A Big Crop Acreage.

In a bulletin issued June 12th, by the Census and Statistics Office preliminary estimates are given of the areas sown to the principal grain crops in Canada as well as reports on their condition according to returns made by crop-reporting correspondents on June 1st. The reports show that throughout the Maritime provinces, seeding was delayed through the lateness of the spring. In Ontario and Quebec the condition of grain is generally satisfactory, notwithstanding a long spell of dry weather; in many places however the meadows were beginning to suffer from the effects of drouth. Conditions throughout the West were reported as generally favorable, though rains would be welcome especially in Manitoba and southern Alberta.

The total area under wheat in Canada is provisionally estimated at 11,203,800 acres, or 188,800 acres more than in 1913. The area under spring wheat is reported as 10,230,500 acres, or 185,500 acres more than in 1913, and the area expected to be harvested of fall wheat is 973,300 acres or 3,300 acres more than last year. The acreage of oats is placed at 10,811,000 acres as compared with 10,434,000 acres last year, an increase of 377,000 acres. Barley occupies 1,604,000 acres, or 9,000 acres less than last year and rye 111,070 acres as compared with 119,300 acres last year. The estimated area under hay and clover is 8,206,000 acres as compared with 8,169,000 acres in 1913.

In the three Northwest provinces, Manitoba, Saskatchewan and Alberta, the total wheat area is estimated at 10,247,400 acres as compared with 10,036,000 acres in 1913; that of oats at 6,086,000 acres as compared with 5,792,000 acres in 1913; that of barley at 1,041,000 as compared with 1,025,000 acres in 1913. These differences represent increases of 211,400 acres for wheat, 294,000 acres for oats and 16,000 acres for barley; or a total increase of 521,400 acres for the three crops as compared with 1913. The wheat area in Manitoba is somewhat less than last year, viz: 2,788,000 acres as compared with 2,804,000 acres in 1913. In Saskatchewan the area under wheat is 5,848,300 acres as compared with 5,720,000 acres, and in Alberta it is 1,611,100 acres against 1,512,000 acres.

On June 1st, the condition of field crops, as measured by a standard in which 100 represents the promise of a full crop was very favorable. The points are as follows: Fall wheat 79, spring wheat 93, all wheat 91, oats and barley 92, rye 89, peas 92, mixed grains 93, hay and clover 90, alfalfa 88 and pastures 90.

Assuming that the conditions between now and harvest will be equal to the average of the past four years 1910-1913, the above percentages represent the promise of yields equal to the four year average in the case of spring wheat, rye and barley, and inferior in the case of oats by 1 p. c. and in the case of fall wheat by 2 p. c.

Does it Pay to Feed Cattle?

John H. Earle, a subscriber to "The Farmer's Advocate," living in Durham Co., Ont., reports that during the past winter he fed seven head of beef cattle which he turned over to the drover, on May 31. One of these cattle was a three-year-old heifer and the other six were eighteen months old. The lot weighed 7,515 lbs. and realized \$638. Mr. Earle concludes his letter to "The Farmer's Advocate" thus: "Does it pay to feed cattle?"

Dominion Legislation for Agriculture.

The legislation relating to Agriculture which has been introduced during the 3rd session, 12th Parliament at Ottawa that closed last Friday, consists mainly of three acts, (1) The Dairy Industry Act, (2) The Cold Storage Warehouse Act and (3) An Act to amend the Adulteration Act, together with an order-in-council relating to the Animal Contagious Diseases Act.

(1) The Dairy Industry Act regulates the manufacture and sale of dairy products prohibiting the sale or manufacture of butter substitutes, thus keeping the Dominion free from the oleomargarine troubles existing across the line.

In this Act sundry words have been introduced indicative of the change and progression of modern dairying. For instance, the term "dairy products" now includes milk powder, the legislation insisting on a pure, undiluted and healthful supply of milk to all milk powder and casein manufacturers, as well as to all premises where milk or cream is collected for sale or shipment. Homogenized milk and cream together with whey butter are also newcomers into the field of law.

A change in the wording makes it perfectly clear that butter no matter how made (that is omitting the old references to mixing any acid, alkali, chemical etc.) must not contain over sixteen per centum of water.

It is provided that print butter must be in

of maple sugar, the aim is made to protect both the consumer from fraud, and the legitimate members of a great industry from dishonest competitors shall be deemed to be adulterated. Further, the word "Maple" shall not be used either alone or in combination with any other word or words on the label or other mark on a package containing any article of food or any article of food itself which is or which resembles maple sugar or maple syrup, which is not pure maple sugar or pure maple syrup, and any article of food labelled or marked in violation of this subsection shall be deemed to be adulterated within the meaning of this Act. Neither is the word "Honey" to be used under like conditions.

Simply pausing to note a customs regulation providing that mowing machines, harvesters and reapers are reduced on the intermediate and general tariff from 17½ to 12½ per cent duty, and that complete parts for repairs of traction ditching machines are free, we pass on to consider a most important order in council now in effect, one designed to protect the public against the great white plague transmitted from tuberculous cows. It provides that if a municipality desires the aid of the Veterinary Director General, that officer of the Department of Agriculture is now empowered under the Animal Contagious Diseases Act to assist in preventing the sale of milk from infected animals.

The mortality of children, particularly in cities, has aroused deep and widespread concern; providing pure milk for infants is a large and complicated problem, but every civilized country is attempting at least something in the direction of controlling or eradicating the fell disease—not only a loss to cattle owners but a constant menace to public health.

It is proposed to license only such dairies that conform to the reasonable requirements of air space, light, ventilation and cleanliness; milk and cream sold in the municipality shall be produced only in such licensed dairies. Cows and dairy bulls are to be subjected to the tuberculin test, and provision is made for compensation in case of slaughter. No milk

or cream shall be sold from a herd containing reactors under that test unless properly pasteurized. After two years from the date of the first test of the cattle of any dairy the sale of milk or cream is prohibited unless the herd shows a clean bill of health.

International Horse Show.

Only one Canadian victory worthy of notice was recorded during the first seven days of the International Horse Show, which, as I write, is still running at Olympia, London. This was when, in the quaint leaping contest of two horses abreast, the Hon. Adam Beck, finished second with his two brilliant hunter-like leapers, Sir Edward and Sir Thomas, defeated ultimately by two French army leapers, which could quite fairly be described as trick horses, so fully and well schooled were they to this "indoor game."

Judge W. H. Moore, accompanied by his enthusiastic wife, was a big competitor at the Show, but in the first few days his horses fared none too well.

The first prize in the class of tandems over 15 hands and not exceeding 15 hands 2 inches, went to W. H. Moore's well-known team, Lord Seaton and Lady Seaton, which made a very great show. This really was the clear first victory achieved by Judge Moore at the show, and it was a right down popular one with the crowd. Sumner's horses have as yet done none too well for the Massachussets enthusiast.

Single harness horses over 16 hands made a good show. Barron's handsome chestnut Cadogan Flash made a great show and won, Robert Black's Gaythorn being a very good second. W. H. Moore was third with Allen-a-Dale, and fifth went to Moore's Vida Fayre. The Kentucky Trophy for the best pair of hacks was won by Walter Winans with Mount Hanover and Bugle March, Mrs. Chapman being a good reserve with Follow On and Enchantress.



Re-inforcements Needed Now.

Canadian Farmer—"If you have any men to spare for the national defence, send 'em this way."

either one-quarter-pound, one-half-pound, one-pound or two-pound weights when moulded or cut; this does not refer to farmers' roll or lump butter of indiscriminate weight.

When necessary to make convictions under the Act there is now given a standing to the holders of dairy school certificates and graduates of an agricultural college.

New regulations already made under this Act which come into force the 1st of September, 1914, include compulsory branding of any butter containing whey as "Whey Butter" and dairy butter in parchment paper prints as "Dairy Butter", any mixed dairy and creamery butter as "Dairy Butter"; cheese containing any skim-milk as "Skim Milk-Cheese." The use of the words "Canada" or "Canadian" on any cheese or butter package is restricted to such products as have been made in Canada. The fines for violation are from \$10 to \$30.

(2) The Cold Storage Warehouse Act provides that the Governor in Council may make such regulations as he deems necessary or expedient, to provide for a supervision of all cold storage warehouses. Such regulations may provide for the licensing of all cold storage warehouses; for the inspection of all cold storage warehouses; for a system of periodic and other reports by owners of cold storage warehouses showing the quantities in storage of the several articles of food; for limiting the several periods of time during which the respective articles of food may be held in cold storage; for the inspection of food products before they are placed in cold storage warehouses, while they are in such warehouse and where they are removed therefrom, and for labelling or marking food products or packages of food products when placed in cold storage warehouse and when removed therefrom for sale.

(3) Under the third, an Act to amend the Adulteration Act, which touches the adulteration

Walter Winans, the American millionaire, enjoyed a host of victories in the riding horse and hack classes. In riding horses over 15 hands 2 inches, his Mount Hanover was first. He is a very stylish horse, and his action is excellent. In ladies' hacks Walter Winans' Turquoise may be said to have won cleverly. He is a chestnut, just short of fifteen hands two inches, and shows fine quality. John Drage was second, with Redskin, a well-balanced chestnut on hunter lines, and a fine mover all round.

In novice tandems not exceeding 15 hands, first were placed Mel Valley's Bauble and Mel Valley's Fire, the property of the executrix of the late William Foster. They are now owned by a wealthy London tradesman, W. W. Bourne, who gave 1,150 guineas and 410 guineas respectively for them at the Foster sale. Both are good winners in single harness. Mel Valley's Fire, then known as Melbourne Fire, and owned by his breeder, Walter Cliff, was first and champion at Islington last year, and also won there this year, both in hand and in harness, and Mel Valley's Bauble has several first prizes to his credit, including three at the International Show and one at the Royal last year. They make a beautiful tandem team and go well together, whilst their quality and action make them stand out conspicuous winners. Mrs. F. E. Judson was second with Primrose of White Gate and Peacock Sensation, a well-balanced team, with fine quality and excellent action.

Some of the best ponies of the day were seen in the class for ponies or cobs to be shown with a governess car and driven by a lady. It looked queer to see a pony that has cost 1,150 guineas unable to get higher up in a "Governess Car" class than reserve. Mr. Bourne, however, won easily with Mel Valley's Fame, whose reputation is worldwide, and who, as usual, made a great show. He cost 525 guineas at the Foster sale. Mrs. F. E. Judson's Firespark, a stylish bay, with action and pace, was second and Ruspier Consul, owned by the same lady, third.

Walter Winans' trotters, led by Bonnie View, won all before them in the Standard-bred classes.

The class for three qualified hunters belonging to one hunt saw Count Fritz Hochberg win with his team, Black Prince, The Dandy and Robin. Walter Winans was second with a very workman-like team, ridden by ladies, and was third with another team.

In the coaching Marathon, an event for coaches over eleven miles from Bushey Park in Surrey to the show-ring, America got a setback for either Judge Moore or A. G. Vanderbilt have won the event on all the occasions competed for. Each coach had to carry seven passengers, and was to be set out as though fully equipped for the road. The coaches had to weigh 28 hundredweight. Judge Moore was given the honor of going off first, and he drove four Standard-bred horses, bays and greys, crossed. They proved a very fast team, but if anything they were spoiled by the near-leader, a well-shaped grey, which was not of quite the same type as the others. After Mr. Moore came Lord Leconfield, with a well-balanced bay team of true

coach horses. Spectators were not far wrong in their choice of Barron's chestnuts, which have twice won at Ranelagh. They were Hackneys with perhaps, rather too much action for the road. But they were a team, and not merely four horses. They stepped like one, and as they left the grass for the road settled down to their work. Whatever their breeding, they had courage and pace, and they stayed well, too, for no team showed better in the ring after the completion of their journey. There was no team among the competitors more full of character than Tilling's greys. They were the most workmanlike on the ground—stout horses with weight and substance. They were very level, and looked like making the journey with ease. Miss Sylvia Brocklebank had four bays of rather a lighter stamp than she has sometimes driven, and the off-leader was hardly of the same type as the others. They moved smoothly, and Miss Brocklebank drove steadily, reaching Olympia well within the time—sixty-five minutes—but not forcing the pace.

A. G. Vanderbilt had two very nice teams, one consisting of four bays—handsome standard-bred horses—which he himself drove. Wilson, the professional, handled a second team. Both these teams were fast.

The teams averaged 51 minutes for 11 miles. This is good work over a road with every kind of surface, from asphalt and wood paving to stones and macadam.

Inside Olympia the judges went for Hackney type, and Barron's four chestnuts gained the prize. They were a team level in size, type, and action, and after their long drive no team moved with more fire and freedom in the ring. Judge Moore's, Lord Leconfield's, Vanderbilt's, Miss Brocklebank's, and Tilling's teams were all honored with well-deserved cheers, and ribbons.

The King Edward VII. Gold Challenge Cup for officers jumping saw Belgium, England, France, and Russia represented. The Cup was won by Russia. France was reserve. This was the third time Russia had won the cup, and it now goes to the Czar outright.

There is still a week of the show to run, and I will deal with the championship largely in my next letter to you. The show is still a pronounced financial success. The social butterflies of London are flocking to it in countless hundreds—and the joke is, they all "do it" by motor!

COUNTY SHOWS IN ENGLAND.

In Nottinghamshire the cult of the Shire horse is growing. Open Yearling Shire Colts had as winner A. H. Clark's Moulton Porter, a very stylish and shapely brown by Moulton Victor King. In Yearling Fillies A. H. Clark jun.'s Victor's Choice, a bay with a leg at every corner was first. In Two-year-old Fillies Sir A. Nicholson won with Roycroft Forest Queen, a good-looking bay with good legs and feet by Ratcliffe Forest King. J. G. Williams' handsome bay Snelston Lady (winner of the junior Cup in London and reserve for the championship) led in Three-year-old Fillies, with Forshaw's Arbour Modest Queen second.

In Barren Mares, four years old, J. G.

Williams' Halstead Duchess VII. made a great show, and led.

In Colt Foals, James Gould's Lymm Cardinal was first. In Filly Foals, J. G. Williams led with a filly by Norbury Menestrel. Sir John Robinson's local prize went to Smeeton's Bunney Duchess II., with Tom Kay's filly foal that won in the County class reserve. The Shire Horse Society's gold medal for stallions went to the Duchess of Newcastle's Clumber Casket, with Forshaw's Walburgh King reserve; and the gold medal for Mares went to Forshaw's Arbour Modest Queen, with Matthew Hubbard's Scarcliffe Sundial reserve.

In the four local Shorthorn classes, F. B. Wilkinson won first in each, other exhibitors of prominence being H. Sheldon, W. Clark, W. Cranfield, and E. Waddington. In the County classes Earl Manvess won Bull Calves, Yearling Bulls, Two-year-old Bulls, Pairs of Heifer Calves, and Heifer Calves; Lord Middleton for Yearling Heifers, and F. B. Wilkinson for Two-year-old Heifers. In Open Bull Calves, Swinton Sardonyx, a good thick-fleshed red, led for Captain C. Behrens. The leading Old Bull was Royal Sovereign, from Lord Manvers' herd, and is a three-year-old, with grand head and nice fore-end. Banksfields Jewel, that deep, wide and evenly-fleshed heifer, owned by R. Cornelius, and the Oxford champion, easily led in Yearlings. J. H. Maden won in the Cow class with a grand white cow, now seven years old, that had fine quality and type.

Suffolk County Show was held at Bury. In the Suffolk Stallion Championship, K. M. Clark's Sudbourne Peter's chief opponent was Sir Cuthbert Quilter's Bawdsey Harvest King, and they finished in that order. Sir Cuthbert Quilter's four-year-old mare, Bawdsey Bloom, gained the Mare Championship, with the prize three-year-old Sudbourne filly Merrilass reserve.

Edgar Appleby led in the Old Shire Stallion class with Royston Forest King. He was afterwards declared champion. J. G. Williams' Garston Surprise took the Female Championship, her principal opponent being Appleby's Rea Lassie.

Older Shorthorn Bulls saw Messrs. Chivers win; their River Broadbrooks took the premier award. J. B. Dimmock's Ascott Banner, a nice red roan, won the special for the best Shorthorn Bull in Suffolk or Norfolk calved in 1913.

Wellingborough was the venue of the Northamptonshire Show. Here there was keen competition for Dairy Cows above four years, in which the Dairy Shorthorn Association gave first prize, and it went to R. W. Hobbs and Sons' red-and-white Shorthorn Dulce 8th., Captain Willis having the second in his beautiful roan Barrington Duchess 34th, and E. A. Smith third with Thurndale Belle 19th. The British Dairy Farmers' Association silver medal went to Preece's Windsor Pansy, Hobbs' Dulce 8th being reserve.

In Aberdeen-Angus J. J. Cridlan's Duke of Maisemore won the Bull class, also taking championship. Duke of Grafton's Duchess of Dalmeny 5th, led in the Female class, his Grace's Minnie 2nd of Wakefield, being placed next.

London, Eng.

G. T. BURROWS.

Toronto, Montreal, Buffalo, and Other Leading Markets.

Toronto.

Receipts at West Toronto, on Monday, June 22, were 160 cars, comprising 2,688 cattle, 2,658 hogs, 391 sheep and lambs, and 199 calves. Trade was fairly active in all classes of live stock. Prices were about steady all round, excepting fat cows, which were about 25 cents per cwt. lower. Choice steers, \$8.25 to \$8.60; good, \$8 to \$8.25; common, \$7.70 to \$8; choice heifers, \$8 to \$8.25; common, \$7.75 to \$8; choice cows, \$6.50 to \$7; common to good cows, \$3.50 to \$6.25; feeders, \$7 to \$7.50; stockers, \$6 to \$6.75; milkers, \$5 to \$8.5; calves, \$7 to \$10.50; sheep, \$4 to \$6.25; lambs, 9c. to 11c. per lb. Hogs, \$7.85 fed and watered, \$7.50 f. o. b. cars, and \$8.10 weighed off cars.

REVIEW OF LAST WEEK'S MARKETS

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

	City.	Union.	Total.
Cars	12	400	412
Cattle	123	3,712	3,835
Hogs	97	15,102	15,199
Sheep	312	2,420	2,732
Calves	23	1,078	1,101
Horses	51	52	103

The total receipts of live stock at the two markets for the corresponding week of 1913 were:

	City.	Union.	Total.
Cars	25	371	399
Cattle	518	5,951	6,469
Hogs	221	6,957	7,178
Sheep	487	2,356	2,843
Calves	281	943	1,224
Horses	—	44	44

The combined receipts of live stock at the two markets for the past week show an increase of 13 car loads, 8,921 hogs, and 59 horses; but a decrease of 1,764 cattle, 111 sheep and lambs, and 123 calves compared with the corresponding week of 1913.

Receipts of cattle were fairly liberal for the past week but not more than equal to the demand, while more sheep, lambs and calves, as well as hogs would have found ready sale at firm prices. As a rule the values of fat cattle were about the same as for the previous week, excepting that there were more sales made at the top prices, for stable-fed cattle which are beginning to come forward in smaller numbers; grassers have made their appearance on the market. Some of these were of good quality, having been partly stable fed, or meal fed on grass; but, there were some grassers offered that looked as though they had never seen meal let alone eat any, and this class of grassers was slow sale. The demand for feeders and stockers was not nearly so great, and values were fully 25 cents per cwt. lower. The main reason for this is that in many parts of Ontario, drovers report that very little rain has fallen for the past three weeks, and while at present there is no shortage of grass, should this dry weather continue there certainly will be in the near future, consequently farmers are eager to purchase cattle under these circumstances. The demand for feeders, and prices for the same, have declined accordingly. The deliveries of milkers were not large, and good to choice, fresh milkers, and forward springers,

especially were scarce. But orders from outside points were scarce, and prices declined from \$5 to \$10 per head. The supply of veal calves was larger, but not large enough for the demand, and prices ruled strong. Sheep and lambs came forward in larger numbers, but the demand also was great, especially for spring lambs, consequently prices were very little lower than for the previous week. The deliveries of hogs were liberal, especially from the Northwest; there being 2,500 on Monday; 1,200 on Tuesday, and over 900 on Wednesday, or 4,600 all told from this source. This had the effect of causing the prices to go lower.

Butchers.—Choice butchers' steers sold from \$8.30 to \$8.60 by the load, but only two or three loads reached the latter price; choice steers and heifers at \$8 to \$8.25; medium to good, \$7.80 to \$8.10; common, \$7.30 to \$7.65; choice cows, \$7 to \$7.35; good cows, \$6.50 to \$6.90; medium cows, \$5.75 to \$6; canners and cutters, \$3 to \$4.75; bulls, choice, at \$7 to \$7.50; common to medium bulls at \$6 to \$6.75.

Stockers and Feeders.—Choice steers, \$7 to \$7.25; medium to good, \$6.75 to \$7; common eastern stockers, \$6.25 to \$6.75.

Milkers and Springers.—The market for milkers and springers was from \$5 to \$10 per head lower. Prices during the week ranged from \$50 to \$80 each, with one extra Shorthorn grade and one choice Holstein grade at \$90 to \$100 respectively.

Veal Calves.—The calf market during the week ruled strong. Choice calves

sold at \$9.50 to \$10.50; good, \$8.50 to \$9; medium at \$7.50 to \$8.25; common and eastern calves sold at \$6.50 to \$7; and "bobs" at \$4 to \$6 each. On Wednesday there were 5 calves, new milk fed, 3 of which were the best we have seen in years on the Toronto market. The 5 sold at \$11.25 per cwt., which is the highest price for many weeks.

Sheep and Lambs.—Receipts were fairly liberal for the week. Sheep, ewes, light, sold at \$5.75 to \$6.25; heavy ewes and bucks, \$3.50 to \$5.25; spring lambs sold all the way from \$4.50 to \$8.50 per cwt.

Hogs.—Selects, fed and watered, sold at \$8, and \$7.60 f. o. b. cars, and \$8.25 weighed off cars.

BREADSTUFFS.

Wheat.—Ontario, No. 2 red, white or mixed, \$1.03 to \$1.04, outside; Manitoba, No. 1 northern, \$1.00½ track, bay points; No. 2 northern, 98½c.; more at Goderich.

Oats.—Ontario, No. 2, white, 39c. to 40c., outside; 41½c. to 42½c., track; Toronto; Manitoba oats, No. 2, 43c.; No. 3, 43½c., lake ports.

Rye. Outside, 63c. to 64c.

Peas.—No. 2, \$1 to \$1.10, outside.

Corn.—American, No. 2 yellow, 75½c., Collingwood.

Barley.—For malting, 56c. to 58c., outside.

Buckwheat.—No. 2, 88c. to 90c., outside.

Flour.—Ontario, 90-per-cent. winter-

THE ROYAL BANK OF CANADA

Capital Authorized - \$ 25,000,000
 Capital Paid up - 11,500,000
 Reserve Funds - 13,000,000
 Total Assets - 180,000,000

HEAD OFFICE: MONTREAL

Branches throughout every Province of the Dominion of Canada.

Accounts of Farmers
 Invited
 Sale Notes Collected

Savings Department at All Branches

wheat patents, \$3.85 to \$3.90, bulk, seaboard. Manitoba flour—Prices at Toronto are: First patents, \$5.70; second patents, \$5.20; in cotton, 10c. more; strong bakers', \$4.90, in jute.

HAY AND MILLFEED.

Hay.—Baled, car lots, track, Toronto, No. 1, \$14.50 to \$15.50; No. 2, \$12.50 to \$13.50 per ton.

Straw.—Baled, car lots, track, Toronto, \$8.50 to \$9.

Bran.—Manitoba, \$25, in bags, track, Toronto; shorts, \$26; Ontario bran, \$24, in bags; shorts, \$25; middlings, \$28.

COUNTRY PRODUCE.

Butter.—Receipts have been liberal, causing prices to be easy. Creamery pound rolls, 24c. to 26c.; creamery solids, 24c.; separator dairy, 23c. to 24c.; store lots, 20c.

Eggs.—The market for new-laid eggs was easy, at 23c. to 24c., by the case.

Beans.—Imported, hand-picked, \$2.40; Canadians, hand-picked, \$2.40; primes, \$2.25 per bushel.

Potatoes.—Car lots of Ontarios, per bag, track, Toronto, \$1.10. New Brunswick Delawares, \$1.10 to \$1.15 per bag, track, Toronto.

Poultry.—Cold storage is now being used, and prices were quoted as follows: Turkeys, 21c. to 25c. per lb.; geese, per lb., 14c. to 15c.; ducks, per lb., 14c. to 20c.; chickens, per lb., 17c. to 23c.; hens, per lb., 14c. to 17c. Spring chickens are coming forward in small lots, and are selling at 45c. to 47c. per lb. dressed.

HIDES AND SKINS.

City hides, No. 1 inspected steers and cows, 14c.; No. 2, 13c.; city butcher hides, flat 14c.; country hides, cured, 15c. to 16c.; green, 12c. to 12½c.; lamb skins and pelts, 35c. to 50c.; calf skins, 17c.; horse hair, per lb., 37c. to 39c.; horse hides, No. 1, \$2.50 to \$4.50; tallow, No. 1, per lb., 5½c. to 7c. Wool, unwashed, coarse, 17½c.; wool, unwashed, fine, 19c.

FRUIT AND VEGETABLES.

Receipts of Canadian fruits and vegetables are so steadily increasing that the wholesale market at the foot of Yonge Street opened this past week. Prices were quoted as follows: Apples, American, \$2.50 per box; apricots, \$3.25 per box; blueberries, 17½c. per box; cantaloupes, standards, \$4.75 per case; ponies, \$4.50 per case; cherries, Canadian, 75c. per small basket, and \$1.50 to \$1.75 per large basket; gooseberries Canadian, \$1.25 per basket; grape fruit, 64's., 68's., \$4.75 per box; lemons, \$4.50 to \$4.75 per box; oranges, Valencia, \$3.75 per box; navel, \$3 per box; pineapples, 24's., and 30's., \$3 per box; peaches, \$2 per box; plums, \$3 per box; strawberries, Canadian, 10c. to 14c. per box; watermelons, 60c. to 75c. each. Vegetables—Asparagus, \$1.00 to \$1.25 per basket; beets, \$1.50 per hamper; beans, wax, \$2.50 per hamper; green, \$2.25 per hamper; cabbage, Canadian, \$2.25 to \$2.50 per crate; onions, Egyptian, 112 lbs., sack, \$5 to \$5.25; green peas, 60c. per small basket.

TORONTO HORSE MARKET.

Receipts of horses at the Union Horse Exchange, Union Stockyards for the past week were moderate. Trade was again very quiet, about 75 horses being sold at steady prices, the bulk of which were taken by eastern buyers from

Ottawa, Montreal and Quebec, with a few going to the local city trade. Prices ranged as follows: Drafters, \$175 to \$250; general-purpose horses, \$150 to \$225; expressers, \$160 to \$200; drivers, \$100 to \$200; serviceably sound, \$85 to \$80 each.

Montreal.

Live Stock.—Weather during the past week was cool, and this, to some extent, favored the consumption of meat and the demand for cattle. Prices continued firm, partly on this account, and partly on account of light supplies. Prices of choicest steers were as high as 9c. to 9½c. per lb. for small lots, this being an exceptional figure. Otherwise, the price ranged from 8½c. to 8¾c. per lb. for fine stock, and from 8c. to 8½c. for good, while medium ranged from 7c. to 8c., and common down to 6c. per lb. These are very high prices for cattle. Prices of sheep declined slightly, yearlings selling at 5½c. to 6c. for ewes, and 4½c. to 5c. for bucks. The price of spring lambs, however, continued steady, and sales took place at \$3 to \$8 each. Calves were quoted at the usual price of \$3 to \$6 for ordinary, and up to \$10 for the best. The easier tone in the hog market continued, and prices dropped off to 8½c. for selected stock, while heaviest sold at 7½c. to 8½c.

Horses.—Prices of horses show little alteration from week to week. Demand was not very active. Horses weighing from 1,500 to 1,700 lbs., sold at \$275 to \$300 each; light draft, weighing from 1,400 to 1,500 lbs., \$225 to \$275 each; broken-down, old animals, \$75 to \$127 each, and choicest saddle and carriage animals, \$350 to \$400 each.

Dressed Hogs.—Prices of dressed hogs were generally easier last week, and ¼c. was knocked off the quotation. Abattoir-dressed, fresh-killed hogs, 12½c. to 12¾c. per lb.

Potatoes.—The stock of potatoes was light, and good stock quite scarce, so that prices were higher last week. Green Mountains, in car lots, were quoted at \$1.10 to \$1.15 in bags of 90 lbs., while Quebec stock was 90c. to 95c., and reds were 85c. to 90c. In a smaller way, prices ranged from 15c. to 20c. above these figures.

Honey and Syrup.—Maple syrup in tins was 60c. to 65c. in small tins, and up to 35c. in 11-lb. tins. Sugar was 8½c. to 10c. per lb. White-clover comb honey was 13c. to 14c. per lb.; extracted, 10c. to 11c.; dark comb, 12c. to 13c., and strained, 6c. to 8c. per lb.

Eggs.—The market for eggs was very high for the time of year, but the absence of very hot weather helps greatly. Prices were 22½c. to 23c. for wholesale lots of straight-gathered eggs, and 26c. for single cases of selected stock, with No. 1 at 23c., and No. 2 at 21c. to 21½c.

Butter.—Creamery stocks were said to be light, and in any case prices were high and firm. Choice quality creamery sold at 24½c. to 25c.; fine at 24c. to 24½c., while seconds were 23½c. to 23¾c., and Ontario dairy was 21c. to 22c., and Manitoba 19c. to 20c.

Cheese.—There was practically no change in the price of cheese. Western colored was 13c. to 13½c. per lb., and white, 12½c. to 13c. Eastern cheese was 12½c. to 12¾c. for colored, and 12½c. to 12¾c. for white.

Grain.—The market for oats was higher. No. 2 Western Canada oats were quoted at 44c. per bushel, ex store, in car lots, and No. 3 at 43½c., with No. 2 feed at 42½c. to 43c. per bushel.

Flour.—Manitoba first-patent flour was unchanged, at \$5.60 per barrel, in bags; seconds being \$5.10, and strong bakers' \$4.90. Ontario winter-wheat flour was firmer, at \$5.25 to \$5.50 for patents, and \$4.70 to \$4.90 per barrel for straight rollers, in wood.

Millfeed.—Millfeed showed no change. Bran sold at \$23 per ton, and shorts at \$25 in bags, while middlings were \$22 including bags. Mouille was \$30 to \$32 per ton for pure, and \$28 to \$29 for mixed.

Hay.—The weather continued favorable for the new crop, though more moisture would be welcomed. No. 1 pressed hay, car lots, Montreal track, was \$16.50, car lots, while extra good was \$17 per ton, while extra good was \$15.50 to \$16, and No. 2, \$14.50 to \$15.

Hides.—Lamb skins were up 5c. each. Prices were: Beef hides 14c., 15c. and

16c. for Nos. 3, 2 and 1, respectively. Calf skins were 16c. and 18c. for Nos. 2 and 1, and sheep skins were \$1.35 to \$1.40 each. Lamb skins were higher, at 30c. each, with horse hides ranging from \$1.75 for No. 2, to \$2.50 each for No. 1. Tallow sold at 1½c. to 3c. for rough, and 5c. to 6½c. for rendered.

Buffalo.

Cattle sold mostly lower at Buffalo the past week. Some few loads of top, heavy weighty steers, brought steady prices, extreme top kinds ranging from \$9.25 to \$9.30, but the quality and finish was better, and compared with the previous week, sold possibly a nickel to a dime higher. Shipping steers ranging from \$8.75 down, and especially where coarse, plain and light, running around twelve hundred, were notably a dime to fifteen cents lower. There were thirty-five cars of steers suitable for shipping demand, and they were placed early, demand being strong from the east. Butchering cattle generally ranged from a dime to a quarter lower, the inside take-off being on yearlings and choice, handy, butchering steers. Several loads of baby heaves, the best seen here this year, sold from \$8.80 to \$8.90, and went to local packers during the first hours. Supply ran freely of grassy cattle, and these, in most cases, were a full quarter lower. Bulls sold a shade lower, the grassy grades running from a quarter to half a dollar under the strictly dry-feds. The stocker and feeder market was weak, supply being, in the main, little, common stuff, and it sold slow. Eight cents took about the best in the feeding line; they were of good quality, but not heavy. Milker and springer market was slow and draggy, trade in this division being from \$2.50 to \$5 under two weeks ago. Authorities generally are of the opinion that strictly dry-fed cattle will continue to bring good, strong values, and the general impression is that there will be none too many of these. At the present time, quite a few twelve-hundred-pound steers are coming to market not quite heavy enough, and while they are taken by the east, nevertheless they would bring more money if they carried fifty pounds more weight. Yearlings that are strictly choice are being bought readily, both by the packers and smaller killers. Large consignments of Argentine beef for the big packers arrived in New York the past week, and but for this, sellers think that prices would be even higher than at present on the prime cattle. The past week, quite a few other market cattle were marketed here. Most of these were grassers, light, and of ordinary quality. They come in competition with common natives, making this class of stuff more plentiful than the better kinds, and in consequence are not selling as satisfactorily. Only a few loads of Canadians the past week, and they were mostly shipping steers, best of which ranged from \$8.75 to \$8.85. Some distillers brought \$8.90. Receipts the past week figured 5,065 head, as against 4,375 for the previous week, and 4,265 for the corresponding week a year ago. About 30 cars of Canadians the past week. Quotations:

Choice to prime shipping steers, 1,250 to 1,500 lbs., \$9 to \$9.80; fair to good shipping steers, \$8.50 to \$8.85; plain and coarse, \$8.25 to \$8.40; choice to prime handy steers, \$8.40 to \$8.65; fair to good, \$8.15 to \$8.25; light, common, \$7.50 to \$7.75; yearlings, \$8.25 to \$9; prime, fat heifers, \$8.25 to \$8.40; good butchering heifers, \$8 to \$8.15; light butchering heifers, \$7 to \$7.75; best, heavy, fat cows, \$7.25 to \$7.50; good butchering cows, \$6 to \$7; canners and cutters, \$3.90 to \$5.25; best feeders, \$7.75 to \$8; good feeders, \$7.35 to \$7.65; best stockers, \$7.50 to \$7.75; common to good, \$6.25 to \$7; best bulls, \$7.25 to \$7.75; good killing bulls, \$6.50 to \$7; stock and medium bulls, \$5.50 to \$6.50; best milkers and springers, \$75 to \$90; good milkers and springers, \$55 to \$65; common milkers and springers, \$35 to \$50.

Hogs.—Liberal run the past week, 40,000; previous week, 33,120; year ago, 32,320. Week started with an \$8.40 market for packers' kinds, and there was a reaction the next few days, bulk selling Thursday and Friday at \$8.60. Pigs sold down to \$8.10 the fore part of the week, and Wednesday these weights brought the same price as the better-weight grades, \$8.55 to \$8.60. About

twenty decks of Canadians the past week. Monday they sold at \$8.35, Tuesday \$8.40, Wednesday none here, Thursday they brought \$8.40 to \$8.45, and Friday, general price was \$8.40. Roughs, \$7.15 to \$7.35; stags, \$6 to \$7.

Sheep.—Lamb market was steady, best springers bringing from \$9.50 to \$10, while top for yearling lambs on the dry-fed order, was \$8.75, those showing grass going from \$8 down. Sheep active. Deck of choice, handy wethers, sold Friday at \$6.75, and ewes went from \$5.50 down, heavy ones underselling handy ones by \$1 to \$1.25 per cwt., extreme heavy ewes being hard to place the latter part of the week above \$4.25. Receipts the past week were even lighter than the week before, and considerably under that of a year ago, runs respectively, being 5,400, 5,600 and 12,400.

Calves.—Mostly a \$10.50 market for top veals for the entire week, a few selected ones selling Monday and Wednesday at \$10.75. Culls, \$9.50 down, and feds, \$5 to \$6.50. No Canadians to speak of. Receipts the past week, 3,150; previous week, 3,000; year ago, 2,750.

Chicago.

Cattle.—Beeves, \$7.35 to \$9.35; Texas steers, \$6.80 to \$8.15; stockers and feeders, \$6.10 to \$8.10; cows and heifers, \$3.60 to \$8.80; calves, \$7 to \$10.

Hogs.—Light, \$8.10 to \$8.42½; mixed, \$8.10 to \$8.45; heavy, \$8 to \$8.45; rough, \$8 to \$8.15; pigs, \$7.25 to \$8; bulk of sales, \$8.35 to \$8.42½.

Sheep and Lambs.—Sheep, native, \$5.80 to \$6.40; yearlings, \$6.80 to \$7.50. Lambs, native, \$6.50 to \$8.40; spring lambs, \$7 to \$9.50.

Cheese Markets.

St. Paschal, Que., 12½c.; butter, 23½c.; Peterboro, 12 18-16c.; Madoc, 12 18-16c.; Vankleek Hill, white, 12 18-16c.; colored, 12½c.; Alexandria, white, 12 18-16c.; Kingston, 12½c.; Brockville, colored, 12 18-16c.; 12½c. refused for white; Picton, colored, 12½c. and 12 11-16c.; St. Flavie, Que., butter, 23 5-16c.; cheese, 12½c.; Cornwall, colored, 13½c.

Gossip.

Attention is directed to the advertisement elsewhere in this issue of one of the best farms in Oxford County. Look it up, and write Chas. V. Canfield, Oxford Centre, Ont., for all particulars.

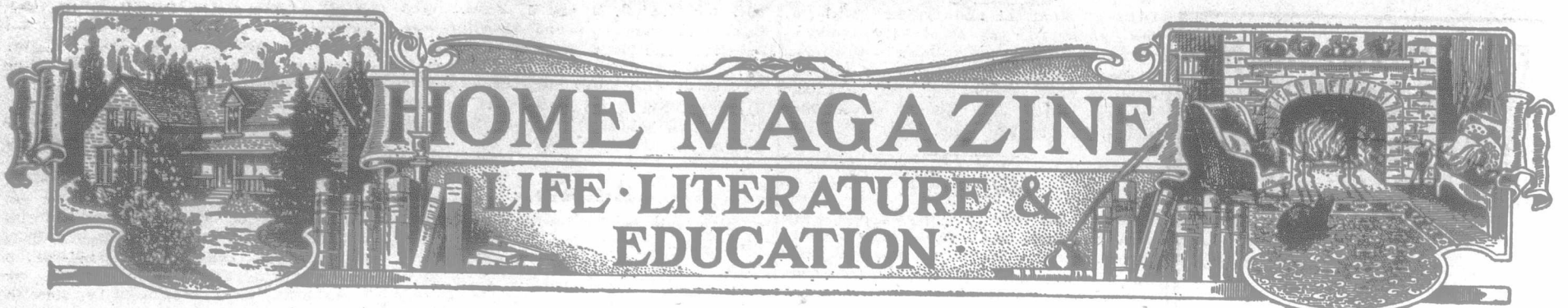
Look up Rock Bailey's advertisement of a sale of Jersey cattle at Union, Ont., June 30th. Twenty-five head will be sold, including seven heifers, two year-olds, which will freshen early in July. Write to R. R. No. 4, Union, Ont., for further information.

Volume 20 of the Kent or Romney Marsh Flock Book, published by the Kent or Romney Marsh Sheep-breeders' Association, Incorporated, has been issued from the press, and a copy received at this office, by courtesy of the Secretary and Editor, W. W. Chapman, Mowbray House, Norfolk street, Strand, London, W. C. Flocks registered in this volume number from 2 to 182; rams number from 33700 to 35978; ewes from 3780 to 6440, and the membership list of the society numbers 146. The volume contains 359 pages, is exceptionally well bound, creditably edited, and indicates a decidedly rapid increase of popularity of this strong, healthy and heavy-shearing breed of sheep, as shown by the record of export certificates in recent years.

Trade Topic.

A NEW ROYAL MAIL SHIP.

A very fine ship for the passenger trade between England, Brazil, and the River Plate, was recently launched at Belfast from the yards of Harland & Wolff, Limited. She was built for the Royal Mail Steam Packet Co., who operate a passenger and freight service both to the east and west coasts of South America. This is the Company now operating the Canadian-West India service. The new ship is 600 feet long, and is 15,800 tons gross. Her name is the "Alcantara," and from reports in the English press, she is the very last or latest work in high-class ship construction.



The Old Home.

An old lane, an old gate, an old house
by a tree;
A wild wood, a wild brook—they will
not let me be.
In boyhood I knew them, and still they
call to me.

Down deep in my heart's core I hear
them, and my eyes
Through tear mists behold them beneath
the old-time skies,
Mid bee boom and rose bloom and
orchard lands arise.

I hear them, and heartsick with longing
is my soul,
To walk there, to dream there, beneath
the sky's blue bowl;
Around me, within me, the weary world
made whole.

To talk with the wild brook of all the
long ago;
To whisper the wood-wind of things we
used to know,
When we were old companions, before
my heart knew woe.

To walk with the morning and watch its
rose unfold;
To drowse with the noontide, lulled in
its heart of gold;
To lie with the night time and dream the
dreams of old.

To tell to the old trees and to each
listening leaf
The longing, the yearning, as in my
boyhood brief:
The old hope, the old love, would ease
me of my grief.

The old lane, the old gate, the old
house by the tree;
The wild wood, the wild brook—they
will not let me be.
In boyhood I knew them, and still they
call to me.—Madison Cawein.

The New Story.

We are pleased to announce that by special arrangements with the publishers, we have secured the serial rights for the publication of "PETER, A STORY OF WHICH HE IS NOT THE HERO," by the well-known author, F. Hopkinson Smith. Although not the hero, Peter is the central figure of the story, a delightful old gentleman of high ideals, and the fine manners and true courtesy which come from forgetfulness of self and consideration of others. We can recommend this story to our readers as distinctly worth while. The first installment will appear in our issue of July 2nd.

Browsings Among the Books.

THE DAILY FRICTION.

(From "The Human Machine," by Arnold Bennett.)

It is with common daily affairs that I am now dealing, not with heroic enterprises, ambitions, martyrdoms. Take the day, the ordinary day in the ordinary house or office. Though it comes seven times a week, and is the most banal thing imaginable, it is quite worth attention. How does the machine get through it? Ah! the best that can be said of the machine is that it does get through it, somehow. The friction, though seldom such as to bring matters to a standstill, is frequent—the sort of friction that, when it occurs in a bicycle, is just sufficient to annoy the rider, but not sufficient to make him get off the machine and examine the bearings. Occasionally the friction is very loud, indeed, disturbing,

and at rarer intervals it shrieks, like an omnibus brake out of order. You know those days when you have the sensation that life is not large enough to contain the household or the office staff, when the business of intercourse may be compared to the manoeuvres of two people who, having awakened with a bad headache, are obliged to dress simultaneously in a very small bedroom. "After you with that towel!" in accents of bitter, grinding politeness. "If you could kindly move your things off this chair!" in a voice that would blow brains out if it were a bullet. I venture to say that you know those days. "But," you reply, "such days are few. Usually ———!" Well, usually, the friction, though less intense, is still proceeding. We grow accustomed to it. We scarcely notice it, as a person in a stuffy chamber will scarcely notice the stuffiness. But the deteriorating influence, due to friction goes on, even if unperceived. And one morning we perceived its ravages—and write a letter to the Telegraph to inquire whether life is worth living, or whether marriage is a failure, or whether men are more polite than women. The proof that friction, in various and varying degrees, is practically continuous in most households lies in the fact that when we chance on a household where there is no friction we are startled. We can't recover from the phenomenon. And in describing this household to our friends we say: "They get on so well together," as if we were saying: "They have wings and can fly! Just fancy! Did you ever hear of such a thing?"

Ninety per cent. of all daily friction is caused by tone—mere tone of voice. Try this experiment. Say, "Oh, you little darling, you sweet pet, you entirely charming creature!" to a baby or a dog; but roar these delightful epithets in the tone of saying: "You

certainly the attitude, so far as friction goes, is more important than the thought. Your wife may say to you: "I shall buy that hat I spoke to you about." And you may reply, quite sincerely, "As you please." But it will depend on your tone whether you convey, "As you please. I am sympathetically anxious that your innocent caprices should be indulged." Or whether you convey, "As you please. Only don't bother me with hats. I am above hats. A great deal too much money is spent in this house on hats. However, I'm helpless!" Or whether you convey, "As you please, heart of my heart, but if you would like to be a nice girl, go gently. We're rather tight." I need not elaborate. I am sure of being comprehended.

As tone is the expression of attitude, it is, of course, caused by attitude. The frictional tone is chiefly due to that general attitude of blame which I have already condemned as being absurd and unjustifiable. As, by constant watchful discipline, we gradually lose this silly attitude of blame, so the tone will of itself gradually change. But the two ameliorations can proceed together, and it is a curious thing that an agreeable tone, artificially and deliberately adopted, will influence the mental attitude almost as much as the mental attitude will influence the tone. If you honestly feel resentful against someone, but, having understood the foolishness of fury, intentionally mask your fury under a persuasive tone, your fury will at once begin to abate. You will be led into a rational train of thought; you will see that after all the object of your resentment has a right to exist, and that he is neither a doormat nor a scoundrel, and that anyhow nothing is to be gained, and much to be lost, by fury. You will see that fury is unworthy of you.

ness, sympathy, and respect for another immortal soul would imply deplorable weakness on your part? You say that your happiness does not depend on every person whom you happen to speak to. Yes, it does. Your happiness is always dependent on just that person. Produce friction, and you suffer. Idle to argue that the person has no business to be upset by your tone! You have caused avoidable friction, simply because your machine for dealing with your environment was suffering from pride, ignorance, or thoughtlessness. You say I am making a mountain out of a mole-hill. No! I am making a mountain out of ten million mole-hills. And that is what life does. It is the little but continuous causes that have great effect. I repeat, Why not deliberately adopt a gentle, persuasive tone—just to see what the results are? Surely you are not ashamed to be wise. You may smile superiorly as you read this. Yet you know very well that more than once you have resolved to use a gentle and persuasive tone on all occasions, and that the sole reason why you had that fearful shindy yesterday with your cousin's sister-in-law was that you had long since failed to keep your resolve. But you were of my mind once, and more than once.

What you have to do is to teach the new habit to your brain by daily concentration on it; by forcing your brain to think of nothing else for half an hour of a morning. After a time the brain will begin to remember automatically. For, of course, the explanation of your previous failures is that your brain, undisciplined, merely forgot at the critical moment. The tone was out of your mouth before your brain had waked up. It is necessary to watch, as though you were a sentinel, not only against the wrong tone, but against the other symptoms of the attitude of blame, such as the frown. It is necessary to regard yourself constantly, and in minute detail. You lie in bed for half an hour and enthusiastically concentrate on this beautiful new scheme of the right tone. You rise, and because you don't achieve a proper elegance of necktie at the first knotting, you frown and swear and clench your teeth! There is a symptom of the wrong attitude towards your environment. You are awake, but your brain isn't. It is in such a symptom that you may judge yourself. And not a trifling symptom either! If you will frown at a necktie, if you will use language to a necktie which no gentleman should use to a necktie, what will you be capable of to a responsible being? Yes, it is very difficult. But it can be done.

Children and Liberty.

(By Mrs. W. E. Hopkins.)

The sentiment which now prompts this article must, I think, have been one of the first of my many revolutionary sensations, for I remember giving it a defiant expression when but a little maid of nine or thereabouts. "When I have babies," I told my mother while reprovingly watching her mummify a new baby brother in yard-long, swaddling cloths, "I shall not tie up their poor little legs and body like that."

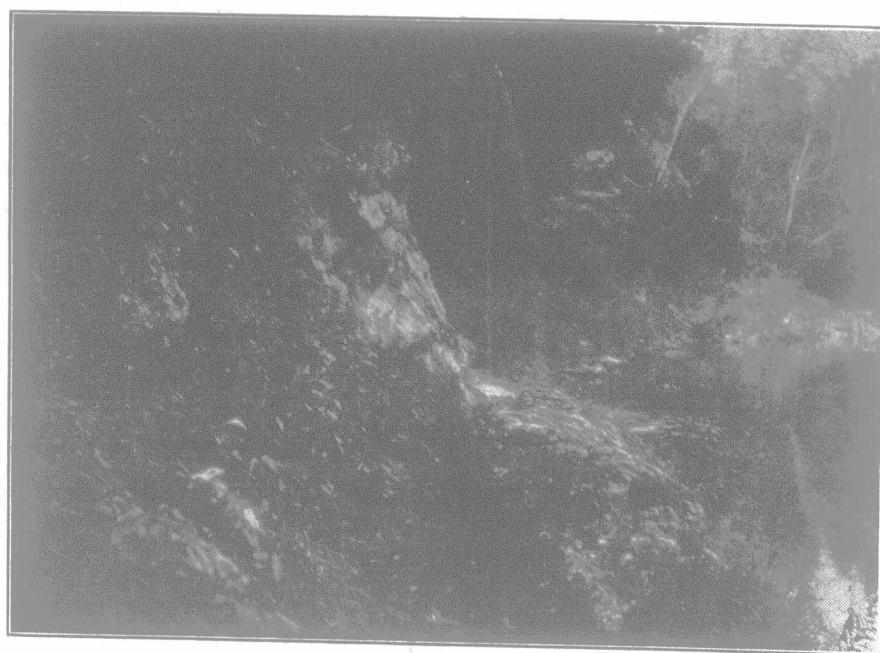
"Then your babies will grow up with bow-legs and crooked backs," my mother rebuked sternly.

"But my back is crooked, and sister Lou has bow-legs," I argued. "Did you think 't wasn't worth while to roll up baby girls Mummie?"

"Such a child!" exclaimed my mother irritably. "Of course not, silly."

"But then," I persisted, "why have I a crooked back?"

"Or a busv tongue?" snapped my mother impatiently. "I know that I



Beauty Spots in Canada—Wishing Well, Kilworth, Ont.

infernal little nuisance! If I hear another sound I'll break every bone in your body!" The baby will infallibly whimper, and the dog will infallibly mow off. True, a dog is not a human being, neither is a baby. They cannot understand. It is precisely because they cannot understand and articulate words that the experiment is valuable; for it separates the effect of the tone from the effect of the words spoken. He who speaks, speaks twice. His words convey his thought, and his tone conveys his mental attitude towards the person spoken to. And cer-

Do you remember the gentleness of the tone which you employed after the healing of your first quarrel with a beloved companion? Do you remember the persuasive tone which you used when you wanted to obtain something from a difficult person on whom your happiness depended? Why should not your tone always combine these qualities? Why should you not carefully school your tone? Is it beneath you to ensure the largest possible amount of your own "way" by the simplest means? Or is there at the back of your mind that peculiar English and German idea that polite-

was always as careful with my girls, even though they came to me as plentifully as the thorns on a wild rosebush, as I am now," giving the cloth a firmer twist, "now run away child. You make me nervous."

When in course of time and nature the babies did come to me, I, true to my long-cherished convictions, refused absolutely to roll them up into the tight bundles, or burden them with the long clothes of infant fashion. As a mother I burned with the desire to give my children as much freedom as could consistently be given to human beings. From the first moment of their birth they were left to wiggle their pink toes and kick their chubby little legs to their heart's content; or to sleep, or wake, or cry, when they so wished. I would not rock or dandle them. I would not stop their little mouths with food that their stomach did not need. I would not bathe them oftener than once a day, nor awaken them for show purposes. I was simply determined to act in the way of Nature with the helpless little ones intrusted to me; and the little ones repaid me richly by being 'natural' with me. Not one of the four ever caused me a night's wakefulness or anxiety. They were always well, and happy and contented. And the greatest satisfaction of all is that apart from their rightful share of original sin they have so far, and the youngest is nine, grown up without mental or physical crookedness.

Do we ever stop to reflect that our children are as easily the most repressed of all young growing things, as we are the most curiously inconsistent creatures that live? For instance, we deem ourselves far too wise to curtail the freedom, or impose any task whatsoever on the young of our animal stock during the period of their growth and development. We are careful to give them plenty of fresh air and sunlight. We sacrifice a great deal to give them wide fields where they may frisk and frolic to their heart's satisfaction and our's also, for we know that every dash of spirit and play is an investment of which we shall draw the returns when the animal reaches maturity. We are ready at all times to recognize the rights, as it were, of the colt or calf, of the puppy or kitten, to laugh at their merry antics; to look with indulgent eyes on the mischief that they perpetrate. All to the purpose of raising cattle or horses, or whatever animal it may be for profit and solid satisfaction.

But how contrariwise we act in regard to the children who have precisely the same instinct and necessity for freedom as the young of all kind! How we insist that they must behave like little old men and women. How we stunt them under a system of steady repression and restraint. They must do this and mustn't do that. We set them a stint of study that would stagger a mature mind, and they must get through it somehow. We force them into almost continuous confinement in ill-ventilated school-rooms, and they must bear it somehow. We inflict on them punishments, we impose on them tasks, we demand of them feats of endurance, that we simply would not dare to think of in connection with any one who had the power to retaliate against us or the strength to resist our unjust supremacy, and they must submit and endure and accomplish somehow. But through it all what a most convincing example of the survival of the fittest, what a triumph of the Darwinian theory of natural selection, of the wonderful power of adaptability of the human species in the midst of unnatural conditions, of the magnitude of resistance possible in life, in the feeblest little body, in the frailest little mind! The fact, however, which most utterly amazes me is the stoical calm, the indifference, the insensibility, with which we read the pitiful story told in the statistical record of children mortality, and the wonderful way that we have of taking our generosity to the colt or calf, the puppy or young pet of any kind, as a mere matter of course, while we talk of our devotion to our children and of our sacrifices for their welfare. Are there any so blind as those that will not see!

"Ah," but you protest, "there is so much to learn, and to do, and life is so short. Aye, but it is because we

make it so. We shorten the years of the end in exact proportion to the measure that we shorten those of the beginning. The boy old before his time simply means the man old before his time. We rob ourselves, we rob our children, of years and of the leisure in which to be happy, through the unnecessary complexities of life that we have invented and still invent every day. We, who would not dare to force food on a child already filled to repletion, have no scruples of any sort with regard to the far more sensitive and important matter of his mind. No farmer would be foolish enough to think of teaching his draft colt the fancy gaits and manners that are essential to the saddle horse or driver, but we, in our abuse of little children, begin by wanting them to learn so many things in general that we generally finish by not having them know anything in particular. We dissipate the energy of the child; we waste the gray matter of his immature mind, the strength and health of his growing body, the budding bloom of his sensitive spirit, on a multiplicity of studies that are of no value or interest to that particular child. We stunt our young mentally, physically, and spiritually, by the bewildering complexity, and the repressing quality of the burden that we place upon him in his formative years. We are unfair to the child. You see there is so much that the child must learn, so much that he wants to learn, so much that he cannot help learning, every fresh sensation is a fresh lesson to the child. He is learning to see and speak, to think and behave, to understand and reason and adjust himself to the world and its conditions, at the same time that the insatiable demands of growth and development are making the heaviest drain on his strength and spirit. Even without any set lessons the child is learning more and faster than we, with intellects dulled through the same process that is dulling that of our children, can almost comprehend or imagine. Were we as wise with the child as we are with the colt that we wish to raise to the splendid stature of a fine maturity, we would discourage him from too much effort rather than spur him on to ever greater endeavors; we would withhold from him all knowledge not ardently desired, strictly necessary or practically beneficial; we would wait for a full development of strength and size before fitting him with bit and bridle.

Life is short. Aye, and childhood is the very shortest period of it all. Maturity, middle age, the years of rest

and of retirement, are all long as compared to that fleeting time of what should be but freedom and first impressions. It is the most precious possession to the child, and it should be the happiest and most care-free. If we rob the child, thinking to repay the man or woman through the knowledge that we force him to acquire, we are making a vast and irreparable mistake. What we rob from the child of freedom and happiness, of rightful development, of enjoying capacity, of the life of the fields and the friendship of Nature, we can never repay for the simple reason that the child will never be there again to receive it. I do not mean to say that the child should not be taught or have any tasks whatsoever. What I mean is that he should not be compelled to learn; that he should not be compulsorily confined for his lessons; that he should not be constrained in the thousand and one ways that make up our present custom with children. The child is a born imitator. If we taught ourselves a lot of things that we want our children to know and practice, if through our personal example we would demonstrate the desirable qualities of certain acquisitions, or virtues, or principles, we would find the young copying us without coercion of any kind.

We need, oh so much, to revert to Nature and her ways, which are to always present that which she wants to teach as eminently desirable or wonderfully attractive or interesting. Do we need coercion to learn of life and love, of field and forest lore, of the many, many things of which Nature is the monitor. We are all, big and little, selfish to the degree that if a subject fires our imagination, if a certain acquisition becomes necessary, if a particular qualification plainly contributes to our happiness, it simply resolves itself into a game to win, a pleasure to pursue, a play in which it spells life and health to perform our part.

It is a wise mother who seeks to impose her will on her children as little as possible, who gives them a chance of developing their own individuality, who seeks to train their wills instead of being determined to break them. Of course every mother wishes to be obeyed by her children, but only that mother is really happy whose children obey her in spite of the full freedom given them of not doing so.

[Mrs. Hopkins, in the above article, has grasped the principle that the education of the child must not be by compulsion but by freedom. This is the principle upon which Dr. Montessori has

based her wonderful system, a system which, when carried out right, enables weak-minded children to make as much progress as the ordinary normal children of to-day; and the ordinary normal children such progress as stamps them almost as superchildren,—all this without overstraining the children in the least; indeed actual experiment has shown that the little ones under Dr. Montessori's care have been healthier, happier and brighter than those left to undirected liberty outside of her schools. The whole world to-day is in a remarkable state of transition. Dr. Montessori's system of education, with its happy freedom and wonderful results, may prove to be one of the strong forces that will hasten the coming of the superman, who, we like to believe, will be the ordinary man of the future.—Editor.]

Hope's Quiet Hour.

Diversities of Gifts.

If the whole body were an eye, where were the hearing? If the whole were hearing, where were the smelling? But now hath God set the members every one of them in the body, as it hath pleased him. And if they were all one member, where were the body?—1 Cor. xii: 17-19.

St. Paul, in this chapter, declares that our business as members of a great body is to do the special work given us to do, do it faithfully for the good of the whole community. He explains that God gives His Spirit to each, but that Spirit of Life works through each member in a different way, and for a different purpose. If there were no life in our bodies the eyes could not see, nor the ears hear, nor the heart beat; but the same life works out sight through one member, hearing through another, and steady movement through another. Each member is of great value to the body, if it is content to do the special work assigned it,—but no member is able to do satisfactorily the work of another. If the ears are not working properly, the eyes try to fill their place, if the eyes are darkened, the ears do their best to protect the body, and the hands reach out to detect possible danger ahead. They do their best, but both together cannot begin to take the place of eyes.



The Old Home.

As it is in our bodies, so it is in the Community. Each has some special gifts which are given him in trust for the good of all. St. Paul says that the Spirit gives wisdom and knowledge to some, faith and gifts of healing to others, teaching, prophecy, etc. No one can have them all—only to Christ, our Head, has the Spirit been given "without measure." We should, the Apostle declares, covet earnestly the "best" gifts—faith, hope and love—which we all may possess; accepting cheerfully whatever work and talents God sees fit to bestow, and never envying our neighbors.

We all want to be useful, but it is a mistake to let that ambition lead us astray. The eyes are of immense value to a man, but if his hands, feet and ears (not to speak of the vital organs which are working steadily and silently within) became discontented with their work, and insisted on having the same duty as the eyes, how helpless the man would be?

So it is in the world. A great writer or preacher can help thousands, or millions of people. He is called to do a great work, and is of great value to the whole community. But if every man set his heart on becoming a great writer or preacher—and succeeded in that ambition—the business of life would soon be at a standstill. To begin with, we should all die of starvation for want of the farmers, or freeze to death for want of the miners.

"God hath tempered the body together, having given more abundant honor to that part which lacked," says St. Paul, and "our uncomely parts have more abundant comeliness." How true that is. We honor the eyes and ears, but we can live without sight or hearing. We never give a thought to the liver or lungs—as long as they are working for us uncomplainingly—but we can't live without these humble, unnoticed members of our bodies.

Let us give up fretting over the gifts which are out of our reach, and joyously serve our generation wherever and however our Head directs.

"Ann of Green Gables" thought no one could be happy with red hair, and even happy-hearted "Pollyanna" was far from satisfied to have straight hair and freckles. Those who are poor and busy think they could do far better service if they were rich and leisured, those who are sick feel as if they were shut out from the chance of helping anybody. Those who live in the country are apt to feel that their opportunities are narrow, while those who live in the city may be driven to distraction by the noise, glare, and whirl of life.

It is not our business to choose the post which seems the most attractive to ourselves, but to do the work which God places in our hands and for which He has especially fitted us. To do our own work cheerfully and faithfully will bring happiness to ourselves and valuable help to others.

No one is given every kind of talent. Sir Humphrey Davy—who has saved so many lives through his invention of the miner's safety lamp, had so little idea of music that when his friends tried to teach him the air of "God save the King" they had to give it up as hopeless. John Dalton—the great chemist, who was held in such high esteem in Manchester that 40,000 people visited the Town Hall where his body was laid in state—was color-blind, and could not tell red from green.

A great genius is often very helpless in the ordinary emergencies of life, and not nearly as satisfactory to his employers as a commonplace person. Sir Isaac Newton, when a boy, was so bent on knowledge that when he was sent to the fields to watch sheep or cattle he lost himself completely in a book and allowed his charges to go where they chose. He was careless and untidy in his dress and surprisingly absent-minded. Once he started to lead his horse up a hill and found on reaching the top, that the horse had slipped away unnoticed and he had only the bridle in his hand.

But I must not multiply instances. We have all our gifts and our limitations. We can do some things better than the people we envy, and we are in many things very stupid as compared with the people we consider our inferiors. The captain on the bridge has a great and responsible duty, but so has the fireman out of sight below. The organist can

only make beautiful music if the organ-blower does his humble work. A great man like Edison would probably be a very poor hand at breadmaking, and a learned professor would be a bungler if he tried to mend a shoe. A great surgeon, who can work miracles of healing with the shining tools he understands, might make a very poor and impatient "patient" if he were to change places with a helpless, suffering woman.

Perhaps the hardest, most glorious duty anyone can be called to do is the patient endurance of pain of heart or body. I have before me an essay called "Tuberculosis and the Road to Eldorado," written by a brave consumptive, to be published after his death in the "Journal of the Outdoor Life." He says that men may meet some ills "with a snicker or a whine," but tuberculosis is such a tremendous thing that it brings to the surface all the powers of greatness that are hidden in a soul. He found out the wonderful truth that "it is possible to live a life as full, as deep, as interesting, as exciting, tied to a porch and an invalid chair, as when caught up in the whirl of a city's strife." He discovered that the outside of life, which looks so real, is only like a painted curtain, which was rolled up before his quiet gaze, showing him the "true men and women, acting under the impetus of real emotions, unravelling the plot of human existence." He watched quietly the busy world, intent on success or pleasure, and his own suffering, disappointment and deprivation burned into his being the stupendous secret "that man can live within this universe not

sick or sorrowing person fancy he has no opportunity for greatness. I think God cares more for the quality than the quantity of our work. It is beauty of spirit that the King greatly desires to see in each one of us. That gift He is eager to bestow on us all—the gift of unquenchable gladness.

"Of your gladness lend a gleam
Unto souls that shiver:
Show them how dark Sorrow's stream
Blends with Hope's bright river."
DORA FARNCOMB.

From a Reader of the Quiet Hour.

I am sending a trifle as a thank offering for my dear little baby. Have three boys, and lost a little girl baby four years ago. Feel so thankful for this one being spared to me.

Enclosed find \$2. Perhaps there is some little baby you know who is in need.
MRS. H. E. R.

I wish to thank Mrs. H. E. R., and also a "Watford Reader," for their very kind letters.
HOPE.

The Beaver Circle

Lines by Lord Byron, on the death of his dog, "Boatswain."

"When some proud son of man returns
to earth,
Unknown to glory but upheld by birth,
The sculptor's art exhausts the pomp of
woe,



Ready for Play.

having these, and laugh and grow and pass from understanding unto understanding, thanking God for giving him the chance to be."

One who is facing the great mystery—and knows he will soon pass through the veil—has this great advantage over the healthy people who pity him in his weakness. He can weigh earthly gain more justly, valuing it very little. The praise of men seems a trifling matter to one who is called before the bar of the Great Judge, and a dying millionaire knows that his wealth would be a very small price to pay in exchange for the health which a cowboy enjoys so unthinkingly and lightly.

This message of good cheer left behind by the man who dared to say, as death drew very near: "I cannot regret that I have had tuberculosis," ends with these words: "To draw the veil from the beyond, is not for man to do. But if there is a soul that can go through that veil without a tremor of the lip, it is he to whom tuberculosis has brought its greatest teaching. With W. E. Henley, he, above all others, may with understanding, say:

"What is to come we know not; but we know
That what has been, was good—was good
to show
Better to hide, and best of all to
bear."

It is a great thing to hide troubles and bear them without a whine. Let no

And storied urns record who rest below;
When all is done, upon the tomb is seen
Not what he was, but what he should
have been:

But the poor dog, in life the firmest
friend,
The first to welcome, foremost to defend,

Whose honest heart is still his master's
own,
Who labors, fights, lives, breathes for
him alone,"

Unhonored falls, unnoticed all his worth,
Denied in heaven the soul he held on
earth;

While man, vain insect! hopes to be
forgiven,
And claims himself a sole, exclusive
heaven.

Ye, who perchance behold this simple
urn,

Pass on—it honors none you wish to
mourn:
To mark a Friend's remains these stones
arise:

I never knew but one—and here he lies."

"Near this spot,
Are deposited the remains of one
Who possessed Beauty without Vanity,
Strength without Insolence,
Courage without Ferocity,
And all the Virtues of man without his
Vices.

This Praise which would be unmeaning
Flattery

If inscribed over human ashes,
Is but a just tribute to the Memory of
BOATSWAIN—A DOG."

A True Story.

I have all my life been an enthusiastic lover of dogs, and have seldom been without from one to three in the house, always eager to join us in our sports and rambles through the woods. Oh, the jolly times we have had. We were living in the country, some years ago, and about a mile from us was a large wood, cut by a deep ravine with an old sawmill at the top from which ran a rapid stream, bordered with a luxuriance of moss, ferns, and in the season, such a wealth of lovely wild flowers; it was a paradise for us children and the two dogs, Thetis and Cadeau, who were in the seventh heaven of delight hunting chipmunks and digging holes for various mice, etc. One spring, Thetis, a beautiful Newfoundland, had a litter of puppies. One day, when they were only a few days old, we started off on one of our rambles to the woods, and when Thetis saw us starting, she could not resist the temptation to follow, and came joyously along to have a share in the fun. On we all went, getting a wealth of treasure in our handkerchiefs, which we always gave to Thetis to carry for us. This day, as usual, we gave her the bundle containing our various finds, but when we started for home the load was not to be found. She had dropped it somewhere in the woods, and as her puppies were her first consideration, we did not urge her to go back for it, and the circumstance was forgotten. What was our surprise, next morning, when we went to visit her little family, to see there, in the middle of the nest, the bundle, which she must have gone out a couple of miles in the middle of the night to find. The little bundle had been given into her charge, and although she could not wait at the time to find it, it must have been on her conscience. She knew that she was responsible for it, and at the first possible moment had gone to redeem her trust. Who would deny that a dog has conscience, reason and memory.
A. C. B.

"Amid all the forms of life that surround us," says Maeterlinck, "not one, excepting the dog, has made an alliance with us. A few creatures fear us, most are unaware of us, and not one loves us."

Junior Beavers' Letter Box.

[For all pupils from the First Book to Junior Third, inclusive.]

Dear Puck and Beavers,—This is the second time I have written to you. My first letter was in print. I am going to tell you about my grandmother's cat. My grandfather took it about seven miles away on the fourth of March. In a week afterwards that cat came home. In summer the cat is wild. They could not get him to come near the house. He is an egg-eater, too. It goes around in summer-time stealing eggs at night, and that is the reason my grandmother doesn't like it. This is all about the cat.

I saw a picture of a beaver at work, and a story. It was an interesting story, and will be glad to hear some more about wild animals by Victor Woolfings. This is all. Good-bye Beavers.
HAROLD PLAIN (age 11, Sr. II).
Sarnia Res.

Dear Beavers,—This is my first letter to your Circle. My father takes "The Farmer's Advocate." He began to take it only this year, and he likes it very much.

I go to school nearly every day. There are two departments in our school. I am in the second department. I am in the First English reader, and in the Second French reader. We have two good teachers in our school. One of the teachers boards at my home. The school is about half a mile from my home, and I walk home to dinner every day. I have two little rabbits; they are great pets. They are black and white, and very fat. I like them because they make faces at me when I look at them. I have also a nice pussy cat to play with. We have three horses; their names are Prince, Dick, and John. Well, as this is my first letter to your Circle, I will close, hoping the w-p. b. is not

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hungry for my letter when this reaches you.
YVONNE RICHARD (age 11).
Urbenville, P. E. I.

Dear Puck and Beavers.—This is my first letter to your Circle. I am going to tell you about the lake near my home. It is called Otty Lake. It is about four miles long and one mile wide in some places. There are quite a few bass, and some pike in it. When I am at home and father goes fishing, he sometimes takes me. In the winter-time when the lake is frozen, I go and skate or slide on it. There are quite a few boys in it. In the summer-time there are a few people come out from town to

camp by the lakeside. We keep a boat. Father taught me to row two years ago. This is all I have to tell you.
CHAS. ARTHUR MILLAR (age 10).
Perth, Ont., R. R. No. 5.

Dear Puck and Beavers.—This is my first letter to your charming Circle. We have taken "The Farmer's Advocate" for as long as I can remember. I am 11 years old, and go to school nearly every day. Our teacher's name is Mr. Mahon. I have three brothers and one sister. I live on a farm of two hundred acres. We have a creek running through our place, and in the summer we have grand fun fishing. We have four ducks and

about forty-five hens, four geese and four turkeys. We had a very good garden last year of vegetables and flowers. I helped to plant the flowers. As my letter is getting rather long I will close, wishing the Beavers every success.
PHYLLIS HANNING.
(Age 11, Class III.)
Crowhin, Ont., R. R. No. 1.

Dear Puck and Beavers.—This is my first letter to your charming Circle. I enjoy reading the Beaver Circle letters. I live on a farm of one hundred acres about two miles from the village. I like reading books, and have read quite a number of them. I am iron lone-

some, as I lost two sisters inside of four months. Would some of the Beavers please write to me, as I am sure I would answer back. I have a little nephew living with us; his name is Elmor Honey. He is fifteen months old.
Well, I think I will close for this time, as my letter is getting rather long. I hope that it will escape the hungry w.-
VERA L. BRISBIN.
(Age 11, Book III.)
Fenella, Ont., R. R. No. 1.

Honor Roll.

Doretta Weppler, Neustadt, Ont.; Ernest Gunning, Kirktion, Ont.; Bessie Nattress,



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The Roundabout Club

Huckleberries in Winter.

Whew! what a night! Hubby takes off his rubbers, puts insoles and socks to dry, then leans back in the rocking-chair with the children gathered around him. "I'm glad no one here is sick. The roads would be heavy for a horse if I had to go for a doctor." You, too, are glad, but too busy to say much. The Big Boy takes down his violin, and as he tunes it, remarks, "There's a hockey match in the village I meant to take in, but I'll not go to any old hockey match this night."

The Lesser Boy says, "There'll be some tall wading going to school in the morning."

The Small Boy chuckles, "Mother, theresth a great big sthnowbank down by the milksthand, and I'm going to build housthe there in the morning. It'sth justh like a housthe now only it'sth prettier. It'sth like that," pointing to the curved petal of a rose in bloom on the sitting-room table.

Whoop! the wind shrieks around the house, the eavetroughs rattle, and Hubby asks if the furnace fire is all right. You answer "Yes," but add that as you are not going to bed just yet, you will go down and fire up before you do so. So it happens that after the others are in the land of Nod, you go down cellar with a lamp in your hand, and its light gleams on your gems of fruit. Something impels you to look them over, and presently you lift a gem of huckleberries.

Instantly you recall the day you picked those berries, and, as you fire the furnace, you can almost hear the songs you sang that night.

You find that the furnace draft should be open for awhile, and as you watch the fire you live over again that day which you marked as a red-letter day of your life.

You are up early, for you want to get a good start. Everything necessary for the basket has been cooked the day before. Picking huckleberries is a picnic which sharpens the appetite, and you make provision for at least three ordinary meals. You and Hubby are actually going to pick huckleberries,—the first time for ten years. Only twice since your marriage have you done so, and you want to make the most of your day with him.

You put on a gray-linen frock, for scrambling over rocks is hard on gowns, and you look anxiously at the sky. The weatherman is very undecided. Sometimes there is a spatter of rain, and then, just when you decide to stay at home, there is a gleam of sunshine. The neighbors who are going with you call over to see what you are going to do, and you don't know that yourself.

About eight o'clock you decide to go, and the basket with its load of provisions, empty pails, rugs and oilcloths, are put into the democrat and you are off.

You are to call in the village for more passengers, but Hubby does not hurry the horses, for he thinks you will want to turn back when you reach the village. Not you! You're going on, though your passengers have given you up and have to be hunted up. Remarks are passed concerning people crazy enough to drive miles to pick huckleberries in the rain, but you laugh, and go on with your increased load.

Rain, rain, rain. It pours just after you leave the village. There is a trickle from your umbrella that will persist in running down your gown, and another from the umbrella behind that will go down your neck, but you are off for a day with Hubby, and you don't care.

Hubby has to call at a house three miles from the village, and while he is making his call a man passes who says it is going to rain all day. You begin to think he is right, but you won't give in.

Rain, rain. Pools are standing here and there; the horses are splashed with mud; the umbrellas drip steadily. You peer out from beneath yours to note any changes along the road. You look at the school where your niece taught, but no brown eyes with their crown of

Riddles.

What is the difference between fish alive and live fish? Ans.—There "a" difference.

What is the difference between winter and summer? Ans.—There's no (snow) difference.

What is the first thing you do when you get into bed? Ans.—Make an impression.

What is the longest word in the English language? Ans.—"Smiles," because there is a mile between the first and last letters.

When is a door not a door? Ans.—When it is ajar.

Funnies.

Freddie—I must have changed a lot, Grandmother, since I was here last summer. The chickens don't seem to know me.

The story is told in Harper's of a little girl, aged four, who accompanied her mother to the butcher shop. As she saw the sawdust-covered floor, she exclaimed: "Oh, mamma, how many dolls this butcher has broken!"

Miss Wilkins, the primary teacher, was instructing her small charges. "Name one thing of importance that did not exist a hundred years ago," said the teacher. Ralph Franklin, an only child, who was seated in the front row, promptly arose and answered—"Me."

Robert—"Mamma, my stomach says it is dinner-time."

Mamma—"You'd better go and see what time it is."

Robert (after an inspection of the clock)—"Well, mamma, my stomach's three minutes fast."

News just received from London, England, reveals a secret which will delight every child in the world, and a great many grown-ups as well. The author of the famous nursery rhyme, "Old Mother Hubbard," is made known.

"Her name was Sarah Catherine Martin. She was the housekeeper of the Vicar of Yealmpton, in South Devon, and she wrote her 'poem' in the year 1805. Now, it happens that the church at Yealmpton requires repairs for both its body and its tower; the rector of the parish makes an appeal to the children of the world to send their pennies to him to assist in the rebuilding of the church, in which lie the remains of the author of the immortal story of how the old woman went to the cupboard to get a bone for her dog and found it bare.

"The original of the 'ditty' is now in the library of the Squire of Yealmpton, and every person who sends a contribution to the fund will get an authorized copy of it."—Canadian Churchman.

Mons. Bachelet, a Frenchman who has lived for the past twenty years in America, has invented a train, operated by electricity, which travels through space without wheels. It is pulled along by magnetism from hoops or coils of charged electric wire placed at intervals along the route. Demonstrations have been given proving the feasibility of his invention, and it is among the possibilities of the future that men may travel with safety at the rate of three hundred miles an hour.

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Don't throw away your old carpets. They are valuable. Send them to The London Art Carpet Works and have them woven into beautiful fluff rugs, equal in appearance and durability to the most expensive, imported rugs. See advertisement on page 1214.

re-auburn hair will be there, so you look across where live the genial couple with whom she boarded. No one in sight. Your party are apparently the only lunatics about.

At the fountain, Hubby waters the horses, and someone says, "If we knew the cheesemaker we might go into the factory and get dried up." We don't go in—we go on. Shall it be north or east.

East. It is sixteen years since you were over this part of the road, but you remember the little lake and the large, red raspberries that grew on the long hill that is one of the main slopes down to Squaw River. They still grow so close to the road that you reach out and pick two, declaring you have berries anyway.

Past a sawmill where the shanty in connection might shelter the party, but is probably locked up.

Past huge boulders of granite, and over some of them, too. Down the hills and up again. Down over Squaw River and up on the other side. You have apparently left the limestone behind and entered the granite formation.

Past a large patch of red raspberries which almost tempt you to stop. No! You are after huckleberries.

At the Buckhorn Road the party turn south. Soon Hubby stops where a small, new barn, looks clean and inviting, and asks if we may have dinner in the barn. Everything around that barn is spick and span, and the owner is hospitality personified.

Baskets are unpacked, hot water obtained at the house, and dinner is served on fresh, clean hay.

Some chickens come in, and you throw some scraps outside for them, whereupon one of the party says that the proper way to drive an animal is to coax it. You reply that the rule works as well with the unfeathered as with the feathered biped. Some one offers to bet a cent that the weather will clear after dinner, but the bet is not accepted.

But when your dinner is finished, four men, your host among them, appear, and offer to take you to the berries. Each man carries a pail, and you are somewhat surprised to see that the clouds are thinning and no rain is falling. Off you go.

Across the road, through an oat field, across a pasture field where wild strawberries run riot, and out on to the bare limestone rock the path leads. You are surprised at this, but hurry after your host, who tells you he can hear the rapids.

Presently your host stops at the edge of the ledge and tells you with a significant gesture, "You can see some country from here." You can, indeed! Miles and miles of flat limestone, with its characteristic covering of sumac and juniper. Down, far down below, runs the Mississauga River, inky black. You can hear the rapids now, and involuntarily you shudder, and you wonder how you will get across, though the other three men have gone ahead to prepare the way. But over there are the berries. Miles and miles of granite hills you can see, and you know that their sloping sides are covered with huckleberries. But there is that dreadful river to cross, and no bridge, and no canoe to be seen.

Your host leads the way, and you go down. Surely some giant hewed out those steps for his own benefit. Three feet broad and two feet down. Down, down, down. You touch soil again, but still the path leads sharply down. Over a seventy-foot boulder, not of limestone, but of rounded granite. The boulders now are all granite. Mother earth has been curling on some gigantic rink in bygone ages, and has left her playthings lying in every position, till they have been grown over by shrubs, and even large trees.

The path leads down to the river where there is an old dam, and you see the rapids now. You think of the Wreck of the Hesperus, as the cruel, beautiful water dashes on. Your party rinse the sand out of their pails and then hurry along up the bank of the river. There are huckleberries growing on the boulders now, but you leave them to "top off with" coming back.

But all the while you talk and laugh in the sunshine you are wondering how you will face that awful water. Turning a bend, you see the three men who preceded the party. You begin dimly to

understand how you will cross the river now.

You have crossed several of the rivers of Ontario at different times. You have crossed the Don and the Humber at Toronto. You have crossed the Thames and the Grand at various times and by various kinds of bridges. You have trod the little foot bridge over the Moira at Belleville. You have crossed the floating bridges on Pigeon and Chemong Lakes. You crossed this same river sixteen years ago by an old bridge you were nearly afraid to tread on. Now you see the actual making of the bridge by which you are to cross.

Two boom logs are placed across the river just where it leaves a small lake. An uprooted tree is placed across these, some planks are thrown on the timbers, and behold your bridge.

You think you can never cross, but when the oldest man of the party goes across, though he is lame, you go too, but you are right glad of a helping hand on the other side.

Here are berries at your feet. You leave the lower berries for those who cannot climb so well as you, and you zig-zag up the granite slope.

Berries everywhere! Miles of them! Growing in tiny cracks; growing in an inch or two of soil on the flatter places, clinging even where the rocks rise so steeply that you dare not tread.

You notice that what you had always thought were berries with the bloom rubbed off, are a distinct variety, and you fancy they are sweeter than the more beautiful bloom-covered variety.

How quickly the berries fill your pail. You pick as rapidly as possible, but you are getting more than berries out there on those granite hilltops. You are getting a whiff of your childhood days. You forget for a while that you are the mother of eight children, that there are shirts to mend and socks to darn. You forget even the baby for a little while, and involuntarily you look south to see the wide, tumbling waters of blue Lake Ontario. South! Where is south! The sun is apparently shining in the northeast though Hubby's watch tells you it is half-past three.

The party have agreed to meet at the bridge at five. Hurry, then, to fill your pail while you may.

The small boy of the party says he has his pail nearly full, whereat you express surprise, but he assures you that it is so because he has the bottom covered. Five o'clock. Hubby calls you, but those berries are so enticing. Fifty-three. You reluctantly leave the patch, cross the bridge, and start homewards.

The rapids are foaming white and cruel, and the uprooted tree which formed part of your bridge is tossed like a match in the racing water. You watch it go, and then begin the upward toil. You are glad now that your childhood was spent among the hills. You learned there the trick of climbing easily, and it stands you in good stead as you mount those gigantic steps.

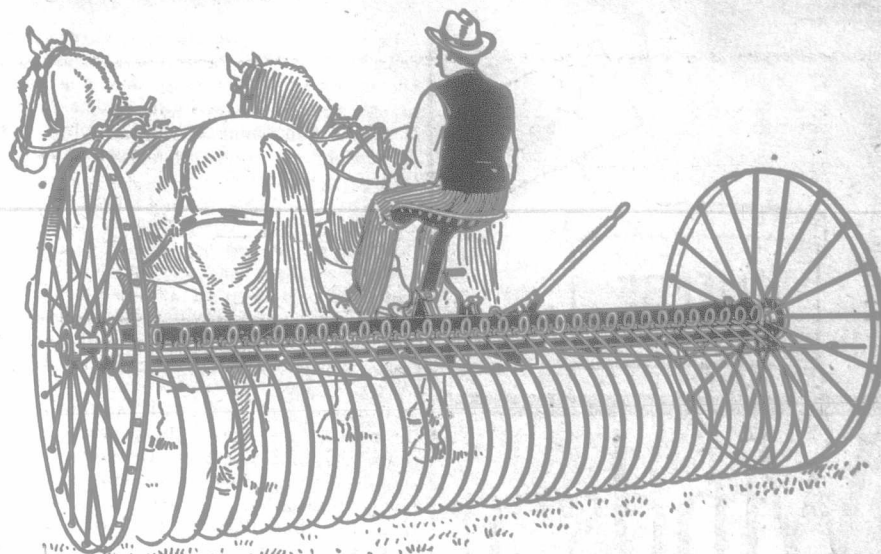
A picnic supper in the barn, berries bought from the men who have done so much for your party, then for home. One man has filled a large milkpail, and not a leaf or a stem in it. Between what the party buy and what they have picked, there are eight pails of berries in the democrat when you start home.

You meet others coming in who will perhaps camp several days. You envy them, but there are home ties not to be slighted.

Someone starts to sing, and for several miles you sing anything you can think of. The song stops abruptly sometimes when the horses trot through the yielding sand over a granite boulder, and the democrat gives a jounce that settles your supper and the berries in the pails at the same time. You wonder if there will be a whole dish left in the basket—but never mind. You are having one of the times of your life.

The evening mists are falling, and as you look back from the uplands they appear filmy and delicate as a bridal-veil flung sideways, decking the woods with beauty. Another hill or two passed, and the mist has covered all but the tree-tops, giving one the weird sensation of driving into a lake dotted with islands.

While you laugh and talk and sing (or croak), you can see in your mind's eye the tall figure of your host as he tells you the berries are over there. You can still see the black river, and hear the purr of those white, cruel rapids.



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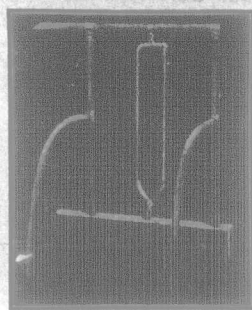


Fig. I

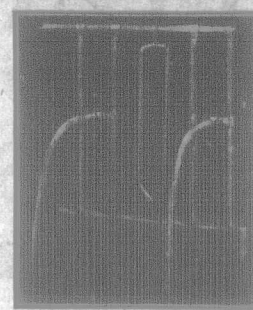


Fig. II

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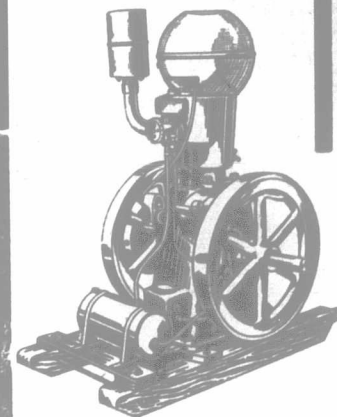
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Fig. II, 1 1/4-in. "	.. 4.25	" 5.20
Fig. II, 1 1/2-in. "	.. 4.75	" 5.70
Stanchions alone	.. 1.25	" 1.60

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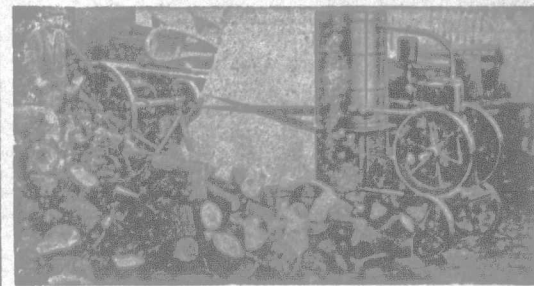
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It starts instantly—every time—no batteries to run down. Self-oiling—no oil cups to fill. No oil wasted. Self-regulating at all loads. No attention needed when at work. Fitted with phosphor-bronze bearings throughout. No babbitt metal to wear and run out, and cause trouble. In a word, the best engine on the market.

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HISCOTT INSTITUTE
61 College St., Toronto. Estab. 1892

Please mention "The Farmer's Advocate."

In the village people are watching the searchlight of an incoming steamer. At the mill corner you stop, and the beauty of the scene, as the light flashes now on this side and then on the dripping leaves on the island opposite, appeals to you. But you move on.

Your village passengers are dropped, and the horses trot merrily homeward through the dense fog.

More good-nights at your own gate, and then you peep in at the kitchen window where you see your eldest daughter fast asleep with her hand on the carriage where the youngest girlie, too, lies asleep.

It comes to you with a shock that since the eldest are able to care for the youngest, that the time is near when the bloom-covered berries of love and the darker berries of commerce will call your dear ones, and between you will roll the black river—Separation.

Hubby is waiting for the lantern, and you light it and bring in the berries.

Your eldest girlie wakens, and is amazed at the amount of berries you have. All the news of the day must be told, comments of various sorts are made, but underneath it all the thought of that dreadful river, Separation, is running.

After a while you go upstairs where the tousy-headed treasures are resting. The Lesser Boy lies with his clothes on, and his arm thrown over a curly-headed small boy, and you lean over and kiss the flushed, wee cheek. That black river seems farther off.

Soon you are snuggled down between Hubby and the baby, and then the river runs close and black. Long after Hubby's snores proclaim him aboard the Midnight Express there are tears on your pillow, for the rapids are boiling white and furious now.

Suddenly you smile to yourself in the darkness as you nestle a little more comfortably on your pillow. The Father Himself will build the bridge then.

A cry from upstairs startles you. You have been dreaming by your furnace fire, and as you hurry upstairs to quiet a fretting child you are thankful that the bridge is not yet needed.

MRS. J. H. TAYLOR.

The Ingle Nook.

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

Dear Friends,—I wonder sometimes if you who live in the country appreciate fully two in particular of the advantages you possess over us city folk. The first is the freedom from city noises. From early morn till dewy eve, our ears are assailed by the shriek of the engine whistle, the honk-honk of the motor-horn, and the rattle of the street cars. The noises begin at six o'clock in the morning when the first street car goes tearing past, clanging its gong, and putting sleep effectually to flight. This noise is repeated at five-minute intervals throughout the day, and intensified by one car which has a flat wheel and pounds its noisy way along with a special "screech" at every curve, and another car which sounds as if it were only tied together, and might go to pieces at any moment. Next come the big motor trucks thundering past on their way to the various outlying farms to collect the milk and produce for the respective dairies and produce merchants in town. By half-past eight, the children begin to pass on their way to school, many of them on roller-skates, anything but a quiet means of locomotion, especially on cement sidewalks; others on express wagons, which have a beautiful "coast" down a slope of two blocks in length.

Then the regular business of the day begins, and there is a constant succession of delivery wagons, motors, puffing buses, with their chug-chug, like motor-boats, peanut-roasters, ice-cream vendors, and various other vehicles, each with its own special addition to the general babel. The factory whistles and bells at noon and six o'clock, the occasional blood-curdling shriek of the siren belong-

ing to the motor-truck of the fire department, and the music—save the mark—now and then of an old-fashioned barrel-organ, make up a sum-total of noises calculated to put the strongest nerves on edge, and to test the stoutest ear-drums. We had an unusually severe experience of the latter variety the other evening, when an organ-grinder, in gratitude for several donations from the neighborhood, planted himself directly in front of our house and went through his whole repertoire. Anything more excruciating was surely never heard, no two notes of his instrument of torture were in tune, and the various selections, faintly recognizable as the "Miserere," from Il Trovatore; the "Marsellaise," etc., were literally executed.

These noises are kept up till pretty nearly time to begin again next morning. A few nights ago a party of joy-riders motored past, between one and two o'clock in the morning, and they evidently wanted everyone to know what a good time they were having, as they kept their horn, a particularly offensive one, going incessantly, and by the time the sound had died away in the far distance, everyone within range had been thoroughly aroused, and was muttering "curses, not loud, but deep," on the thoughtless merrymakers. Sitting on verandas on the street side of the house, conversation is almost impossible, and one feels that peace is only to be obtained by stuffing one's ears with cotton-batting. Think of it—and be glad you live out of town.

And then the space you have, and the opportunities for out-door living! Do you make the most of them? Here, in town, with only the ordinary city lot, which is "overlooked" by eyes on all sides, the out-door life is limited to sitting, and occasionally taking tea, on one's veranda, and if one lives on a street-car line that is not an unmixed pleasure. It is as yet only the fortunate few who have sleeping-porches. Once, some years ago, we were fortunate enough to live in a house with a delightful, wide veranda at the side, sheltered by trees from the gaze of outsiders, and we almost lived there all summer long, and everything possible was done there, from shelling peas and paring potatoes in the morning, to sewing, reading, and resting in the afternoon, and, for some of us, sleeping at night. We still look back regretfully and wish for that veranda.

And the work that is saved in the house! Sweeping and dusting reduced to a minimum. Those of you who do not yet know the pleasure of out-door life, try it. If your veranda is big enough, and convenient of access, try dining out there—you may have to cook a little more, as things always seem to taste better in the open-air—but it is worth it, and you will be sure to like it. If not large enough to use as a dining-room, bring out some comfortable chairs, hang a hammock across one corner, have a good, steady table, large enough to hold your work-basket and your favorite book, and do all your "sit-down" work there. A few yards of mosquito-netting tacked from post to post, to keep out moths, bats, and mosquitoes, and a good bracket-lamp fastened to the wall or one of the posts, and you can spend your evenings there till bedtime; and a comfortable couch there will give you sound sleep from which you will rise refreshed at the sound—not of the first street-car—but of the early bird in search of the proverbial worm.

If you have no veranda, there will be some nice shady spot under the trees near the house which you can use instead; have your hammock, chairs and table there, and don't spend one minute more than you can help under a roof. We are shut in enough for eight months in the year; let us enjoy life in the open while we can.

Foot Ease for the House-Wife.

One of the first requisites for the housewife's comfort is to be properly shod. The house shoe is, preferably, of soft, pliable kid or canvas, with low, broad heels capped with rubber. A fairly heavy sole insures the greatest ease for those who are compelled to stand much. Great care should be exercised in the fit, as shoes that are



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Mix 1/2 cup sugar and 1/4 cup butter. Add 1 beaten egg. Mix and sift 1 1/2 cups flour and 2 teaspoons baking powder. Add alternately with 1/2 cup milk to first mixture. Bake 30 minutes.

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"Wear-Ever" Aluminum Cake Pans bake good cakes because they bake quickly and evenly on all sides at once.

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Send for our new folder, "Delicious Cake Recipes" mailed free upon request.

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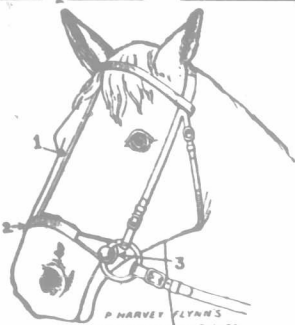
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1. Strap to top of head.
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TO FARMERS
Summer Season and Fall

Secure good help and make 12 months engagement to prevent disappointment next spring. Farm help supplied from the Old Country. Utmost care given in selecting the right class of help to fill each individual requirement. Write stating particulars.

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350 acres, 260 under cultivation balance pasture, with spring creek running through. 8 miles from Woodstock, 3 miles from Eastwood, G.T.R. Good brick house, slate roof. Water on tap in house and barn from drilled well. Two other good houses on farm. New bank barn, 56 x 90; other barn, drive barn, and hog pen. Cheese and butter factory across road from farm. Telephone and R.F.D. One of the best farms in Oxford County; has never been rented. The farm is in highest state of cultivation, and clean. No waste land on it. The buildings are all in good condition. For further particulars, apply to

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Will hold any sized bag or sack at any height—is easily carried about—stands anywhere—made of steel—lasts a lifetime. Satisfaction guaranteed or money refunded—\$3 each. Send to-day, or ask your dealer. Agents wanted. Imperial Bag Holder & Machine Co. Lucknow, Ontario

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either too large or too small inevitably produce corns.

If these should appear, much relief can be obtained by rubbing with pumice stone.

A corn remedy which our foremothers swore by was a poultice made of bread crumbs that had been soaked in cider vinegar for half an hour or longer. This was bound on the affected toe over night, after which the corn was easily dislodged. This is in line with the treatment that prescribed the binding on of salt-pork rind for a sore or stubbed toe, and I have heard more than one old Yankee Graybeard testify to its efficacy.

There is nothing much more disastrous for the foot's well-being than wearing a boot that is too short, for enlarged joints or bunions are the painful result. Some relief is afforded such a condition by wearing bunion plasters, which help lessen the pressure. Where there is much inflammation surrounding the joint, an occasional painting with tincture of iodine will alleviate the suffering.

People whose feet have a tendency to perspire excessively should use borax in the footbath, and then dust the feet thoroughly with lycopodium.

Mr. Weston, the champion walker, after a long sprint, always bathes his feet in warm water in which a generous amount of sea-salt has been dissolved. On removal from this bath, he rubs his feet enthusiastically for some moments with a rough, coarse towel. For tired, aching feet, there is no better treatment. Swollen feet are sometimes benefited by bathing in water in which wood ashes have been boiled. It is understood that the water is strained before using.

Some women cannot take a ramble of any length without incurring blistered feet. This can be obviated, at the outset, by rubbing the soles of the stockings worn with pure castile soap, and by softening the soap with water and applying to the sides and bottom of the feet.

In summer, when the feet seem to tire most easily, a satisfying sense of refreshment follows a dusting with talcum powder, slipping on fresh hosiery and a change of shoes.

Not only the shoes, but the surface on which one stands, but much to do with foot-fatigue. The favorite foot-rug for those obliged to stand a great deal, is the fibre matting made from "Coir," the outer husk of the coconut. It "gives" most agreeably to the tread. Rugs of this material, placed in front of the stove, table, sink, or wherever the housewife must stand for long periods, will contribute much toward foot comfort.

It is the height of folly for the domestic woman to slight either care or shoeing of her "tribbles," for, day in and day out, ill-treated feet retaliate by handicapping a good deal of worthwhile efficiency.—E. R. W., in Boston Cooking School Magazine.

The Scrap Bag.

Hanging a coat up by the loop at the back pulls it out of shape. Coat hangers are inexpensive, and take up little space in the wardrobe.

Ordinary fruit or red wine stains can be removed from table linen by means of a few drops of thick sour milk. This should be left on for several hours, after which wash the spot in lukewarm water.

The best way to clean brushes. A piece of soda about the size of a walnut should be dissolved in a quart of hot water. Comb the hair from the brushes, dip the bristles downward into the hot water, and out again, endeavoring to keep the backs and handles as dry as possible. Repeat this until the bristles look clean, then rinse in cold water. The bristles should be shaken or dried in the sun or near a fire and not wiped, as this makes them soft, as does also the use of soap.

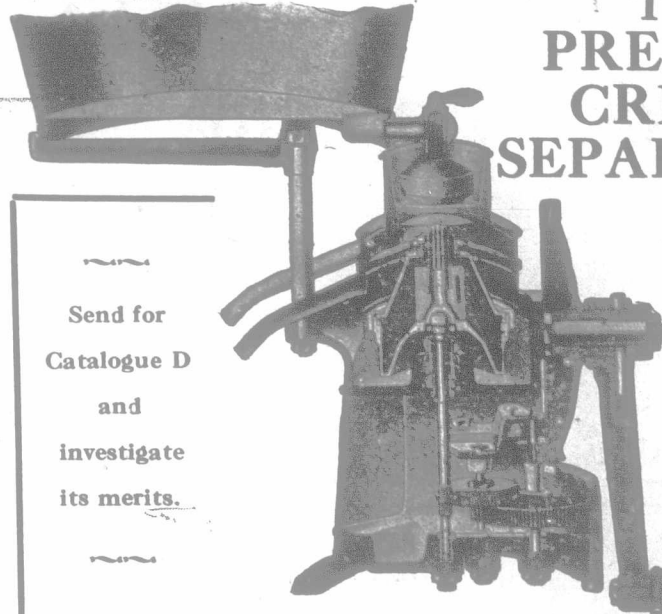
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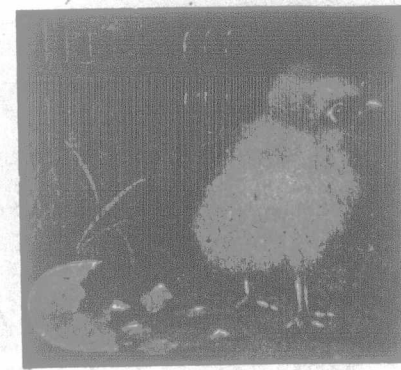
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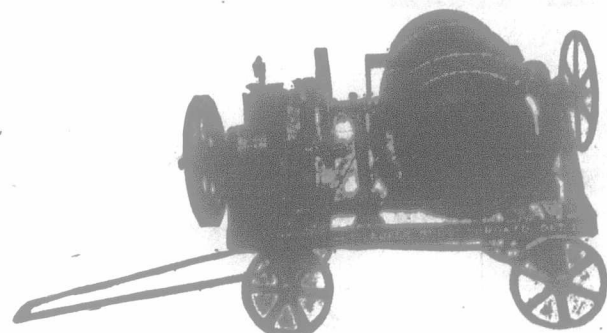
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DUCKS—Records exist where Indian Runner ducks have produced 300 to 320 eggs in 365 days. True Indian Runner ducks, trios \$10, baby jacks 75 cts. each. Fertile eggs, \$2, \$3 and \$5 per setting. Mrs. E. C. Cattle, Weston, Ont.

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Toronto consumes the milk and cream from over 14,000 cows, and the butter production of over 70,000 cows. We need your cream, and expect to pay well for it. Drop a card.

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Please mention "The Farmer's Advocate."

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CULTIVATED half section on easy terms, 11 miles from Virren, Man., and 3 miles from Woodnorth, 155 acres now in crop. Price \$25 per acre including half the crop. Terms \$1,000 cash, balance \$500 per year principal and interest till paid. Apply to E. J. Blaquier, Port Arthur, Ontario.

MARRIED MAN seeks situation on a farm, November 1st, by year. Wages monthly. Good experience in stock and mixed farming. Travelled stud horse. Furnished house, catables and fuel wanted. Good barn. Hemsley, Box 33, Glencoe, Ontario.

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Other farmers are doing so and saving money. Not only that, but they are getting flour of the very highest quality.

Cream of the West Flour

the hard wheat flour that is guaranteed for bread

Mr. Bert Greenbury, of Cedar Grove, writes: "Please excuse me for not writing to you before as I entirely forgot to write, but all the same I don't forget the flour. It is the very best flour we have had in our house yet. Mother gets just some of the loveliest bread made now that I really wish you were here to taste it. It makes the bread so pure and white that you could not help wishing you had a piece if you saw it. I do not think that I will ever buy any other kind but yours, as there is not any better. It is such a handy cook-book that you give, too, and we certainly would not like to do without it."

We don't believe it necessary to go into details and explain the good points of our flours. We believe it is sufficient to say that they are sold with the understanding that if they are not right in every respect back goes your money.

Note the special prices in right-hand column. Remember, we cannot make any reduction on these prices, even if you purchase five or ten tons. The only reduction we could make would be on car-loads.

TERMS.—Cash with order. Orders may be assorted as desired. On shipments up to five bags, buyer pays freight charges. On shipments over five bags we will prepay freight to any station in Ontario east of Sudbury and south of North Bay. West of Sudbury and New Ontario, add 15c. per bag. Prices are subject to market changes.

FREE: To buyers of three bags of flour we will give free "Ye Old Miller's Household Book" (formerly Dominion Cook Book). This useful book contains 1,000 carefully-selected recipes and a large medical department.

If you already possess this book, you may select from the following books: Ralph Connor's—"Black Rock," "Sky Pilot," "Man from Glengarry," "Glengarry School Day," "The Prospector," "The Foreigner," Marion Keith's—"Duncan Polite," "Treasure Valley," "Lisbeth of the Dale," J. J. Bell's—"Whither Thou Goest." If you buy six bags of flour you get two books, and so on. Enclose 10c. for each book to pay for postage.



SPECIAL PRICES

	Per 98-lb. bag
Cream of the West Flour (for bread)	\$2.90
Queen City Flour (blended for all purposes)	2.50
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Cream of the West Wheatlets (per 6-lb. bag)	.25
Norwegian Rolled Oats (per 90-lb. bag)	2.55
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FEEDS Per 100-lb. bag

"Bullrush" Bran	\$1.20
"Bullrush" Middlings	1.30
Extra White Middlings	1.40
"Tower" Feed Flour	1.60
"Gem" Feed Flour	1.80
Whole Manitoba Oats	1.50
"Bullrush" Crushed Oats	1.60
Manitoba Feed Barley	1.35
Barley Meal	1.40
Chopped Oats	1.60
Feed Wheat	1.65
Oatmaline	1.65
Oil Cake Meal (Old Process)	1.85

The Campbell Flour Mills Co., Ltd., (West) Toronto, Canada

Iron Fence at Wire Fence Prices

If you've come to the point where you need a new fence, we would like the opportunity of showing you how you can buy real good honest ornamental iron fence for about the same money usually paid for wire. There's nothing wrong with this fence—it isn't a special sale—it's just an evidence of the progress we are making. In fact, contrary to anything being wrong with it, it's without doubt the best-looking fence you ever saw at it's price, and it's wearing qualities, if anything, go it's looks one better.

You can buy it in many styles, one of which is sure to suit your surroundings in a way to delight the eye and to give the whole enclosure a look of comfort and refinement. The prices will suit your pocketbook, whether you want to spend a good deal or very little.

Let's get together about it—we'll send you a catalogue showing the different styles, and a price list to help you choose within your means. Write now, while it's in your mind, to

The Dennis Wire & Iron Works Co., Ltd., London, Canada

"1900"
Gravity Washer
sent free for one month's trial
Write for particulars.
1900 WASHER COMPANY
357 Yonge St., Toronto, Ont.

An interesting advertisement for
THE IMPERIAL LIFE
ASSURANCE COMPANY
will appear in next week's issue entitled
"Poor Old Folks"—Watch out for it!

MAKE YOUR OWN WILL
You can make your own will in the privacy of your own home without expensive legal fees.
A "CODE" WILL FORM with complete instructions is perfectly legal and incontestable. Sold by book sellers or stations or sent direct on receipt of price **25c.**
THE COPP CLARK CO. Limited.
207 Wellington St. West, Toronto

News of the Week

Nearly 200 miners have been killed by an explosion at the Hillcrest Collieries in the Crow's Nest Pass District, and many more are badly injured. The explosion took place on the morning of the 19th instant.

The Oberammergan Passion Play will be reproduced in England the first week in July. As a license for its production has been refused, the play will be given in a large private garden near London, the use of which has been offered for the purpose.

News has been received of the slaughter of ten thousand men, women and children, by White Wolf, the Chinese brigand and his followers at the capture of the city of Tao Chow. After looting the city, hundreds of the people were driven into the temples which were then set on fire and burned. White Wolf and his band were surrounded by regular troops but broke through and escaped.

Following a severe thunderstorm in Paris (France) on the 15th instant, the streets of the city caved in in several places, causing the loss of a number of lives. The chasms were in some places from twenty to thirty feet deep. In one street a taxicab was engulfed and both passenger and chauffeur killed.

The contract for salvaging the Empress of Ireland has been given to the Canada Salvage Co. Expert divers have been engaged, and it is expected that it will take at least two months to complete the work. A refrigerator car will be kept at the wharf for the storage of such bodies as may be recovered. When the salvage is completed the question of the possibility of raising the vessel will be considered.

A firm in Berlin has adopted a new kind of motor truck for delivering coal, which gives each customer the exact weight of coal delivered. The weight of each bag is automatically registered, and the total weight stamped on a strip of paper inside a glass case which cannot be opened till the wagon is unloaded, so that fraud is impossible. This paper is given to the customer, who, after deducting the weight of the empty sacks, knows exactly the amount of coal received. A small extra fee is charged for this service.

The Ivory Snuff Box.

By Arnold Fredericks.
(Copyrighted.)
Chapter XXII.

SUCCESS AND HAPPINESS.

It was characteristic of M. Etienne Lefevre, prefect of police of Paris, that when he had once placed a case in the hands of one of his men, he rarely ever interfered in any way with the latter's conduct of it.

Reports of progress he did not desire, nor encourage. Success was the only report that he asked; and by thus throwing his subordinates upon their own responsibility, he obtained from them far better results than would have been the case had he kept in constant touch with their movements.

Hence, when he despatched Richard Duvall and M. Dufrenne, the little curio-dealer of the Rue de Richelieu, to London, and the former's wife and, later on, Lablanche to Brussels, he felt that he had done all that it was possible to do toward recovering M. de Grissac's stolen snuff-box.

He did not, it is true, dismiss the matter from his mind; it was, indeed, of too grave and sinister a character to be treated thus lightly. But he had the utmost confidence in Duvall, and believed that the latter would without doubt succeed in his quest.

Hence Duvall's departure, he had waited anxiously for the detective's appearance. He did not expect to hear from him, but felt convinced that within the next day or two he would walk into his office with the missing snuff-box in his pocket.

It was with some dismay, therefore, that he received, on the fourth day, a sudden visit from Dufrenne. The latter had been released the day before by the Brussels police, after a most uncomfortable night in a cell, an experience for which he knew he had Hartmann to thank; and in desperation had decided to place the condition of affairs before his chief.

The latter had heard him in silence. A long conference followed, with the result that Dufrenne returned to Brussels, bearing the mysterious message, subsequently given to Grace by Lablanche, to play "The Rosary" upon the phonograph.

Since then the prefect had been in a state of profound agitation, although he carefully concealed the fact from his subordinates. The gravity of the issues at stake tortured him ceaselessly; and to add to his discomfort, M. de Grissac arrived from London, determined to ascertain what progress, if any, had been made toward the recovery of his lost property.

He was bitterly disappointed to find that Lefevre was unable to give him the slightest encouragement. The box had not, he believed, passed into the hands of their enemies. Beyond that, he could say nothing.

It was on the day of the ambassador's arrival that Dufrenne appeared at the prefecture a second time, his face pale and haggard, his eyes bloodshot and sunken from loss of sleep, his whole manner indicating that he had lately passed through some terrible experience.

De Grissac was closeted with the prefect at the time; but the man's appearance, his urgent request that he see M. Lefevre at once, gained him an immediate audience.

The prefect and the ambassador stood awaiting his entrance, their faces tense with anxiety. The expression upon the old man's countenance confirmed their worst fears. He staggered into the room, grasping the back of a chair to support himself.

"He has given it up. The scoundrel! the traitor! he has given it up to save himself and his wife!"

The ambassador turned away with a groan of despair; Lefevre stepped up to Dufrenne.

"You mean to tell me," he cried, "that Richard Duvall has proven false to his duty? I cannot believe it."

Dufrenne nodded.

"He gave it to Hartmann last night. I saw him do it. Hartmann had promised to let him go free. They had been torturing him in some way, I do not know how. It was the woman who weakened first. The man—Duvall—gave up the box to save her from doing so."

"Then she knew where it was?"

"Yes."

The prefect went over to the window and looked out over the Seine. His emotions almost overcame him. The loss of the box, Duvall's faithlessness, his own failure—all plunged him into the deepest despair.

"Mon Dieu!" he muttered to himself. "Duvall! It is incredible!"

Suddenly he turned. The ambassador had begun to question Dufrenne.

"What did this Dr. Hartmann do when the box was given to him?" he asked in a voice trembling with excitement.

"He pressed the large pearl, pushed aside the cross, and removed the paper that was hidden beneath it. He read the paper. It contained nothing but a row of numbers. I saw it as he held it beneath the light."

De Grissac became as white as chalk, and turning to Lefevre, cried out in a broken voice:

"It is all over! Nothing can be done now. It is too late. Mon Dieu! what will become of France?"

"Where is Duvall?" cried the prefect suddenly. "I must see him. He is not the man to do such a thing as this. I must talk to him. Do not tell me that he has run away."

"No, monsieur. He and his wife are outside. I have placed them both under arrest."

"Were they attempting to escape?"

"No, monsieur. They were coming to Paris."

"At least," the prefect remarked mournfully, "he is not cowardly enough for that. Bring him here—bring them both here at once. I must question them."

Dufrenne turned to the door. "In a moment, monsieur, they will be before you."

"What can it avail now?" said De Grissac sadly.

"We shall see. I never condemn a man without a hearing." As he spoke, Duvall and Grace came into the room.

The prefect looked at his young assistant with an expression both grave and sad. He had always been very fond of Duvall. He was fond of him still. The whole matter had hurt him very deeply.

"M. Duvall," he said, without further preliminaries, "M. Dufrenne tells me that you, after recovering M. de Grissac's snuff-box from Dr. Hartmann, deliberately returned it to him last night, in order to secure your liberty and that of your wife. Is this true?"

"Yes," Duvall's voice was calm, even, emotionless. "It is true."

Lefevre recoiled as though he had received a blow. "Can you dare to come before me and tell me such a thing as that?"

"It was my fault, M. Lefevre," cried Grace, going up to him. "Richard begged me not to tell, commanded me not to tell, but they were torturing him, they were driving him mad. Oh—I could not stand it—I could not."

"You should have considered your duty, madame, not your husband," remarked the prefect coldly, then turned to Duvall.

"Young man," he said, "you have done a terrible thing. Perhaps even now you do not realize how terrible a thing I regret that I did not inform you at the time I placed the case in your hands, but the matter is one which, at all costs, I wished to remain a secret. Now it makes little difference."

"M. de Grissac has for many months been carrying on with the foreign office a correspondence regarding the relations of France and England in the matter of Morocco. Many details of action have been settled which, in the event of certain eventualities, would constitute the joint policy of the two nations. I need hardly say that these details and policies are of such a nature as to cause, if known, an immediate declaration of war by the third nation involved."

"This correspondence M. de Grissac, unwilling to trust to the ordinary cipher in use for such purposes, carried on in a code of his own; one which he regarded as absolutely proof against all attempts at solution. That desperate attempts to obtain copies of the correspondence would be made he well knew, and in spite of all precautions our enemies, by bribing a subordinate, did some time ago manage to secure copies of many of the most important letters and documents. Their attempts at reading them, however, were fruitless. Without the cipher and its key they could do nothing."

"How they ultimately learned that the key and the cipher were contained in the ivory snuff-box we do not know. Perhaps through Noel, the ambassador's servant, although M. de Grissac is positive that he never under any circumstances made use of the cipher in the presence of a third person. That they did learn the whereabouts of the cipher, however, we now realize only too well. When I told you that in the missing snuff-box lay not only my honor, but the honor of France, I indulged in no extravagant statements. It is the solemn truth. Even now, by means of the snuff-box and key which you have delivered to them, our enemies have no doubt read the stolen documents, and are preparing to strike while we are as yet unprepared."

He strode up and down the room in a state of extreme excitement.

"As a last desperate chance, I attempted to send you a message by means of the phonograph record. I hoped you might in this way learn the secret of the box, and by destroying the key, render it useless. If you hesitated to do this, fearing that should Hartmann discover that the key was missing he would refuse to liberate you, you are worse than a traitor. You are a contemptible coward. Let me tell you, M. Duvall, if I had a son I should rather have struck him dead at my feet than have had him fail me in a crisis like this."

Grace began to weep hysterically. "It was all my fault," she began. "I told them the box was hidden in the

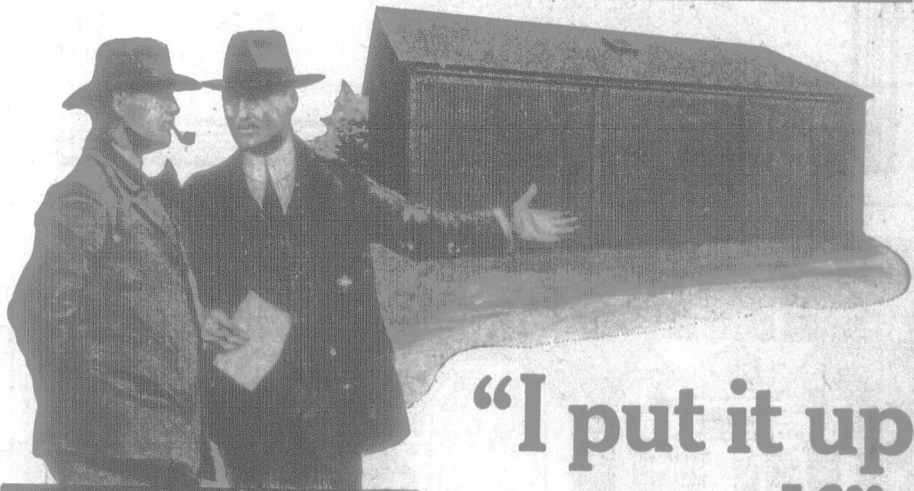


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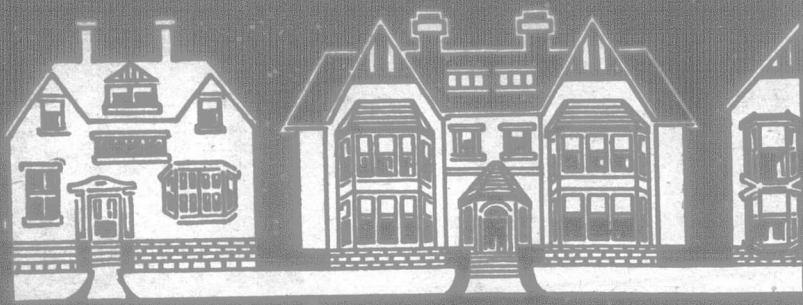
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room below, against my husband's wishes."

"Where were you, then, that you say 'in the room below'?" asked Lefevre suddenly.

"In the laboratory, on the second floor. My husband was confined in the basement. I said I would tell—for they were killing him. He cried out to me, forbidding me to do so. Then they took me away to the room above."

"And left your husband alone, with the snuff-box in his possession?" demanded the prefect sternly.

"Yes."

"For how long?"

"About—about ten minutes," she replied, wondering at his question.

"And you," exclaimed the prefect in a voice of fury, turning on Duvall, "were left alone in this room, with the snuff-box in your possession, for ten minutes, at the end of which time you calmly turned it over to this fellow Hartmann. Mon Dieu! Why did you not destroy it—crush it under your heel—anything to prevent our enemies from obtaining possession of it?"

He looked at Duvall, his face working convulsively.

"You—you are a—sacre bleu—I cannot tell you what I think of you."

"M. de Grissac," asked Duvall, his face white, "had I destroyed the box, or even only the key, could you have read these documents yourself?"

The ambassador gazed at him, puzzled for a moment. "Certainly not, monsieur," he replied. "I could no more have solved the cipher than they could. It was for that reason that I was forced to carry the key about with me. But it would have been infinitely better had the documents never again been read than to have them read by our enemies."

Without making any reply, Duvall placed his hand in his pocket and drew out, between his thumb and forefinger, a tiny white pellet, no larger than the head of a match.

"You are no doubt acquainted, M. de Grissac," he said coolly, "with your own handwriting?"

"My handwriting! Naturally. What of it?"

He went toward the detective, an eager look in his face. Lefevre, Dufrenne, and Grace also crowded about, their expressions showing the interest which Duvall's questions had aroused.

The detective began to unroll the little white pellet with the utmost deliberation. It presently became a tiny strip of tissue paper, not over two and a half inches long, upon which was written a series of numbers.

"Is that, then, your handwriting, monsieur?" he inquired carelessly, as he placed the strip of paper in De Grissac's trembling hand.

"Mon Dieu! The key!" fairly shouted the ambassador, as his eyes fell upon the bit of paper. "M. Duvall, what does this mean?"

"It means, monsieur," replied the detective coolly, "that while I was left alone in the room down-stairs I tore off the lower half of your key, which, luckily, was of sufficient width to enable me to do so, and with a fountain pen I had in my pocket, wrote upon the second strip of paper a series of numbers taken at random. This series I placed in the secret recess in the box. I do not think it will prove of much use to our friends in Brussels."

"Duvall!" cried Lefevre, rushing forward with outstretched hands. "Forgive me! Forgive me!" He was not quick enough, however, to forestall Grace, who with one cry of happiness had flung herself into her husband's arms.

"Richard!" she cried, and then sank sobbing but happy upon his breast.

M. Lefevre seized his assistant by the arm and began to shake his hand in a way which almost threatened to dislocate the young man's shoulder.

"My boy," he cried, laughing and crying at the same time. "Forgive me—forgive me. I was hasty. I should have let you speak first. God be praised, everything is well. De Grissac—think of it—they will puzzle their brains over that cipher for weeks and weeks, and they will discover nothing—nothing! Is it not splendid!" He grasped the ambassador's hand and embraced him with ardor. "Magnificent! Superb!"

The ambassador was no less overjoyed. "Young man," he said, "we owe you

the deepest apologies. No one could have done better. I thank you from the bottom of my heart."

Dufrenne also offered his congratulations.

"My friend," he said, "I have done you a great injustice. I salute you, not only as a brave man, but as a very shrewd one. As for me, I fear I am only an old fool."

Duvall patted the old man on the shoulder and smiled.

"A patriot, monsieur, and for that I honor you. I was luckily able to turn the tables on these fellows. But one thing you, and all of you, gentlemen, should know. Had I not been able to substitute a false key for the real one, the latter would never have passed into Hartmann's hands, if I had died for it."

"I know it, my friend. I was a fool, a dolt, even for one moment to doubt it. I ask your pardon; and that of madame, your wife," cried Lefevre, seizing Duvall's hands in his. Grace looked proudly at her husband, her knowledge of her own weakness forgotten in the triumph that he had won.

"And now, monsieur," said Duvall, with a look of happiness in his face as he caught his wife's glance, "with your permission Mrs. Duvall and myself will begin once more our interrupted honeymoon."

The prefect put his arm about the detective's shoulder, and gave him an affectionate hug.

"My poor children," he cried, smiling at Grace. "In my excitement, my happiness, I had completely forgotten that you are only just married. And such a honeymoon as you have had! It is indeed shameful, and the fault is mine—mine alone. But I shall make amends, my children. You have rendered both me and France a great service, and I do not forget it. I insist that to-night you shall dine with me."

"You, De Grissac," he exclaimed, turning to the ambassador, "will I know, be one of the party. And it is not alone for the purpose of dining that I ask you. Your service to France shall be acknowledged in a more substantial way. M. de Grissac and myself will have the honor to present to you, M. Duvall, and to your charming bride, some tokens of our gratitude and esteem. After that—go—enjoy your happiness. You have earned it."

He glanced at his watch. "Madame, you are fatigued. You need rest—sleep. I insist that you permit me to send you to my house, where Mme. Lefevre will have the honor to receive you and make you comfortable. You, Duvall, can in the mean time make your arrangements for leaving Paris to-night, and also secure your baggage from the pension in the Rue Lubeck, where it awaits you. I myself will accompany you, and render you any assistance in my power. We will then rejoin your wife at my house, where M. de Grissac will meet us. What do you say?"

Grace clung to her husband's arm. "I'm afraid to leave him, even for a minute," she said.

Duvall pressed her hand, and noted her swollen eyes, her white and drawn cheeks.

"You have had a terrible night, dear," he said, kissing her, "and you must have a few hours' rest. Go to M. Lefevre's house and sleep for a little while. You are so nervous you can scarcely stand. I will not be long."

She gave his arm a little squeeze, then turned to the prefect.

"I thank you, monsieur, and since my husband thinks it best, I will gladly go to your house at once. Good-by, Richard." She accompanied M. Lefevre to the door.

Two hours later Duvall, having made all arrangements for leaving Paris for London that night, descended from the prefect's automobile at the latter's house in the Rue de Courcelles. Within an hour they had been joined by M. de Grissac, and were all seated about M. Lefevre's hospitable board.

Every one was in jubilant spirits, and in the happiness of the moment all the suffering of the past week was forgotten. De Grissac presented to the bride a magnificent diamond crescent, and Duvall a gold cigarette-case of exquisite design and workmanship, while M. Lefevre, not to be outdone, placed in Grace's hand a rare lace shawl, which, he assured her, had been worn



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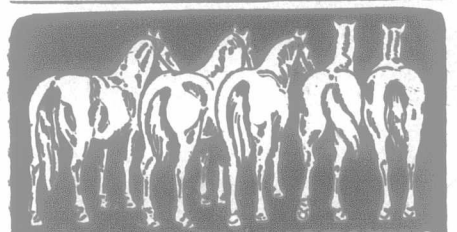
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When M. Lefevre came at last to say good-by to Duvall and his wife, there were tears of sorrow in his eyes. He had no children of his own, and the happiness of his two young friends had been his happiness as well. The thought that he might never see them again left him with a great sense of loneliness.

"Good-by, my dear boy," he said, grasping Duvall's hand in both of his, as he stood beside the door of the automobile which was to take the happy pair to the railway station. "When you settle down upon that little farm in your own country, and raise the chickens, and the pigs, and, may I also venture to hope?"—he smiled meaningly at Grace—"the children, do not forget your old friend Lefevre."

Duvall pressed his hand, while Grace hid her blushes in the darkness of the cab.

"I shall never forget, monsieur, that to you I owe the possession of the sweetest and best wife in the world. We shall meet you again, I promise you."

"Good! I shall hold you to the promise, mon ami. And if you do not keep it"—he pointed his finger impressively at the pair in the cab—"I shall send for you to assist me in the next difficult case which puzzles me, and voila! The thing is done. You would not dare to fail me, should I call upon you for assistance."

He took Grace's hand and kissed it with old-time courtliness, then slapped Duvall upon the shoulder.

"Go now, my children. If you stay longer I shall be unable to restrain my tears."

As the automobile turned the corner below, its occupants saw the old gentleman still standing on the sidewalk, gazing after them and waving his handkerchief in farewell.

"Dear old Lefevre," said Duvall, as he drew Grace to him and kissed her.

THE END.

Questions and Answers

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

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

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

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Miscellaneous.

Splints.

I have a horse that is lame. His symptoms indicate splints. My veterinarian also says he has a blind splint. Is there such a thing as a blind splint, and if so, is it hard to cure? Can you give a remedy for it? This horse stands right and walks right, but is lame when he trots. Can't see any swelling or lump of any kind. Have examined foot for soreness, but there does not seem to be any? F. M. S.

Ans.—Your horse is likely suffering from splint. In the first stages, very often no enlargement is noticed, and the animal may be very lame at the trot. We have heard veterinarians use the expression blind splint. Lameness is usually present only in the inflammatory stage. When the exudate becomes ossified, the inflammatory action ceases and lameness disappears. The horse must be given rest. Keep the seat of the splint showered with cold water for two or three days. In the first stages this often removes lameness. In most cases it is necessary to blister. Splints often gradually disappear by absorption, which is also hastened by blistering. Try a blister of two drams each of biniodide of mercury and cantharides, mixed with two ounces vaseline. Tie so he cannot bite the parts. Rub well with the blister once daily for two days. On the third day wash off and apply sweet oil. Let loose now. Oil daily until the scale comes off. Repeat every month as long as necessary. Unless the horse is lame, treatment is seldom advisable.



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Questions and Answers.
 Miscellaneous.

Holidays.
 What are the holidays for a hired man from April 1st to November 1st?
 Ans.—A hired man can claim May 24th, Dominion Day, and Labor Day, in this time; also Good Friday and Easter Monday if they fall after April 1st, and Thanksgiving Day if it comes before November 1st, together with any other days set aside as holidays by official proclamation, subject to the doing of regular and necessary chores.

Currants Dropping off.
 Will you tell me what is the cause of small currants dropping off. My black and red currants that have been planted out two years were loaded with blossoms, and just as the fruit set they nearly all dropped off the stem.
 A SUBSCRIBER.


Ans.—Since you do not mention insects or fungus diseases affecting them, one must infer that the dry weather has caused them to drop. We have seen considerable drop from this cause. They are still so young that they could only be expected to bear a very few at any rate, and it is not surprising that they dropped. Cultivate them, and with sufficient fertilization, you need have little fear of their failure to bear when a little older. Don't expect too big a crop till they are out three or four years.

Treating Cut, White Pine Plantation, Interest.

1. How would you treat a cut on a horse's leg?
 2. Have set out 200 white-pine trees on stoney, not workable land, a loam, with hard heads, set five feet apart. How often will they need watering this season? What should be their growth in 25 years?
 3. Can interest be collected on a note when due? Interest was not mentioned on note?
- J. S. K.
- Ans.—1. Wash the cut out carefully with warm water and thoroughly dress it three times daily with one part carbolic acid and twenty-five parts sweet oil. If proud flesh should appear, or the wound heal slowly, apply a little butter of antimony with a feather.
 2. Would not advise watering. You may lose a few without, but they may be replaced at much less cost and trouble than the 200 can be watered. If watering is started, it must be kept up at frequent intervals all through the dry season. Better not try it. We cannot estimate their growth. We recently saw some sixteen feet high at five years planted.
 3. We do not think so.

Oats and Roots for Pigs.

1. Will you kindly tell me what value turnips have as feed for pigs, compared with oats?
 2. Could pigs taken off grass in fall be finished upon turnips, and very little grain?
 3. How many bushels of turnips would it take for about ten head?
 4. Are trees around buildings a danger in time of electric storms, or would they attract lightning away from building?
 5. Is it lawful to have cattle, sheep and hogs on highways?
 6. Can neighbors claim damage done by them?
- E. W. S.
- Ans.—1. Oats being a concentrated feed, have much more value for feeding pigs than have turnips, the latter being a coarse, watery feed. If you choose to feed roots, mangels or sugar beets would give better results in pig feeding, as they are more palatable. Oats, if used, should be finely ground, and these, too, are of more value in feeding growing pigs. Heavier grain, as barley, wheat or peas, is preferred for finishing.
 2. Not very well. Turnips or roots are of more value in growing pigs, and should be fed more sparingly in finishing pigs for market. It requires grain to finish pigs.
 3. From one to two bushels of pulped roots daily should be plenty for ten growing pigs, but of course, grain should be fed with this.
 4. They are not necessarily dangerous.
 5. This is governed by your local township by-laws. In most municipalities it is unlawful.
 6. Yes.

The War On Flies

TANGLEFOOT

Fight Flies With Tanglefoot
 For 30 years Tanglefoot has been America's surest, safest, most sanitary fly-destroyer. It is non-poisonous, easy to use, and costs but a trifle. Each sheet is capable of killing 1,000 flies. And Tanglefoot not only kills the fly, but seals it over with a varnish that destroys the germs as well. In buying, ask for the genuine "TANGLEFOOT"—it costs you no more and lasts twice as long as the no-name kinds sold merely as fly-paper, or sticky fly-paper. Made only by
THE O. & W. THUM CO., Grand Rapids, Mich.
Gasoline will quickly remove Tanglefoot from clothes or furniture

How to Use
 Open Tanglefoot slowly. In cool weather warm slightly. For best results place Tanglefoot on chair near window at night. Lower all shades, leaving one at the Tanglefoot window raised about a foot. The early morning light attracts the flies to the Tanglefoot, where they are caught. (31)

SYDNEY BASIC SLAG
 The Fertilizer that gave the best results on Fall Wheat

Hundreds of Ontario farmers applied Basic Slag costing \$20 per ton to their land last year against Fertilizers costing \$30 per ton and are delighted with the results.
 Our Managing Director, Mr. C. R. Walker, will be in Ontario during July arranging agencies in unrepresented districts.
 Perhaps you have heard what Basic Slag has done for others and that you would like to make a trial of it on Fall Wheat or you might even be able to join with some of your neighbors and get a car load.
 If our proposition interests you make an appointment with Mr. Walker by writing

in the first instance to
THE CROSS FERTILIZER CO., LIMITED
 SYDNEY :: NOVA SCOTIA

"La-Lo" Animal Spray
 Protects Cattle and Horses From Flies
 ENDORSED BY
 Dominion Experimental Farm Authorities
 and Prominent Dairymen as being Superior to all other products of its kind.
 NO OBJECTIONABLE FEATURES:
 Does Not Blister—Will Not Discolor—Is Not Gummy—Has Agreeable Odor.
 Dealers wanted in every town: Exclusive territory given.
LA-LO MANUFACTURING CO. LIMITED, - 365 Aqueduct Street, Montreal, Que.

TOPPERS IN CLYDESDALES AND PERCHERONS
 I have just landed a big importation of Clydesdales and Percherons, if you want a top stallion with the best of quality, come and see me, I can show you the best lot of stallions you ever saw.
T. D. ELLIOTT - BOLTON, ONTARIO

Imported CLYDESDALE Stallions
 Yes, they are here, our 1914 importation, and if you want a big young stallion with the best legs, ankles, feet, action, breeding and character you ever saw at a price a poor man can pay, come and see our lot.
BARBER BROS., GATINEAU PT., QUE.

Clydesdales & Shires
 If you want Stallions, Fillies or Foals of the above breeds, personally selected from A. & W. Montgomery's Clydesdale Stud and the Bramhope Shire Stud, Cheshire, and home-bred of the most fashionable strain, see and select from the large stock now offered. Prices and terms will please.
D. MCEACHRAN, ORMSBY GRANGE, ORMSTOWN, QUE.

I HAVE TWENTY GOOD Imported Bulls
 on hand, 11 and 12 months; will deliver any of them to any place in Ontario or Quebec for \$135.00; also have a few good heifers, 11 and 12 months; will sell for \$110.00 each.
L. O. CLIFFORD, - Oshawa, Ontario

SHORTHORNS
 I have ten young Shorthorn bulls, some fit for service now. Part of them are bred and made so that they are fit to head the best herds in any country; some of them are of the thick, straight, good-feeding kind that will produce money-making cattle; some of them are bred from the best-milking Shorthorns, and the prices of all are moderate. I have SHROPSHIRE and GOTSWOLD rams and ewes of all valuable ages. Write for what you want.
Robert Miller, Stouffville, Ont.

DOMINION EXHIBITION

VICTORIA, B. C.

Sept. 21 to 26

Horse Races
and other attractions

LIVE STOCK
AGRICULTURE
HORTICULTURE
MANUFACTURES
ART

C. P. R. return fare at single rate from all points west of Port Arthur.

Take advantage of this and visit British Columbia's Capital City.

For information and Prize Lists, apply to

GEORGE SANGSTER
P.O. Box 705 Secretary
VICTORIA, B. C.

CHOICE BULLS

Have two excellent bull calves left, which are 9 and 10 months old. They are both deep, low set calves, besides being good handlers, and their breeding is gilt edge. Also a number of heifers, all ages.

WM. SMITH, Columbus, Ont.

Oakland—52 Shorthorns

Present offering: one red bull just past two year old. Three crosses from imp. stock, ancestors all good individuals and good milkers. He is a sure calf getter and in good condition, \$165. Also good heifers and cows, all ages. We sell cheap.

JNO. ELDER & SONS Hensall, Ont.

Spring Valley Shorthorns

Herd headed by the two great breeding bulls, Newton Ringleader (Imp.) 73783, and Nonpareil Ramsden 83422. Can supply a few of either sex.

KYLE BROS., Drumbo, Ontario
Phone and Telegraph via Ayr.

Shorthorns For Sale

3 bulls from 9 to 12 months, 2 young cows soon to freshen, 3 two-year old heifers choicely bred and from heavy milking strain. Prices easy.

Stewart M. Graham, Lindsay, Ont.

THE MANOR

Shorthorns and Lincolns

Bulls and rams all sold; a few females for sale. Inspection solicited.

J. T. GIBSON :: Denfield, Ontario

Shorthorns and Swine

Have some choice young bulls for sale; also cows and heifers of show material, some with calves at foot. Also choice Yorkshire sows.

ANDREW GROFF, R.R. No. 1, Elora, Ont.

Shorthorns

Young bulls and heifers of the best type and quality; reds and roans; growthy; good stock from good milking dams.

Thomas Graham, R.R. No. 3, Port Perry, Ont.

FLETCHER'S SHORTHORNS—Present offering: Two choice bulls, suitable for high-class herd headers, 8 to 11 mos., and females all ages. Present stock bull, "Royal Bruce" (Imp.) = 55038 = George D. Fletcher, R. R. No. 2, Erin, Ont. Erin Station, C.P.R. Long-Distance Phone

Shorthorns "Trout Creek Wonder" at the head of the herd, which numbers about 40 head. Heifers and bulls of the best quality for sale at reasonable prices.

Duncan Brown & Sons, R.R. 2, Shedden, Ont.

DR. BELL'S Veterinary Medical Wonder. 10,000 \$1.00 bottles FREE to horsemen who will give The Wonder a fair trial. Guaranteed to cure Inflammation, Colic, Coughs, Colds, Distemper, Fevers, etc. Agents wanted. DR. BELL, V.S., Kingston, Ontario

Gossip.

The Canadian Jersey Cattle Club was one of the last of the pure-bred cattle organizations to commence the work of registering in the National Live-stock Records. However, since they commenced the work has gone on very satisfactorily till now there are almost five thousand registrations. The Club has also made most exceptionally satisfactory strides in Record of Performance work, and there are now about seventy cows which have qualified for the Record of Performance yearly test. These represent animals from a great many different herds, and imported animals as well as Canadian and United States bred animals. Jersey cows from almost every province are qualified in the Record of Performance. However, it has only been within the last year or so that the breeders have fully awakened to the great value to be derived from this yearly testing, and now more breeders are entering cows almost daily. Perhaps there is as great value in this work from a selfish standpoint, that is that a man may know his own cows, as from any other standpoint, but from a monetary standpoint it helps one wonderfully when he comes to sell stock from Record of Performance ancestors. It is most interesting to study the breeding of the cows which are qualifying in this test. However, to date there have been but two sires whose names have entered the list. To be enrolled upon the list, a sire is required, to have four daughters, each from a different dam, qualified. The two sires whose daughters have accomplished this are: Brampton Blue Beam, bred by B. H. Bull & Son, of Brampton, Ont., and since in service in their herd, that of Jas. Bagg & Sons, Edgeley, that of Joseph M. Dolson, of Alloa, and now stands at the head of the herd of C. A. Julien Sharman, at Red Deer, Alta. The other bull which has qualified is Mary Maid's Brigadier 695, at the head of the herd of A. H. Menzies & Son, of Pender Island, B. C. This bull was bred by H. C. Taylor, of Orfordville, Wis., and is sired by Mary Maid's third son, a bull which traces back into the families which produced some of the cows which made Jerseys famous at the World's Columbian Exhibition at Chicago in the early nineties. Several other bulls have one, two and three daughters qualified, and it is to be hoped that in the near future there will be many more sires with sufficient daughters qualified to have their names on the honor roll.

Questions and Answers.

Miscellaneous.

Veterinary Books.

Could you give me information of any company or publishing house selling a reliable, up-to-date, stock-doctor book?

R. L. C.
Ans.—The Farmers' Veterinarian may be had through this office at \$1.50, postpaid.

Clover in Corn,

Would it be advisable for me to sow clover in a field now planted with hill corn, supposing it is sown as it is cultivated for the last time in the season? Would it get root enough to make good hay next year?

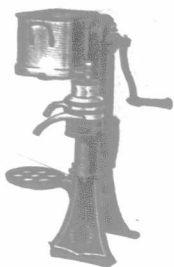
M. L.
Ans.—We have seen some excellent catches of clover from this practice, although it is not very common. It should come on for a good hay crop next year, provided it gets a good start this fall.

Bog Spavin and Thoroughpin.

Please let me know what cure to use for a thoroughpinned one-year male colt? Shall I shut him in during treatment? He also has a bog spavin commencing. Give remedy soon as possible.

C. S. C.

Ans.—Get a blister made of 1½ drams each of biniodide of mercury and cantharides, mixed with two ounces vaseline. Clip the hair off the parts. Tie so he cannot bite them. Rub well with the blister once daily for two days; on the third day apply sweet oil. Turn loose in a box stall and oil every day. As soon as the scale comes off, tie up and blister again. In place of the box stall, it would be even better to have him out on grass, except when it is necessary to have him tied.



Write for new catalogue and learn full particulars about this superior machine, which skims on the average down to .01 per cent. The Standard cream separator is a big money earner. Every man who owns two or more cows should own one.

FIRM BUTTER

Butter made from cream skimmed by the Standard cream separator is noted for its firmness. This is due to the fact that the curved wings of the Standard's centre piece prevents the breaking of the globules of butter fat during the process of separation. Just why the curved wings of the

Standard

do this is explained at length in our new separator catalogue which also gives other interesting information. Every dairyman knows that good solid butter brings the highest price—and that's the kind of butter the Standard insures.

The Renfrew Machinery Co., Limited

Head Office & Works, Renfrew, Ont.

Agencies almost Everywhere in Canada

Shorthorns and Clydesdales

We have seven yearling bulls and seven bull calves from 7 to 12 months. All reds and roans, and of choice breeding. We have some extra good imported mares for sale, also some foals. If interested, write for catalogue of their breeding.

W. G. PETTIT & SONS, Freeman, Ont.
Burlington Junction, G. T. R. Bell 'Phone

"THE AULD HERD"

We have a select lot of females of all ages, and of the best Scotch families for sale. Also a March bull calf, red, little white, an Orange Blossom by Broadhooks Ringleader.

A. F. & G. AULD, Eden Mills, Ont. Guelph or Rockwood Stations

SHORTHORN CATTLE of the popular families for sale. Nine heifers just ready for breeding; 7 two-year-old heifers in calf; 10 young cows with calves by side or close to calving; 10 bulls ready for service, of good colors, at prices within the reach of all.

BLAIRGOWRIE FARM, Myrtle, C.P.R. and G.T.R. Jno. Miller, Jr., Ashburn, Ont.

SHORTHORNS Our present offering consists of Nonpareil Lord -87184-; Dam Imp. Dalmeay Nonpareil 6th; 7 young bulls from 6 to 12 months old; 15 cows and heifers of choicest quality and breeding.

A. J. HOWDEN & CO., COLUMBUS, ONTARIO. Myrtle, C.P.R. and G.T.R. Long-distance Phone.

SHORTHORNS and CLYDESDALES We have a nice bunch of bull calves that will be year old in September and are offering females of all ages, have a choice lot of heifers bred to Cinnamon -87800-. One stallion 3-years-old, a big good quality horse and some choice fillies all from imported stock.

A. B. & T. W. Douglas Long-distance Phone Strathroy, Ont.

BELMONT FARM SHORTHORNS We are offering 20 heifers from 1 to 3 years, daughters of the 1913 Toronto Grand Champion, Missie Marquis 77713, Scotch and Scotch Topped, several of them show heifers.

FRANK W. SMITH & SON R. R. No. 2, Scotland, Ont. Scotland Sta., T. H. & B. L.-D. Phone.

Springhurst Shorthorns Shorthorn cattle have come to their own; the demand and prices are rapidly increasing, now is the time to strengthen your herd. I have over a dozen heifers, from 10 months to two years of age, for sale; everyone of them a show heifer, and some of them very choice. Bred in my great prize-winning Harry Smith, EXETER STN. HAY P. O. ONT.

Willow Bank Stock Farm Shorthorns and Leicester Sheep. Herd established 1855; flock 1845. The imported Cruickshank Butterfly Roan Chief -60865- heads the herd. Young stock of both sexes to offer. Also an extra good lot of Leicester sheep of either sex; some from imported sires and dams.

James Douglas, Caledonia, Ontario

Poplar Shorthorns We have the best lot of young bulls for sale this spring we have ever bred, reds and roans, 10 to 18 months of age, Butterflys, Roan Lady's, Lavender's and Lovelys, all sired by the great Uppermill Omega Imp. Strictly high-class herd headers.

MILLER BROS. ROUTE 2, CLAREMONT, ONT.

SHORTHORNS IN OUR HERD 100 Our 1913 crop of 22 bulls are all sold, we have 20 extra bull calves coming on for the fall trade. For sale—25 heifers and young cows; those old enough are bred to Right Sort (imp.) or Raphael (imp.), both prize winners at Toronto last fall.

MITCHELL BROS. Farm ¼ mile from Burlington Junction BURLINGTON, ONT.

SHORTHORNS of breeding, style and quality. If in want of an extra choice herd header, carrying the best blood of the breed, or a limited number of right nice yearling heifers, write us; we can supply show material of either bulls or females.

GEO. GIER & SON, WALDEMAR, R. R. No. 1, ONT. L.-D. Phone.

Glenallen Shorthorns We offer for sale some of the best young bulls we ever bred, Scotch or Booth breeding, low, thick, mellow fellows of high quality; also our stock bull Climax -81332- sired by Uppermill Omega.

R. Moore, Manager ALLANDALE, ONTARIO

Salem Shorthorns —Herd headed by Gainford Ideal and Gainford Perfection, sons of the great Gainford Marquis. We are generally in shape to supply your wants in either sex.

J. A. WATT, Elora, Ont., G.T.R., C.P.R. Telephone and Telegraph

R.O.P. Shorthorns--R.O.P. Jerseys For the first time we are offering for sale Shorthorn cows and heifers and Jersey cows and heifers with their official records is high-class individuality.

G. A. JACKSON, Downsview, Ont., Weston Station.

One man's experience

In 1884 Mr. M. Merner of New Hamburg took an Endowment Policy maturing in 29 years. The Company returned to him at maturity, \$170.25 for each \$100.00 paid to the Company. Throughout the term of the policy Mr. Merner was insured for its full amount.

The full story of this policy told upon request.

The London Life Insurance Co.

LONDON CANADA 60



PURE BRED SIRES

THE LIVE STOCK BRANCH

Dominion Department of Agriculture

WILL PURCHASE during 1914, a number of CANADIAN-BRED Stallions, Bulls, Boars and Rams.

Animals must be of right type, in good breeding condition and of the following ages:

- Stallions, three to five years.
- Bulls, not under one year.
- Boars, not under six months.
- Rams, not under six months.

All stallions will be purchased, subject to veterinary inspection and bulls subject to the tuberculin test.

Breeders in Eastern Canada having CANADIAN-BRED male animals for sale, filling the above requirements and registered or eligible for registration in the Canadian National Live Stock Records, are requested to communicate with the Live Stock Commissioner, Department of Agriculture, Ottawa.

The purchase of stallions and bulls will be made during the current spring months. The purchases of rams and bulls will be deferred until the autumn.

Communications must state age and breeding of animal offered and price asked.—60271.

Auction Sale of Jersey Cattle

At OAK GROVE FARM, Union, Ont., on

Tuesday, June 30th, 1914

There will be offered for sale the entire herd, consisting of 25 head of A. J. C. C. Jersey cattle, among which are seven head of 2-year-old heifers to freshen in June. This herd is headed by Lady's Jolly of Don, a grand bull.

The proprietor is giving up business and is offering the product of 25 years' careful breeding.

The sale will commence at 2 o'clock, on arrival of the London & Lake Erie Traction car, leaving London at 12.30 o'clock.

Oak Grove Farm is seven minutes' walk from the station at Union.

LOCK & McLAUGHLIN
St. Thomas, Ont., Auctioneers

ROCK BAILEY, Proprietor
R.R. No. 4, Union, Ont.

Brampton Jerseys

Record of Performance cows. These bulls are fit for any show ring.

B. H. BULL & SON,

BRAMPTON, ONTARIO



Glenhurst Ayrshires

ESTABLISHED OVER 50 YEARS AGO and ever since kept up to a high standard. We on supply females of all ages and young males of all ages. Let me know if you are interested. James Benning, Williamstown, Ont.

Questions and Answers. Veterinary.

Pervious Urachus and Orchitis.

Foal was born on May 20th, and a few days after birth I noticed that there was a constant escape of a yellowish fluid from the navel. Now the testicles are badly swollen and the colt is getting thin.

P. McG.

Ans.—It will be wise to get your veterinarian to ligate the umbilical cord, first ascertaining that the normal passage for the urine is open. If he has been seen to pass urine in the normal manner, of course, no means need be taken to open the passage. If you cannot procure the services of a veterinarian, get a mixture of equal parts of butter of antimony and tincture of myrrh, place the colt on his back, and dress the navel with the mixture applied with a feather, being sure to get it well down into the opening. Dress twice daily until urine ceases to pass. For the swollen testicles, get a can of antiphlogistine from your druggist, and apply according to directions, and keep in place by a suspensory bandage. Apply a fresh poultice every 12 hours, and keep colt as quiet as possible.

V.

Quinsy.

Two pigs about five weeks old partially lost power of their hind legs, and their ears turned a dark color. With a little help they could get up and walk around, and drink a little milk. They began to wheeze, could not breathe through their nostrils, but held their mouths open and breathed through them.

J. D.

Ans.—The partial paralysis and the turning dark of their ears was due to faulty circulation, probably caused by the throat trouble. They have quinsy, which is very difficult to treat successfully. The mouth must be held open by the use of a small clevice or other device. The glands of the throat will be noticed to be quite swollen. These must be scarified with a knife until they bleed freely. As soon as free bleeding commences the head must be let down, else the blood may pass down the windpipe and suffocate the patient. Rub the throat well with mustard, mixed with equal parts warm water and oil of turpentine, and wrap well with flannel cloths. Repeat this in 24 hours if not relieved. Swab the nostrils frequently with equal parts oil of turpentine and sweet oil.

V.

Miscellaneous.

Lump on Jaw—Window Shades.

1. I have a three-months-old calf with a lump on its throat. The lump is not hard. I have been bathing it with liniment, but it seems to be getting bigger. Will it hurt the calf? It does not bother when drinking or eating. Is there anything that can be done for it? It is a bull calf.

2. Is there any preparation used for whitening cream window blinds?

N. F.

Ans.—1. This is probably lump jaw. If it continues to grow, try the iodide-of-potassium treatment so often given in these columns.

2. Nothing that we know of.

Cow Lost Calf.

1. Farrow cow lost her calf. Would it be advisable to breed her again?

2. Which would be the most profitable, to dry her up and fatten her on grass, or milk until fall and fatten her in stable? This is a very fine red cow, seven years old. We had a good deal of trouble to get her with calf, and she has been in the habit of going farrow every other year.

A. S.

Ans.—1 and 2. Seeing that the cow has given considerable trouble, it would likely be advisable to turn her off for beef. However, unless she suffers from contagious abortion, no harm could come of breeding again. If the disease is contagious abortion, it will likely affect more of your cows. Would advise that you isolate her for a time, or if she is in good condition, as she should be after freshening, you might be able to get a good price for her right now. We can scarcely say which would pay the better, to dry her now and sell, or to fatten in the stable. This depends on the amount of milk she gives, upon the prices of meat, and cost of feeding.

BOO SPAVIN

Cure the lameness and have the part looking just as it did before the blemish came.

FLEMING'S SPAVIN CURE (Liquid) is a special remedy for soft and semi-solid blemish s—Dog Spavin, Thoroughpin, Splint, Curb, Capped Hock, &c. It is neither a liniment nor a simple blister, but a remedy unlike any other—doesn't irritate and can't be imitated. Easy to use, only a little required, and your money back if it ever fails.

Fleming's Vest-Pocket

Veterinary Adviser describes and illustrates all kinds of blemishes, and gives you the information you ought to have before ordering or buying any kind of a remedy. Mailed free if you write.

FLEMING BROS., Chemists
75 Church Street, - Toronto, Ont.

HINMAN THE UNIVERSAL MILKER



Milks One Cow at a Time

Having advantages:— In Weight; Size of Pail; Pail Changing Idea, Keeps Each Cow's Milk Separate, and Each Machine Works Independently.

PRICE—\$50.00 PER UNIT

H. F. BAILEY & SON
Sole Manufacturers for Canada
GALT, ONTARIO, CAN.

PRESIDENT SUSPENDER

NONE SO EASY

GOOD LUCK CALF MEAL

A perfect milk substitute; put up in 25-lb., 50-lb. and 100-lb. bags and sold at all dealers for \$1.00, \$1.90 and \$3.60 respectively. If your dealer's asleep, write us.

CRAMPSEY & KELLY
Dovercourt Road - TORONTO

Allancroft Dairy and Stock Farm

Beaconsfield, P. Q., Canada



A few purebred Ayrshire and purebred French-Canadian Bulls for sale. Correspondence or visit solicited.

E. A. SHANAHAN, Secretary
Merchants Bank Building, Montreal, Canada

The Sire of King Segis Walker

Was the first sire of the breed to have a 30-lb. dam and 30-lb. granddam. He is the only sire of the breed having a 30-lb. daughter whose dam, granddam and great granddam have each produced a 30-lb. daughter. His three nearest dams have each produced a 30-lb. daughter, and also a son that has produced a 30-lb. daughter, something that can be said of no other sire that ever lived. He is the only living bull having a two-year-old daughter with a record over 925 lbs. butter in one year. Just one of his sons for sale from the only cow in the world to have two 31-lb. daughters and herself a 31-lb. cow.

A. A. FAREWELL
Oshawa, Ontario

RIDGEDALE HOLSTEINS—Only 1 young bull left ready for service, smooth and straight, richly bred, closely related to our champion cow. Will also sell our aged stock bull, Imperial Pauline De Kol, No. 8346, very sure and quiet. Myrtle Sta., C.P.R.; Manchester Sta., G.T.R. R. W. Walker & Sons, R.R. No. 4, Pt. Perry, Ont.



EVERY farmer knows that his cows yield more milk and better milk when they are contented. Are YOUR cows contented? Are they profitable? If not, make them so by doing away with your old-time wooden stalls. They gather dirt, harbour disease germs, and prevent the free circulation of life-giving air and sunlight.

LOUDEN
Perfect Barn Equipments

The LOUDEN Tubular Steel Stable Equipment is easily and quickly installed and insures cleanliness and ventilation. Its use means comfort for your cows and profits for you.

GET INTERESTED. WRITE TODAY. Our book, "Perfect Barn Equipment," and the service of our architectural department, are free.

The LOUDEN MACHINERY CO.
Dept. 51 - GUELPH, Ont.

Best For all Stock
More flesh building, fattening value is found in
"MAPLE LEAF" Oil Cake Meal
Write for sample and prices.
Canada Linseed Oil Mills, Limited
Toronto, Ontario

What Every Dairyman Needs

A clip to hold the cow's tail while milking. Handy and easy to use. Saves the milkers many a nasty blow in the face from the cow's tail while milking. Sent post paid to any address, with full information as to how to use them, upon receipt of 50c. (fifty cents). Address:

R. A. CHAMBERLIN
83 Baywater Ave. Ottawa, Ontario

Holstein-Friesian Association of Canada

Applications for registry, transfer and membership as well as requests for blank forms and all information regarding the farmer's most profitable cow should be sent to the Secretary of the Association.

W. A. CLEMONS, St. George, Ontario

- 1 Holstein Bull, 16 months.
- 3 Holstein Bulls, 8 months and under.
- 2 Canadian bred Clydesdale Stallions, rising two.

R. M. Holtby, Port Perry R. R. 4, Ont.
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Do you know that Tidy Abbecker Prince is the only bull in the world that sired four 30-lb. cows in one small herd at less than 4 years old. He was bred at Maple Grove. There are just as good or better bred ones here now. If you are interested in this kind, and want to get one at a reasonable or live and let live price, come and see my herd, or write me for breeding and particulars.

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Holsteins and Yorkshires. Minster Farm offers a bargain in a bull born March 10th, whose 4-yr-old dam and sire's 4-yr-old dam average milk 1 day 73 1/2 lbs., 30 days 2,035-lbs. Also boars and sows fit to wean. For full particulars write: Richard Honey & Sons - Brickley, Ontario

Believes Armaments Necessary.

Editor "The Farmer's Advocate"

As your paper is continually taking the unreasonable side of being against armaments and militarism, I trust you will be good enough to publish this letter giving the other side of the question.

I suppose it is natural for persons living in the interior of a country to feel a certain sense of security from any unseen enemy, but there is really no excuse for taking up the present attitude your paper does on Canada's defence.

You say you are not in favor of armaments. Who is, if this could be avoided? But is not it a necessary evil? For instance, it would be nicer if we could do without police, but these are necessary to maintain law and order. Just as much is this the case with national police and their equipment. Today, we are all receiving the benefit of Great Britain's navy to protect us, and we are not doing our share in contributing to its up-keep, which is a crying disgrace to this country.

Supposing there was no British navy, where would we be? For instance, we might pass a law against Asiatics coming into the country, but if Japan sent along her navy, what could we do? She would dictate her own policy to us, or take the Western Province for all we could do to prevent her. Or, still assuming we do not get Great Britain's protection, say Germany desired to send out a lot of her unemployed, or even criminal classes. We might weekly pass a law to prohibit this, but how are we to enforce it? Germany would dictate her own wishes by sending some of her fleet over, and we would be powerless to do anything. Such superficial reasoning against armaments used in your paper is ridiculous. No one wants this burden, but under present racial conditions it is a necessary evil.

Therefore, let Canada do her share in maintaining this country for the Anglo-Saxon race, and not too weakly and meanly expect to receive all the benefits of British protection without doing our share.

L. F. SOLLY.

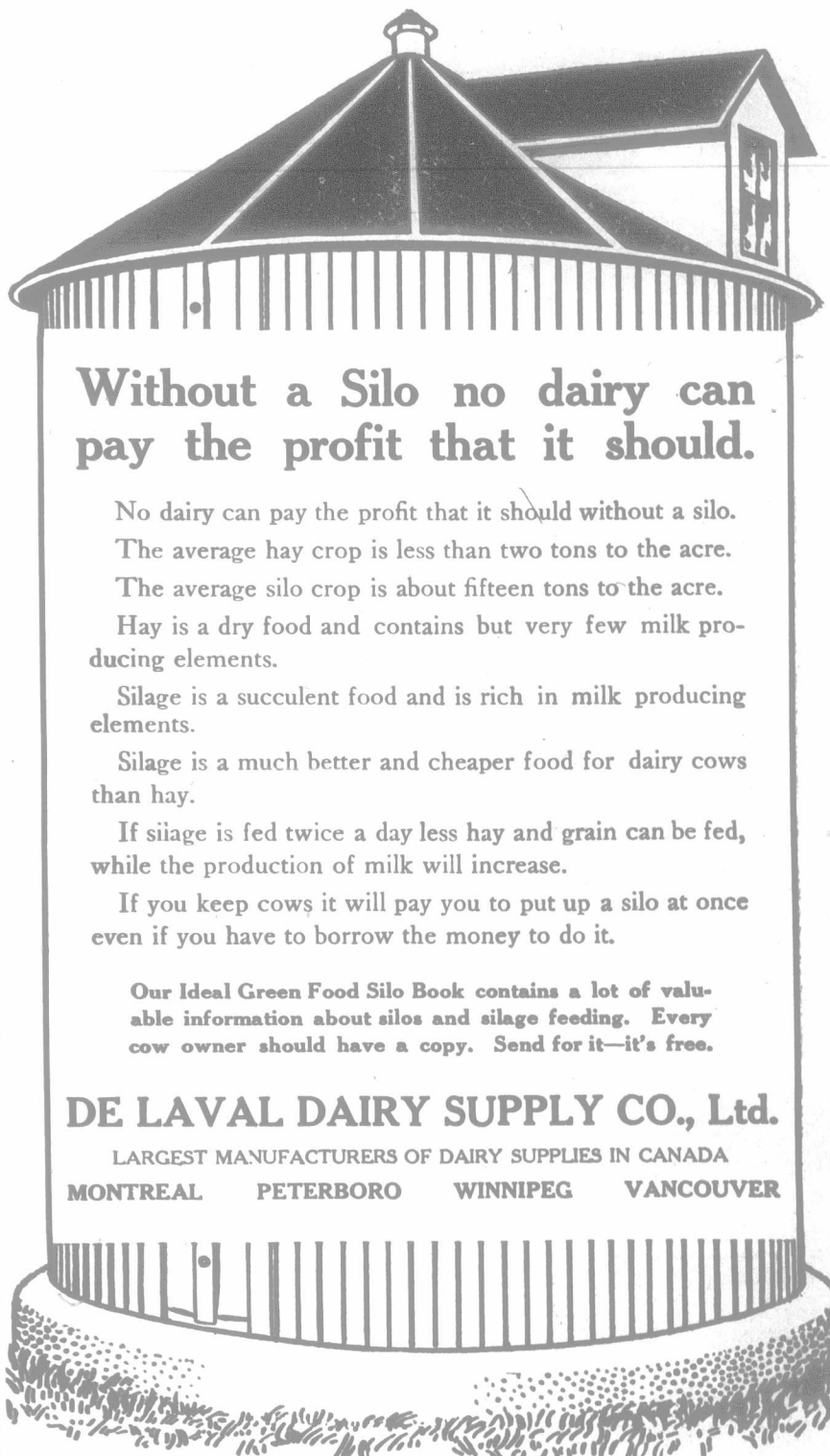
B. C.

Gossip.

BIG THINGS AT OLYMPIA.

It will be interesting to our readers to know a little more of the magnitude of the great International Horse Show held yearly at Olympia, London, Eng. This show recently closed after a very successful fortnight of exhibiting of the world's best horses, especially in the riding classes. The number of horses entered at the show was 4,183, and the prize money offered £11,000. Fourteen nations competed, and the cost of transportation of the horses alone amounted to over £10,000. It required five hundred grooms to keep the horses and appointments in order, and five hundred other workers were kept busy around the show building. Ten thousand square yards of painted canvas were used, and over one thousand loads of earth, in preparation of the arena floor, this being covered with one hundred tons of tanbark. Three hundred loads of soil were drawn to prepare the flower-beds, and twenty-five thousand square feet of turf used in edging borders. While being exhibited, the horses consumed 3,600 bushels of oats, 1,000 bushels of bran, 4,800 bushels of chaff, 2,400 trusses of hay, 500 trusses of straw, and 2,400 bundles of green food, using up also 1,200 bales of moss litter.

The arena is lighted with 1,000 lights, and 80 arcs in lanterns with stained-glass sides. Over 40,000 plants, shrubs and trees, are used in decoration, and 500 palms are arranged throughout the building. This will give the Canadian public something of an idea of the money lavished upon this show of the fashionable horses owned by the wealthy owners the world over. Only one Canadian exhibitor was present this year, Hon. Adam Beck, of London, Ont., whose string of horses carried off seven ribbons, besides the placing of Sir Thomas and Sir Edward at second place in the best performance of hunter teams over the jumps.



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Questions and Answers. Miscellaneous.

Two Weeds.
I am enclosing a sample of two kinds of weeds which we got in some sweet clover seed. Kindly name them, as there is a large quantity of it. Can we make the seedsman we bought it from do anything? If so, how? **A FARMER.**
Ans.—No. 1 is Rocket, first introduced into Ontario in European Alfalfa seed. It resembles Wild Mustard, but may be identified by the dark purple veins on the flower petals. No. 2 is one of the mustards, but the plant arrived in such poor condition that we are not sure which it is. It looks most like Wild Mustard. It depends upon the number of seeds per ounce, and the grade of seed sold you as to whether or not action may be taken against the seller of the seed.

Administering an Estate.
My husband died last fall without a will. The property left was 200 acres of rough land and a sawmill on it which machinery I sold to a man for four hundred dollars. The balance possibly at the outside would bring two hundred dollars. There was \$450 owing when my husband died. There are no children, just an adopted son who is with me on the place. 1. Does the law force me to go through the surrogate court when I have not got the means to pay for it? 2. Is there any other means of my getting the deed? 3. I sold machinery to pay what was owing. Can the purchaser keep back part of the money on that account? He seems to think some of my husband's folks can interfere.

Ontario. T. S.
Ans.—1. It is necessary in your own interest, and for your own protection, in respect of your husband's estate. 2. Probably not—that is to say, not with less trouble and expense. 3. Yes; he is entitled to defer payment until after you have obtained letters of administration from the Surrogate Court.

Concrete Barnyard.
I am thinking of cementing my barnyard this summer, the size of it is about 45 by 90 feet. How should I go about it? Should this size yard be put in one solid block or should it be cut in sections, if so how large should the sections be, and what thickness? How strong should the slope be made?

Should I dig a trench along the back of the yard where I leave off the cement and fill it with the mixture and join the floor to it? If so, how deep should it go in the ground?
Should this yard have tile in it before starting this work, or does it need tile if it has good fall. **W. H. B.**

Ans.—The greatest trouble in this case will be heaving from frost and checking from the same cause. This work is usually executed by first placing about 4 or 5 inches of sand and gravel, preferably gravel, as a foundation. Fine stone could be placed first and tamped down. On top of this gravel is placed and formed into a solid bed by wetting and tamping; then should come 3 or 4 inches of concrete mixed in the proportion of about 1 to 8. Concrete should be so constructed that it will not absorb water, otherwise you have more danger from frost. Consequently, a surface coating varying from one-half inch to three-quarters of an inch of a stronger mixture is advisable. About 1 to 2 is a good proportion for this. This work could be done in a solid block if necessary, but it requires a little fall, and you would find it easier to get the levels by doing it in parts, the size of which will not matter materially. The surface, however, should not be left smooth for obvious reasons and should be grained and cross-grained, such as walks and stable floors sometimes are. It seems extravagant to allow the drainage water and liquid manure from this yard to be wasted, but it will require some drainage. Not knowing the facilities you have for retaining this it is hard to advise regarding the trench. It should be joined, however, to the main floor and three or four inches in depth will be sufficient provided it is kept clear. It would be a great saving to install some system of retaining this waste as it is the most valuable part of the product. Thorough under-drainage by tiles will also eliminate a certain amount of the danger of heaving and checking from frost.

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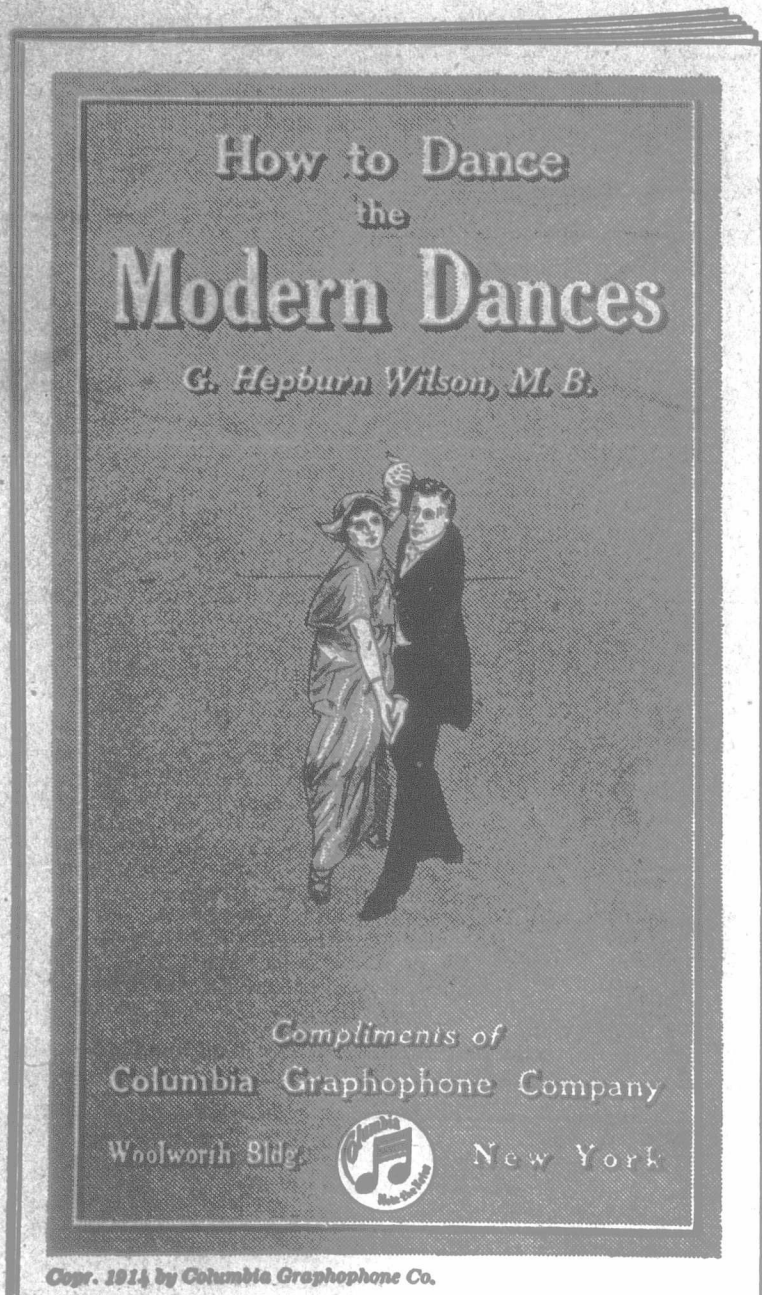
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