

PUBLISHED EVERY WEEK. \$1.50 PER YEAR.

THE FARMER'S ADVOCATE

AND HOME MAGAZINE

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

ENTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875.

Vol. XLIV.

LONDON, ONTARIO, APRIL 1, 1909.

No. 862



ROOF RIGHT NOW

There is one roof that saves money because it will last 100 years. Guaranteed in writing for 25 years.

"OSHAWA" GALVANIZED STEEL SHINGLES

This roof saves you work because it is so easy to put on (do it yourself with a hammer and snips), and save you worry because they fireproof, windproof and weather-proof the building they cover. Write us about it and hear all about it.

ROOFING RIGHT. Address

The PEDLAR People (Est'd 1861).
Oshawa Montreal Ottawa Toronto London Winnipeg

FARMS for SALE or EXCHANGE

If you want to buy a farm in any county in Ontario, or to exchange a farm for a larger or smaller one, call, write or telephone for our catalogue of farms for sale or exchange in any county in Ontario.

THE WESTERN REAL ESTATE EXCHANGE, LTD.
78 Dundas St. London, Ont. Phone 696.

Corn That Will Grow

Buy your seed corn on the cob, and avoid uncertainty. Hand selected, Canadian-grown seed corn—all leading varieties. Your money refunded if you are not satisfied. Send for price list to:

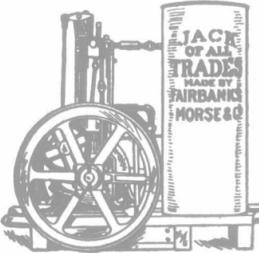
J. O. Duke, Ruthven, Essex Co., Ont.

SEED CORN FOR SALE that will grow

Compton's Early, hand sowed by breeder and home grown. A large grain yield, an early maturer, and a large yield of fodder for ensilage. Write for prices.

W. B. ROBERTS, Sparta, Ont.

1,500 Bushels High Mixed First-Class SEED CORN For Sale.
W. G. BALDWIN, COLCHESTER, ONT.



Every Man's Friend

THE FAIRBANKS-MORSE
GASOLINE ENGINES

furnish the cheapest and best power for general use. They will pump water, run your spraying apparatus, grind corn and feed, run churns, etc. Over 70,000 in use. Send for illustrated catalogue.

THE CANADIAN FAIRBANKS CO., LIMITED
Montreal. Toronto. St. John, N. B. Winnipeg. Calgary. Vancouver.



The Lock That Cannot Slip

The "Maritime" fence lock absolutely holds fast in position and cannot slip.

Not bent in any short twists, the fibre of the wire is not destroyed, and there is no danger of the "Maritime" fence lock snapping off when the weather is at a very low temperature.

The "Maritime" fence lock holds every strand tight and in position, and "Maritime" fences never sag.

Write for catalogue and price list.

NEW BRUNSWICK WIRE FENCE CO. Limited.
MONCTON, N.B.

CUSTOMERS FROM NEWFOUNDLAND TO B. C. WRITE US.

Yes, we ship DIRECT to customers the best Trees, Ornamentals, Roses, Shrubs, Small Fruits in verity we can grow. Send for our priced catalogue.

Mr. Parsons, of Newfoundland, writes us: "Box trees received in excellent condition. Well PLEASED."

Mr. Hill, B. C.: "We have the 1,348 trees all planted, and must say they are the finest lot of trees I have seen from any nursery. Mr. Harry is much pleased with his trees and wants more."

Yes, we can please you, too, if ordered at the **CENTRAL NURSERY** in good time. TRY US.

A. G. HULL & SONS, ST. CATHARINES, ONT.

Buchanan's Swivel Carrier



For unloading Hay and all kinds of Grain.

For wood track, steel track, red and cable track. Made entirely of malleable iron; no springs. Fitted with our patent deadlock. 25,000 of our Haying Machines in use, is the best guarantee that we build them right.

Write for catalogue of Carries, Slings, Stakes, etc.—and name of dealer near you who handles Buchanan's M.T. Buchanan & Co., Ingersoll, Ont.

Better Crops Less Work



Every farmer wants to grow better crops and he wants to lessen the labor of growing them—that's the reward he gets when he owns and uses

THE BISSELL STEEL LAND ROLLER

The roller that increases farm profits and lightens the labor. Runs light, does splendid work, and lasts a life-time. Don't buy until you get "The Bissell Book" selling all about this roller. Book's free—write today. Address Dept. W.

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

POTATO DIGGER The Hoover



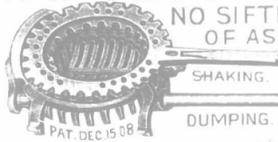
Does perfect work. Fully guaranteed. Write for illustrated catalogue of Diggers, Pickers and Sorters.

THE HOOVER MFG. CO., Box No. 33, Avery, Ohio
Transfer points—Buffalo, N. Y.; Detroit, Mich.; Milwaukee, Wis.; St. Paul, Minn.; Marshalltown, Iowa; Idaho Falls, Idaho; Portland, Oregon; Spokane, Wash.; Winnipeg, Man.; Hamilton, Ont.

AT THE
Dominion School of Telegraphy,
9 EAST ADELAIDE, TORONTO, ONT.,
Telegraphy

Is taught quickly and thoroughly. All students are placed in good positions immediately upon graduation.

NEW IDEA GRATE
NO SIFTING OF ASHES



SHAKING.
DUMPING.

BOTH SHAKES AND DUMPS

NEW IDEA FURNACES

ASK FOR FREE CATALOGUES.
SEND SIZE OF HOUSE
IF YOU WISH ESTIMATE OF
COST OF FURNACE
INSTALLED READY FOR USE

THE GURNEY TILDEN CO.
HAMILTON LIMITED MONTREAL
WINNIPEG, DEPT. A VANCOUVER

She Showed Him



Dairy Tubular bowls are very simple and cost only half as heavy as others. Cleaned in three minutes.

Show your husband how much work he can save you by getting a simple cream separator instead of a complicated one. **One woman did.**

Her husband took a common "bucket bowl" cream separator on trial. It had 40 to 50 pieces in the bowl. His wife said she did not want to wash all that tinware twice a day. But he said it was just a few minutes work. She had him wash it once, so he would see how hard it really was. **It took him almost half an hour. That set him thinking.**

Next day he took a Sharples Dairy Tubular Cream Separator on trial. The Dairy Tubular has just one tiny, smooth, instantly removable piece, about the size and shape of a napkin ring, inside the bowl. His wife had him wash the Tubular once. It took him less than five minutes.

That settled it. The Tubular stayed and the "bucket bowl" machine went back. He said no fair minded man would put that needless work on his wife.

How about your wife, Mr. Man? The Sharples Tubular is the very simplest cream separator. It is also the very best and the only one of its kind. Runs easiest. Skims fastest.

Develops twice as much skimming force as others, therefore skims cleanest. Lasts a lifetime.

The manufacture of Tubulars is one of Canada's leading industries. 1908 sales were way ahead of 1907—out of sight of most, if not all, competitors combined. 1909 is proving better yet. Write for catalog No. 193.



Tubular bowls hang from a single, frictionless, ball bearing. This bearing, and the simple gears that drive the machine, are all enclosed in the head of the Tubular. They are dust proof and self oiling. Tubulars run so lightly that the medium size can be turned by one who is sitting.

**He washed it once
—then sent
It back**



Wife and Time-killing "Bucket Bowls."



The Sharples Separator Co.

Toronto, Can. Winnipeg, Can.

Genasco Ready Roofing

Trinidad Lake asphalt is the backbone of Genasco. It is the greatest weather-resister known. It makes Genasco cost a little more, and makes it worth it because it lasts so long.

When you don't have leaks, damage, repairs, and renewals to pay for, you have real roof-economy.

Get Genasco—the worth while roofing for every building on the farm. Look for the hemisphere trade-mark, and you'll get the roofing backed by a thirty-two-million-dollar guarantee. Mineral and smooth surface. Write for samples and the Good Roof Guide Book.

THE BARBER ASPHALT PAVING COMPANY



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

PHILADELPHIA

New York San Francisco Chicago

Roofers Supply Co., Ltd., Bay and Lake Sts., Toronto.
Alex. McArthur & Co., 82 McGill St., Montreal.

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

Crane Company, Vancouver, B. C.



Commence right. Get the proper paint at once and give your house a chance to shine amongst its neighbors. Get

Ramsay's Paints

Always the leaders for high grade house painting—beats off sun and rain and keeps your house bright and clean for years. 60 beautiful colors to select from. Ask your dealer for sample card and write us for folder showing how some homes are painted.

A. RAMSAY & SON CO. MONTREAL. Paint Makers since 1842.

BESSEMER GAS ENGINE OIL

Low cold test: Will always run freely in cold weather. High fire test: Will always lubricate; does not burn in cylinder; leaves no carbon deposit that gums up piston rings and causes leaky valves. We will ship you A FREE SAMPLE of one 5-gallon can Bessemer Gas Engine Oil. If it is the best oil you have ever used on your engine, send us \$2.00; if not, return balance of oil to us at our expense. We will charge nothing for the oil used in making the test.

A. W. PARKS & SON, PETROLIA, ONT.

Gasoline Engine Experts.



JOSEPH RODGERS & SONS, Limited, SHEFFIELD, ENG.

AVOID IMITATIONS OF OUR CUTLERY

By Seeing That This EXACT MARK

Is On Each Blade. SOLE AGENTS FOR CANADA:

JAMES HUTTON & CO., MONTREAL.

Make that Boy Happy With A STEVENS



He'll be more of a man for every breath of clean fresh air he gets—and *always* a boy. And a Stevens will give him all of this—health and enthusiasm and manliness—more than anything else you can give him.

It will make him quick of hand and eye and brain—equips him for the "grown-up" time when he'll need every well-trained faculty he possesses.

A Stevens is true to the mark, accurately finished and adjusted and thoroughly tested.

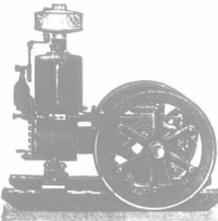
Your boy will enjoy this book—

DAN BEARD'S "Guns and Gunning"

An interesting and valuable volume on camping, woodcraft, habits of game birds; which animals are pests and which are not, etc. Sent postpaid for 25c paper cover, or 30c cloth cover, stamped in gilt.

Send for Stevens Catalog of Rifles, Shotguns, Pistols—learn how well made they are and how moderate in price. 6 cents for postage brings it. Ask your dealer and insist on Stevens—there are no substitutes: if you can't obtain it, we'll ship direct on receipt of catalog price.

J. Stevens Arms & Tool Co.
25 Grove Street
Chicopee Falls, Mass., U.S.A.



The "Stickney" Gasoline Engine

is the essence of SIMPLICITY

NO USELESS CONTRAPTIONS

to get out of order and cause trouble.

NO PIPES TO FREEZE !!!

Ours is the open-tank cooling system. We defy any engine on the market to-day, that can produce a machine with so many good points. Power is guaranteed with every engine. Send for Booklet No. 57, and get wise.

Ont. Wind Engine & Pump Co., Ltd.
TORONTO, ONT.

WANTED

If you want to sell property which you own in the U. S. or Canada, such as a FARM or a business, write us at once for our new successful plan of selling direct, without commission. Give full description of property and state lowest price. If you want to buy property of any kind in any locality, write us, stating what and where you wish to buy, and we will send you FREE our magazine of choice bargains for sale direct by the owner with no commission added.

BUY American Investment Association SELL
1 671 5th Av. N., Minneapolis, Minn.

THE GENUINE SMITH STUMP PULLERS
30 DAYS' FREE TRIAL
W. Smith Grubber Co., Dept. 023, LaCrescent, Minnesota

The Most Modern Straight - Stay Fence.

The most modern fence machinery in the Dominion makes the Monarch Stiff-Stay Fence. This machinery is blessed with almost human intelligence. It produces a fence just as you would build it yourself. It makes the "Monarch" with every strand of even length. Positively no short or long wires in the Monarch. And every Stay stands perfectly plumb when fence is stretched up. Thanks to this machinery—the Monarch lock is applied without requiring the strand or stay wires to be unduly kinked. But the whole story of the Monarch superiority cannot be told in this space, so write for catalogue giving complete details.

THE DILLON HINGE-STAY FENCE.

The only complete hinge-stay fence in Canada. The hinge-stay prevents the fence from becoming disfigured when people climb over it or cattle press down on it. Catalogue explaining everything mailed free—and now is the time to get posted.

IF YOU'RE A HUSTLER, WRITE US.

We've a fence-agency proposition we would like to submit to you. No other fence concern has a line equal to the Monarch and Dillon combination.

THE OWEN SOUND WIRE FENCE CO., LIMITED, OWEN SOUND, ONTARIO.

MONARCH STIFF STAY FENCE

All Soils Look Alike To Champion Disc Drill

Take the "Champion" into a particularly "dirty" field, where vine roots, corn roots, weeds, tangled grasses or straw manure abound. If you've never before seen it work, you'll marvel at the way its sharp, carefully tempered steel DISCS either cut through or roll over everything that may lie in their way. They will not gather anything before them. You'll marvel at the way the high-grade, cutlery steel SCRAPERS (designed after years of experimenting) keep the discs scrupulously clean. Each hour you'll grow more enthusiastic over the manner in which the FORCE FEED MECHANISM produces its steady, even flow of seed—and never a seed even slightly bruised. The DUST PROOF BALL BEARINGS, on each disc—which require oiling but once a year—they'll interest you, too. And the high wheels, with low down grain box—you'll quickly see this means an EASY Machine to operate. Perhaps you'd like to read about the "Champion" Disc and "Champion" Hoe Drills, so write for special drill catalogue F 8

The Frost & Wood Co. Ltd.

SMITH'S FALLS, CANADA

N. B.—If you buy from us you purchase from a company that is familiar with soil conditions in every part of Canada and a company whose policy is to give you the greatest value for your money.

BUY THIS "BIG" WIRE FENCE

Give fences with small wires a wide berth. Do the same with fences that have poorly or thinly galvanized big wires. None of these fences can resist rust for long. And then what good are they?

Now, the Leader has no small wires in it. Laterals, uprights and locks are all No. 9 hard wire—the very best grade, too. The galvanized coating is extra heavy and smooth—extra rust proof.

It will certainly pay you to purchase the big wire, carefully galvanized Leader—especially when it also has the lock with the double grip.

Catalogue free on request.

Also attractive agency plan for those who desire to turn their whole or spare time into dollars.

FRAME & HAY FENCE CO., Limited, Stratford, Ontario

LEADER FENCE

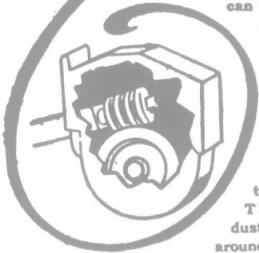
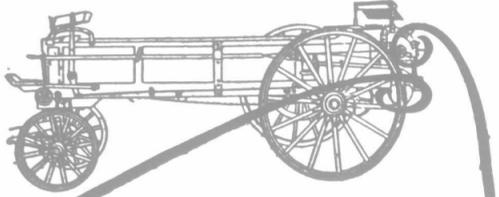
SIMPLICITY IN DEPOSITING. Just hand in your money to our receiving teller. He will make out your deposit slip and relieve you of all details. Nothing simpler than banking with us. 3 1/4% interest on deposits of \$1 and more.

Agricultural Savings & Loan Co.

109 DUNDAS STREET, LONDON, ONTARIO.

"Success" Light Draft Roller Bearing Manure Spreader for 1909 is greatly improved

Just go to the Paris Plow Agent in your locality and examine the New 1909 "Success" Manure Spreader. You'll have no doubts about which machine to purchase after you've seen it and noted the improvements for 1909.



The drawing below illustrates the New Gear Case enclosing the Apron Driving Mechanism. The case is cut away so that you can see the Worm and Gear, which run in oil. This case not only prevents all "leakage-waste" of oil but is dust-tight, too. This oil-tight, dust-proof case around Worm and Gear makes the apron driving mechanism of the "Success" the smoothest and easiest-running, lightest-draft on any manure spreader. And as the Worm and Gear are so fully protected against wear they are rendered practically indestructible.

But just see the "Success," and note all its superior features. That's the right thing to do before making your choice of a manure spreader.

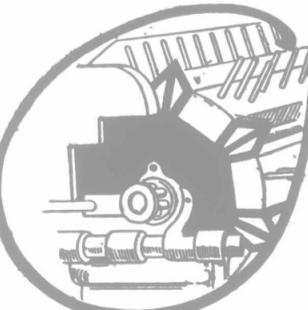
THE PARIS PLOW CO. LIMITED.

PARIS ONTARIO

Western Agents: The John Deere Plow Co., Ltd., Winnipeg, Regina, Calgary and Edmonton. Agents for Quebec and Maritime Provinces: Frost & Wood Co., Ltd., Montreal, Quebec, St. John, N.B.

The bottom drawing shows Beater with Roller Bearing at end of Beater shaft. There is also another Roller Bearing at other end of Beater Shaft. These two bearings make the "Success" Beater a marvel for smooth and easy running—and materially decrease the draft. There are three other sets of Roller Bearings on New 1909 "Success." (Any Paris Plow Agent will show them to you). Their use lessens the draft of "Success" by at least one horse.

The large Black Teeth shown on ends of Beater are the Harpoon Teeth. These Harpoon Teeth cut up the long pieces of straw that would otherwise wind around the end of the beater and clog it up. And this is just another draft-decreasing feature found on no spreader but the "Success."



EWING

SEEDS "Quality"



Don't cost any more, nor do they require as much care as inferior grades, but of chief importance, they put the balance on the right side on reckoning-up day.

EWING'S SEEDS

Are famous for "Quality," and constant "reliability" keeps their popularity ever on the increase.

Get our FREE Catalogue.—Full of just the things you want to know about the BEST SEEDS that nature, care and careful selection can produce.

The result of many years' experience.

WM. EWING & CO.,
Seedsman,
McGill Street, MONTREAL.



Replace Your Broken-down Wheels With Our Wide-tire Steel Wheels.

Have you a wagon that is all right except for the wheels, which are either worn-out or rotted to pieces? Then, why not get a set of our Low Wide-tire Steel Wheels? They are made to fit any axle. Lighter, stronger, more durable than wooden. Make your wagon good as new. Catalogue sent you free if you say so.

Dominion Wrought Iron Wheel Co., Ltd., Grillia, Ont.

HIGH FINANCE

Doesn't offer the safety of an investment in

GOOD COWS

and a

De Laval Cream Separator

One is as important as the other.
Free Catalogue



The De Laval Separator Co.,
173-177 William Street, Montreal
VANCOUVER * * * * * WINNIPEG

LOANS

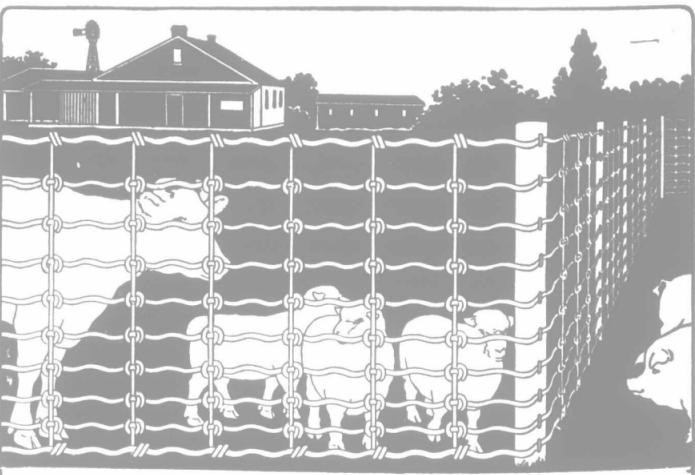
AT LOWEST CURRENT RATES

When you secure a loan on your farm or city property from this company there is no charge for land inspection. Renewals of maturing loans made free of cost. The interest charged is always at the lowest current rate. The terms of repayment are made to suit your convenience. Write for application forms. Privacy our chief consideration.

Assets over \$11,500,000
Incorporated 1864.

HURON & ERIE

Loan & Savings Co.
442 Richmond St., London
366 Talbot St., St. Thomas



IMPORTANT TO FARMERS

Your fences are your fortress against loss and damage. They must be strong enough to resist invasion from without, and to keep within bounds your flocks and herds. You can't afford to take chances on soft, slack, or brittle wire fences, which may fail just when most needed.

Peerless Woven Wire Fence

has the elastic springiness and resisting qualities that make an A 1 farm fence. Once up it lasts—no breaking—no falling down. There are reasons why. We can't tell them all in this ad, but if you will write to us we will send you some valuable fence facts.

The Banwell Hoxie Wire Fence Co. Ltd.
Dept. B, Hamilton, Ont.
Winnipeg, Manitoba.

The Farmer's Advocate

and Home Magazine

"Persevere and
Succeed."

Established
1866.

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875.

Vol. XLIV.

LONDON, ONTARIO, APRIL 1, 1909

No. 862

EDITORIAL.

Speakers Who Have Made Good.

True worth is in being, not seeming;
In doing, each day that goes by,
Some little good, not in the dreaming
Of great things to do by and by.

This little gem of verse was suggested last week by Sandy Fraser's good-natured homily upon those well-informed but gumptionless young farmers who seem to have succeeded in divorcing theory from practice. They may be found in every community, and are usually much heard of, for one discreditable representative of an agricultural training is far more widely advertised than a worthy and successful one.

The worst kind of unpracticing professors are those who allow themselves to be set up as lights to their fellow men. It is a bad sign when an Institute lecturer cannot draw a good audience in his own township. Humanity instinctively discounts the instructor who does not practice what he preaches. The sermon may be orthodox and inspiring, but it gives one a sort of cheated sensation to learn that the mentor expects his hearer to do not as he does, but as he says. They naturally conclude that advice which is impractical for number one must be of doubtful value for numbers two and three.

The main thing that is fresh about most agricultural instruction is the individuality of the instructor, and the experience upon the strength of which he is supposed to speak. When that is discovered to be lacking, or in any way below par, the whole philosophy falls flat, like a punctured balloon.

And yet there are plenty of men with presumption enough to tell others how to do what they have failed to do themselves. We have all heard fine addresses on eradication of weeds by men whose own farms would make stamping-grounds for an economic botanist; beautifully-reasoned arguments on maintaining soil fertility by those whose own farming was better described as soil-mining than field husbandry; talks on stock-judging by lecturers whose own cattle were walking hat-racks; and delectated sermonettes about keeping boys on the farm by men whose own sons manipulate the electric current on city street cars or adorn business or professional offices on a down-town street. Then there is the ornithologist, who undertakes to lecture farmers on clover-seed production or breeding domestic animals, at the risk of converting himself into a laughing-stock by impractical answers to pointed questions; also, the girl graduate in short skirts, who sedately informs married women with families how to feed and care for the baby.

So it goes. The benefit of the Institute or agricultural-extension work is not infrequently marred by those who are content to do the teaching—for a neat salary—leaving others to put it into practice. That the services of such men and women should be available, we cannot avoid. That they should be employed, reflects on the judgment of the executive officers who send them out.

Beyond question, it is difficult to find enough speakers of the right kind. Many of the best farmers are not the best talkers; while some who are fairly proficient in both capacities, are disinclined to leave home on lecture tours. But if a good delegate cannot be sent to each locality every year, send one in two years. Hard-headed farmers and farmers' wives have a right to demand that a speaker deputed to occupy their time shall be thoroughly informed on the subjects

treated, that he eschew other topics, and that the lecturer's address be backed up by reasonably successful practice on his own farm.

A Good Automobile Bill.

The need of more stringent regulations to insure the safe use of country roads by the farmers who built and have chief need to use them, is recognized by the introduction of several new bills into the Ontario Legislature this year to amend the Automobile Act. D. C. Ross, M. P. P., of Middlesex Co., stands sponsor for a bill which would make any violation of the law relating to this traffic punishable by a fine of \$50, or a week's imprisonment for the first offence, a fine of \$100 or a month's imprisonment for a second offence, and imprisonment, without option, for all subsequent violations. It would also forbid any automobile running or standing on the highway between 6 a. m. and 9 p. m. at night on Saturdays, and between 6 a. m. and 3 p. m. on Sundays.

A somewhat more thorough bill, incorporating the very commendable and effective feature of impounding of the cars in the case of a third offence, has been introduced by Major Jas. J. Craig, M. P. P., for East Wellington. This bill proposes to amend the present Act, by inserting a clause to provide that a county council may pass a by-law forbidding any motor vehicle to be operated upon any public highway, in any municipality within the county, except in towns, on Saturday and on Sunday. It further specifies that when the driver of a motor vehicle is convicted of a third offence whereby personal injury is sustained, the offender shall be imprisoned for not less than 30 days, without the option of a fine, and that the motor vehicle in which he was driving shall be impounded for not less than three months. Another amendment proposed by the bill would forbid a motor vehicle from passing within fifteen feet of a street car which is stopping for the purpose of taking on or letting off passengers.

The final section of the bill would place it in the hands of the Provincial Secretary to suspend or revoke a license at any time for a violation of a provision of the Act or any amendment thereto, and would also provide for the keeping of a complete record, by the Provincial Secretary, of all convictions registered against an offender in any or all parts of the Province.

While this bill will by some be deemed drastic, it is, after all, not unreasonable. The farmers of this Province have built the roads, and have a moral right to the safe use of them. Automobile traffic, as we have it to-day, is a menace to such use, especially by women and children, and entails a severe economic and social hardship upon dwellers in rural districts. Most of the trouble is caused by harum-scarum drivers, from whom it is difficult to compel compliance with reason or law. Perhaps the greatest difficulty is in securing apprehension, identification, definite evidence and conviction. For this reason, the penalties for violation should be severe. As fines are mere pin-pricks to many offenders, imprisonment and impounding of machines is called for. "The Farmer's Advocate" is pleased to note the favorable attitude toward this phase of the bill by the Premier and Provincial Secretary.

Against the privilege of closing the highways to automobile traffic on certain days of the week, opposition will chiefly range itself. But this, too, in our opinion, is a justifiable and beneficent proposal, for, no matter how thoroughly we try to regulate the traffic by law, there will still remain a degree of danger to women and children,

and even to men driving fractious horses unaccustomed to cars. No doubt, in time, motor-cars will become an every-day familiarity, but at present there should be at least one or two days of the week when horses may be driven, free of danger from gasoline wagons. Cities regulate all kinds of traffic on their streets at corners where accidents are liable to occur, and even forbid the use of certain streets to heavy traffic for protection of the paving. Is not the safety of human limb and life in the country at least as important as the welfare of the pavements on a city boulevard? Prince Edward Island prohibits the running of autos on its roads altogether. Nova Scotia has passed a law enabling municipalities to forbid them on certain days. This, in its working out, entailed needless inconvenience, because all municipalities did not select the same days. The Craig bill avoids this by designating two particular days, leaving the remaining five free to the sane and proper use of public highways by motorists all over the Province. This bill should pass.

Compulsory Eight-hour Day.

Labor legislation appears to be the order of the day. As if it were not enough that Alphonse Verville should have reintroduced into the Dominion House of Commons his perennial bill, to force upon contractors, manufacturers, employers and workmen an eight-hour day on all Government work, we now have still a more radical proposition introduced into the Ontario Legislature by A. E. Fripp, M. P. P. for West Ottawa, undertaking to restrict the working day to eight hours in all cases, except emergency, caused by fire, flood, or danger to life or property. Exception is specified in the case of domestic service and farm labor, to neither of which is the bill intended to apply. Not content with limiting the hours of a standard day of labor, the framer of the bill further undertakes to set a minimum wage of 25 cents per hour, irrespective of what is earned overtime. It further provides that no boy under fourteen years, and no girl under twenty-one, shall be allowed to work longer than eight hours each day. A penalty of \$100 is provided for infraction of the bill by employers. Clauses relating to Provincial Government work provide for the voiding of any contract in which the conditions of the bill are violated.

The very radical character of Mr. Fripp's bill places it beyond the probability of early enactment. Mr. Verville's bill, in the Dominion House, being a somewhat less drastic, though perhaps not less far-reaching, measure, stands more chance of winning favor. It seeks to provide that:

"Every contract to which the Government of Canada is a party, which may involve the employment of laborers, workmen or mechanics, shall contain a stipulation that no laborer, workman or mechanic in the employ of the contractor or sub-contractor, or other persons doing or contracting to do the whole or a part of the work contemplated by the contract, shall be permitted or required to work more than eight hours in any one calendar day, except in cases of extraordinary emergency caused by fire, flood, or danger to life or property.

"This Act shall apply to work undertaken by the Government of Canada by day labor."

While this bill would apply only to Dominion Government contracts, it is regarded as certain that, if passed, it would prove but the thin edge of a wedge introduced by the Labor Unions to bring about, possibly to compel later by law, the general adoption of an eight-hour day in all urban industries. One result of this would be to draw labor from the farm, and eventually to effect a corresponding reduction in the hours of

THE FARMER'S ADVOCATE AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE
DOMINION.

PUBLISHED WEEKLY BY
THE WILLIAM WELD COMPANY (LIMITED).

JOHN WELD, MANAGER.

AGENTS FOR THE FARMER'S ADVOCATE AND HOME JOURNAL,
WINNIPEG, MAN.

1. THE FARMER'S ADVOCATE AND HOME MAGAZINE
is published every Thursday.

It is impartial and independent of all cliques or parties, handsomely
illustrated with original engravings, and furnishes the most
practical, reliable and profitable information for farmers, dairy-
men, gardeners, stockmen and home-makers, of any publication
in Canada.

2. TERMS OF SUBSCRIPTION.—In Canada, England, Ireland
and Scotland, \$1.50 per year, in advance; \$2.00 per year when
not paid in advance. United States, \$2.50 per year; all other
countries 12s.; in advance.

3. ADVERTISING RATES.—Single insertion, 25 cents per line,
agata. Contract rates furnished on application.

4. THE FARMER'S ADVOCATE is sent to subscribers until an
explicit order is received for its discontinuance. All payments of
arrearsages must be made as required by law.

5. THE LAW IS, that all subscribers to newspapers are held responsible
until all arrearsages are paid and their paper ordered to be
discontinued.

6. REMITTANCES should be made direct to us, either by
Money Order or Registered Letter, which will be at our risk.
When made otherwise we will not be responsible.

7. THE DATE ON YOUR LABEL shows to what time your
subscription is paid.

8. ANONYMOUS communications will receive no attention. In
every case the FULL NAME AND POST-OFFICE ADDRESS MUST
BE GIVEN.

9. WHEN A REPLY BY MAIL IS REQUIRED TO Urgent
Veterinary or Legal Enquiries, \$1 must be enclosed.

10. LETTERS intended for publication should be written on one
side of the paper only.

11. CHANGE OF ADDRESS.—Subscribers when ordering a change
of address should give the old as well as the new P. O. address.

12. WE INVITE FARMERS to write us on any agricultural topic.
We are always pleased to receive practical articles. For such as
we consider valuable we will pay ten cents per inch printed
matter. Criticisms of Articles, Suggestions How to Improve THE
FARMER'S ADVOCATE AND HOME MAGAZINE, Descriptions of
New Grains, Roots or Vegetables not generally known,
Particulars of Experiments Tried, or Improved Methods of
Cultivation, are each and all welcome. Contributions sent us
must not be furnished other papers until after they have
appeared in our columns. Rejected matter will be returned on
receipt of postage.

13. ALL COMMUNICATIONS in reference to any matter connected
with this paper should be addressed as below, and not to any
individual connected with the paper.

Address—THE FARMER'S ADVOCATE, or
THE WILLIAM WELD COMPANY (LIMITED),
LONDON, CANADA.

the work day in country districts. This would tend to increase the cost of production, not only of farm produce, but of manufactured merchandise. The burden would fall chiefly on the farmer and general consumer, for the manufacturer would endeavor to recoup himself by charging increased prices for his products, whilst the farmer would lack opportunity so to enhance the selling price of his produce.

Among the immediate effects would be virtual prohibition of firms or factories which work more than eight hours a day from sharing in Government business; accentuation of the labor shortage expected to recur after we have fully recovered from the recent temporary depression; increase in the cost of accomplishing Government work, with a corresponding increase in the burden upon the general taxpayer.

Upon humanitarian grounds, there is unquestionably much to be said for an abbreviation of the hours of factory labor in some industries. It must also be recognized that, in seeking to bring this about first on Government work, the Labor Unions and their Parliamentary representative are simply seeking the path of least resistance.

On the other hand, manufacturers object that the country is not yet ready for an eight-hour day, and that if generally introduced, it would handicap them in foreign competition. There is this, also, to be said: While factory labor is unquestionably more monotonous and arduous than farm labor, yet this fact has not prevented a large number of men from drifting into town, who, if they only knew it, would be better off in the country. If then, hours of city labor were arbitrarily shortened, would not the cityward tendency be still more marked, with questionable advantage to the industrial recruits, and with inconvenience and disadvantage to the agricultural class?

Knowledge without effort is like a fulcrum without a lever. Knowledge, without timely effort, is like a fulcrum with the lever lying a rod away.

Spraying Instructions.

Every progressive horticulturist has realized that the introduction of insect and fungous pests of divers kinds makes it absolutely necessary to apply spraying mixtures each season. In order that our readers may have a reliable guide for their spraying operations, an up-to-date spraying calendar appears in this issue. Local conditions may make it advisable to use other mixtures than those given in this guide, but for general orchard and garden work, spraying preparations, applied as directed, give satisfactory results.

The main factors are thoroughness of the work and strict attention to details in preparing the solution. Lime-sulphur has been pronounced the most effective mixture in combating many evils. If, however, the boiling has not been thorough, or, again, if boiling has been continued too long, the solution is not as effective. The labor involved in applying the treatment to the plant or tree is the same, whether the spraying mixture is up to standard or not. Specific instructions as to the preparation of these mixtures appear in this paper from time to time. On another page of this issue, the boiling of lime-sulphur is fully described.

Intelligence must be exercised in every operation. The man in charge must take advantage of wind and weather. One application at a particular time may be of greater benefit than two applications, provided that time has not arrived or is past.

For the sake of economy and efficiency, consult the spraying calendar, or discuss the question with a recognized authority in your district. Be thorough in every detail, and reap the benefit of more vigorous trees and plants, and fruit and vegetables of higher commercial value.

Valuation of By-products.

A Lennox County correspondent, in submitting a very acceptable statement of his pig-feeding account, explains that, though the pigs had skim milk and buttermilk, when procurable, no value was set on this, as, without pigs, the greater part would have been wasted. This is not a businesslike way of looking at the matter. It is not fair to the cow. By-products are a feature of a great many phases of production, and it is the business of the producer to utilize such by-products to the best possible advantage. Therein usually lies his chief, often his only, source of profit. To deny that the by-products have any value, would be to deny that there is any profit in the packing business, and to contend that all the money lay in the subsidiary enterprises of manufacturing glue, fertilizers, and the numerous other lines associated with an economically-managed packing plant. In one sense this might be true, and yet, in effect, it would represent the tail as wagging the dog. The rational method of calculation is to look on the packing business as the main or central one, and credit it with such net returns as could be derived from the utilization of by-products.

So with the dairy. The cow's produce consists of butter or cheese, together with what revenue may fairly be earned by utilizing the whey or skim milk, and the manure. To argue that skim milk has no value, because no value would be obtained unless there were stock to consume it, would be as illogical as to assert that manure had no value, because, without land, there would be no means of realizing anything from it. The outstanding fact is that the farmer has the land to which the manure may be applied, and has also the stock to which the dairy by-products may be fed; or, if he hasn't, he should have. The truth is, he always has stock to which skim milk may be fed, for, if he does not keep hogs, he can feed it to calves, or even to cows.

It is indeed difficult to know just what value to attach to by-products, because it is difficult to ascertain just what we realize from them; but, in justice to the cow, and for business reasons of a general nature, one should endeavor to arrive at a fair figure on which to base his calculations. In our opinion, the proper basis is the approximate estimated value of these feeds as substitutes for grains and meals, making due allowance for irregularity of supply; cost, if any, of procuring, and condition in which delivered. On this basis,

it will usually be found that good sweet separator milk is cheap at 20 cents per hundredweight, while 10 cents per cwt. is a very moderate valuation for the right kind of whey, delivered, as it may be, from a factory where the whey is properly pasteurized.

Prepare for Garden Crops.

Farmers, above all other citizens, should enjoy luxuries such as can be produced direct from the soil. The early settlement of any country finds the agricultural class busy with growing some main crop for the production of wealth with which to purchase the necessities of life. The lapse of a few years, however, places the progressive tiller of the soil in position to provide many of the luxuries, but in many cases the habit of not doing so has become so chronic that no thought is given, save when something tempting appears in a grocer's window in a near-by town.

Why should any farmer in Canada be without a standard collection of vegetables? Why should he purchase those vegetables, except for a very brief period each year? Experience has proven that Canadian soil and weather conditions admit of the production of garden crops in variety, and that many of these products can be successfully stored over winter. Competent authorities agree that a liberal supply of vegetables in the diet is beneficial. City folk pay high prices in order to have a daily supply. Why, then, should not those who are in a position to grow them, and to use them before they have deteriorated, be supplied with the best of all kinds? For home use, they are desirable. From the economic standpoint, also, they are worth considering. Not only does the product of a well-kept garden make it unnecessary to purchase vegetables, but, also, the surplus can be disposed of to advantage in buying other necessities that cannot be grown at home.

In this issue appears a list of standard varieties of the various garden crops. Individual growers in some localities may be prepared to recommend varieties not included in this list. Those mentioned, however, have stood the test in many parts of Eastern Canada, and most of them have been found to stand at the top in Western Canada, as well. It may not be advisable to attempt growing all the crops listed, and in most cases it is not necessary to have more than one or two varieties of a crop. It is, however, advisable to have greater variety than is grown in the garden on the average Canadian farm. One mistake frequently made is the practice of allowing field crops to take the place of garden crops. Not only can the season in which the delicacy is ready for use be lengthened, but, also, the quality is vastly superior when garden varieties are grown under proper conditions. Suitable varieties of peas and turnips grown in the garden are as much superior to those taken from the field crop as Northern Spy apples are superior to Ben Davis.

Perhaps many will conclude that only a few common crops can be grown in the garden, because there is a lack of knowledge of the methods that must be adopted in their culture. While greater success with some crops comes with experience, there is nothing to prevent the novice from learning sufficient particulars to avoid total failure. The columns of "The Farmer's Advocate" frequently contain items outlining cultural methods. During the next three or four weeks, hints will be given bearing on approved methods of planting and cultivating most of the crops mentioned in the list of varieties. Bulletins, also, are available in which dates of seeding and general directions for planting and cultivating are given. Catalogues sent out by the leading seed houses also give reliable instructions for beginners, while the salient particulars are usually printed on packets of seed.

There is nothing to prevent every owner of an acre of land in Canada from having a supply of vegetables that will meet the requirements of his table for the greater part of the year. Labor can be reduced to a minimum by doing away with the old-fashioned "beds," and planting in long, even rows, so that the horse cultivator can be used. Purchase the seed, select the most suitable plot of ground that is available, produce vegetables in variety, and enjoy the privileges that are yours.

Reminiscences of a Pioneer.

Editor "The Farmer's Advocate":

It may prove interesting to the young readers of your valuable journal if I give the experience of the little colony, their trials and hardships in the backwoods of Canada. We have very few of them with us now; the great majority are sleeping in the silent city of the dead, and the young generation are reaping the fruits of their labors. This part of Ontario was settled chiefly by Scotsmen, who emigrated to Canada some 80 years back. They were principally tradespeople, who knew little or nothing about clearing land; but what they lacked in knowledge was made up to them in pluck. When they landed in Little York (now Toronto), the men, women and children were forced to walk some fifty miles to their land in the bush. They were poor—very poor—but where can we find such hospitality to-day as could be found in abundance among the old pioneers? They would share their last crust, or, more, they would share their last drop of toddy with the stranger, for his stomach's sake, and the sake of his awful infirmity. But the first order on the paper was to clear a patch of ground and put up a shanty, so they started to work with stout hearts, and, by working early and late, got logs together, and in due time the walls of the shanty were erected—in size, about 15 by 18 feet, one story high; a hole was cut in the wall, and an open fire-place put in, from 4 to 5 feet wide. The bread was baked in a kettle with the lid on; top coals were placed over and around the sides. Potatoes were their principal food, although some may have had pork, which was usually suspended from the rafters, and the smoke that failed to reach the eyes and noses ascended and smoked the meat to perfection. The wool, after being taken from the sheep's back, was manufactured into cloth by the fair daughters of the home, even to the Sunday suit. When harvest time came, they were at work with their little hooks, cutting the grain and binding it into sheaves. And the young scion, the pride of the home, could be seen skipping over the stubble with his bare feet; and, when he pulled on daddy's boots, his joy was complete. Finally, the grain was built into a stack, something like a boy's top, with the large end down; and no king on his throne was prouder than the old weaver, as he sat on the top of his stack and viewed his little clearing. The next order was threshing. This was done with that primitive machine known as a flail; then the grain and chaff were separated by tossing it in the air, and the wind blew the chaff away. Then daddy, with the ox-team and jumper, would take the grain to the mill and have it ground into flour. By starting at daylight, if all went well, he might get home the next day. And when he came home—talk about Santa Claus!—why, in those days dad made Santa Claus look stingy. But, as time rolled on, other machinery came into play. The writer was present when the first separator was started. As the name implies, it separated the straw and chaff from the grain; but the trial was not what we would call a brilliant success. When one wheel would go, the other was inclined to stand still. And, as trouble never comes singly, an aged spinster was going to be married that day; and, as the men were anxious to get through with the threshing, each had his own cure for the machine. Finally, they concluded it was like the old maid's wedding—a new venture. The boys' schooling days were cut out in the summer season when he reached the age of 10 or 11, although we had spelling-matches once a week in the evening. The young people would gather in the old log schoolhouse and choose captains, who would call off sides. The master would give out the words from the old Mavers spelling-book. Of course, the boys went down like ninepins. The faculty those girls had for building up jaw-breakers out of the 26 letters of the alphabet, when they had to double some of them for good measure, was astonishing. It was the custom for the boys to take their sisters to the spelling-bee, and this evening two lads thought it a good joke to exchange coats and horses; and the girls, thinking they were going with their brothers, started off as merry as a marriage bell. But, on the way, the young man was in a confidential mood, and said that he was bashful in the presence of ladies, and if she had a sister's affection for him, it would be kind of her to give him a lesson or two on courtship. But, by the time the first lesson was learned the lady arrived at her destination. Then, we would have a wedding, and a dance to the soul stirring strains of the bagpipe.

When Scotia's sons get on their feet
To dance the Highland fling, so fleet,
You'd think the very roof would rend
Before the fun came to an end.

I have merely given a rough outline of some events that happened in the lives of the old pioneers. Life to them was no ideal dream, but a stern reality. And if their methods seem crude to the up-to-date farmer, still, they have left an example for courage and perseverance that would

be well for the younger generations to follow. It gives me a pain when I hear people grumble because they have no car running through their back yard. We cannot look forward into the future, but we can look back over the past, and memory loves to linger along the sands of time. "Backward, turn backward, O time in thy flight, Make me a child again just for to-night." "To live once more the golden hour of childhood's joyous play, No thorns, but only sweetest flowers, there in life's merry way." Wellington Co., Ont. GEO. BEER.

Strange Protection.

Editor "The Farmer's Advocate":

We use both Canadian and American farm implements. There is 25 per cent. duty on stoves, ranges, gasoline engines, farm machinery. Drive to the railway station in the State of Washington, and get a load, say \$200 worth. The custom-house officer comes along, and tells you you have \$275 worth, and gives you a lecture on the seriousness of misrepresenting facts, and the penalty. 'Tis useless to say you are a truthful man. On his face you can plainly see a wink-the-other-eye look—you can't fool me. You hand him the shipping bill, and then give him \$50 for your \$200 worth of goods. Then you are a free man. Boys, this is our protection. New Westminster Co., B. C. WM. MEDD.

HORSES.

The Carriage Horse.

The possibility of the demand for good driving or carriage horses being seriously decreased, owing to the prevalence of motor-cars and the possibility of flying machines becoming common, need cause little alarm to breeders and farmers in a country possessed of such vast agricultural areas as is Canada. While heavy horses for heavy work will be needed in ever-increasing numbers as more and more of our almost boundless heritage of land is taken up for cultivation and production, the lighter class or road horses will be

the claims of the patrons of the automobile for its convenience and suitability for rapid running on good roads, and for many other purposes in large cities, rightly declares that "nothing has ever come into use for purposes of transportation which involves such extravagant outlay of money," and that, "in New York City, the average cost of keeping autos, where a chauffeur is in charge, is not less than \$200 to \$250 a month, without counting the depreciation in value of the machines." The elements of fad and fashion, he remarks, have had a tremendous influence in increasing the use of autos. "Ten years ago one could not walk across the upper part of Broadway, in New York, on a Sunday afternoon, without being in danger of being run over by a bicycle. To-day one might drive a mile up Broadway without seeing a bicyclist." There is little doubt that, in a few years, to a considerable extent, the same reversion will be noticeable in regard to the motor-car, for purposes of pleasure, at least, though it may, and doubtless will, in large cities, displace many work-horses. But, for the best class of harness horses for pleasure and general road purposes, prices are higher at the present than for many years, the reason being that good horses of this class are decidedly scarce, and difficult to secure. It is, therefore, evidently advisable for breeders to make a special effort to produce the class of carriage horse which combines beauty and style of conformation with good constitution and easy feeding quality, a good temper and an even disposition, together with soundness and a satisfactory capacity for speed. A high rate of speed is not a necessity in the harness horse, and the ability to make good time when needed is quite capable of being combined with the desired style and formation—all of which qualifications are found in a high degree in the Hackney breed; while, for the production of high-class saddle horses, which are also scarce and in active demand, at high prices, the Thoroughbred sire holds acknowledged pre-eminence. A cross of these two breeds produces the ideal combination saddle and harness horse.

Supremacy of the Hackney.

Editor "The Farmer's Advocate":

Ever since 1897, when Graham Bros.' sensational Hackney horse, Royal Standard, won the great grand championship of all light harness horses in America, beating the Cleveland Bay, the German Coach, the French Coachers, and all other breeds exhibited against it, the Hackney horse has steadily but very surely gone to the front, and every year its success has become more pronounced, until there is no longer any doubt as to the best breed for getting carriage horses. The following is taken from Bit and Spur for March, and removes all shadow of doubt on this head:

"The Hackney in America has done wonders, for statistics published in the 1907 Yearbook of the Department of Agriculture show that the number of registered horses of all recognized harness breeds in the United States was then about



Kirkburn Toreador (8534).

Hackney stallion; chestnut; foaled 1901. First and champion stallion, London Hackney Show, 1909. Sire Rosador.

scarcely less required for family and livery driving, and for marketing the lighter products of the farm; and the medium-weight horse for general purposes will always find a place, and ready purchasers, for work to which he is suited. In a country in which the natural conditions are such that motor machines can be used on the roads with comfort little more than half the year, there is little ground for alarm lest horses shall be displaced by this innovation, which, like the bicycle fad of a few years ago, may lose its popularity when its novelty is outworn, and townspeople will return to their first love—the faithful and dutiful horse.

Dr. F. C. Greenside, of New York, in an article in the March number of the Ontario Agricultural College Review, while admitting

220,000, of which only 2,500 were Hackneys; and, while thus tremendously outnumbered, the latter won at the eight great shows of 1908—Philadelphia, Long Branch, Newport, Syracuse, Brockton, Louisville, New York and Chicago—not only more prizes than any other breed in the open classes, but almost as many as all the other breeds combined. Twenty-one per cent. of all the Hackneys entered at the shows have won blue ribbons (first prizes), or championships, while but 10 per cent. of the horses shown were blue-ribbon winners. In addition to this, nearly 37 per cent. of the whole number of prizewinning Hackneys were at the head of their classes."

The American Hackney Horse Society intend giving medals at the following exhibitions and shows in Canada this year: Montreal, Canadian

National Exhibition, Ottawa Exhibition, Winnipeg Exhibition, and Victoria Horse Show.

This Society is working in harmony with the Canadian Hackney Horse Society for the furtherance of the interests of the breed.

The Canadian Society are using every effort to get suitable mares inspected for registration in their studbook, which is to be published the latter end of this year, in time for distribution at the next general meeting.

The Secretary would be pleased to hear from any who are desirous of having their mares inspected. The attention of Hackney stallion-owners is especially drawn to this. It would be a good thing if a number of mares could be got together at some central point, say Brampton, Guelph or Simcoe, where an inspector could be sent on a given day. The expense in this way would be reduced to a very nominal figure, as it has already been decided not to charge any fee for inspection.

Judging from the latest advices from New York, Philadelphia and Chicago, the Hackney commands a higher price than any other breed for carriage purposes. We are also informed that a number of gentlemen are crossing the Hackney horse on Thoroughbred mares, and the cross produces an excellent park hack or a combination horse.

H. M. ROBINSON.

Toronto, Ont.

Sec.-Treas.

Breeding Aged Mares.

Editor "The Farmer's Advocate":

I have a pair of mares, 12 years of age, that have never raised foals, but I want to breed them this spring. What treatment should I give them to aid in getting them in foal? They are in very good condition, and are built close and solid.

This inquiry, propounded by an Alberta subscriber, is thus answered by "The Farmer's Advocate and Home Journal," of Winnipeg:

The fact of these mares being as described is no reason why there should be any trouble getting them in foal. It is popularly supposed that close-knit, solid mares are not as ready breeders as the more loose and open type, but it does not follow that the former are generally non-breeders. In fact, it is often the case that a close, solid mare makes a phenomenal breeder.

The age at which mares are first bred sometimes has to do with getting them in foal, and also with the ease of delivery. It is generally accepted that, to get the best of a brood mare of which she is capable, she should be bred before

she is six or eight years old, but we have seen mares worked hard until they became crippled and too old to work, go on and raise several foals.

Of course, it is quite frequently the case that mares become sterile, and we suggest that our inquirer read "Whip's" article (in "The Farmer's Advocate" of March 11th) on the subject.

But there are precautions which everyone should take with breeding mares. Avoid sudden changes of feed, sudden changes from idleness to work. Protect from exposure. Keep the digestive system in natural condition, and return regularly to the horse.

Very often a mare will not take a horse at any time, and in such a case she may sometimes be brought around by hopping her and breeding against her will, after which she may come regularly in season, and accept service.

The National Bureau of Breeding.

On page 442 of "The Farmer's Advocate" of March 18th was an article describing a philanthropic organization called the Canadian National Bureau of Breeding, Limited, organized in the spring of 1908 by John F. Ryan, of Montreal, for the purpose of improving the breed of horses in Canada, by placing Thoroughbred stallions of class and pedigree within easy reach of farmers with good cold-blooded mares. Last fall it was incorporated under Dominion charter, and offices opened in 14 Windsor St., Montreal. The Bureau is not a commercial concern, and is not intended to be put upon a commercial basis, unless all other means fail. It contends that the reason farmers have not benefited by the use of Thoroughbred blood is because such blood has not been easily available. The fees for Thoroughbred stallions have been high, and the cost of purchasing a horse outright has been so great as to put him beyond the reach of the average farmer; and so the Bureau is undertaking to secure the stallions, and to deliver them free of all cost to responsible men, who, in turn, will give their neighbors the services of the horse at a nominal fee, which will go to pay for the maintenance of the stallion. The right is reserved to take back any horse which, in the opinion of the Bureau Inspector, is not being well treated. Property rights are retained on every stallion, and every man with whom one is placed must agree to keep a careful record of all foals, and of all mares served. Except where otherwise instructed, the service fee is \$10 to insure, the fees going to the man who keeps the stallion. Except in case of

wilful neglect or carelessness, a man keeping a Bureau stallion will not be held responsible for the injury or loss of the horse. The Bureau arranges all insurance on the horses, pays transportation to the farms where kept, and delivers them in healthy condition, and free from hereditary taint. It supplies pedigrees free of charge, and undertakes to change the stallions around every four or five years. For the present, at least, not more than one stallion will be placed in any one county, and no Bureau stallion is to be put out for service in a county where a privately-owned Thoroughbred stallion is already kept. The Bureau will try to place 100 stallions before the end of 1909, and, if possible, will put out an equal number in each of the following four years. If this plan be carried out, Mr. Ryan estimates that Canada will have the greatest breeding bureau in the world, and that, in round numbers, about \$5,000,000 per year will come to Canadian farmers through the improvement of the light-legged stock for saddle, cavalry and general breeding purposes.

The Bureau is not controlled by or affiliated with any jockey club or racing association, though it aims to be on friendly terms with all such organizations. The Bureau's field is the whole of Canada, and it is organized in each Province. It already has this year's work about completed in Quebec, and has made a fair start in Ontario. By June 1st, it expects to be able, at least partially, to supply the demand in Alberta, Manitoba and Saskatchewan, besides giving some attention to the Maritime Provinces. It has a plan which it hopes will be successful, of supplying British Columbia with horses secured from California.

Early in March, a deputation in the interest of the Bureau, waited upon the Minister of Agriculture, at Ottawa, and asked for a grant of \$25,000 to pay, in part, the running expenses of the Bureau, such as transportation, insurance, cost of inspection, etc., consequent upon its putting into service this year 50 Thoroughbred stallions in different parts of Canada. Under existing conditions in the United States, owing to the closing of many studs, consequent upon the anti-race-track-gambling legislation of so many States, it is possible for the Bureau to obtain a large number of high-class Thoroughbred stallions, some free, and others for a nominal charge. Mr. Ryan said then that some sixteen horses had already been donated to him entirely free of charge, worth from \$2,000 upwards.

As intimated above, the aim is declared to be in no sense commercial, but simply a public-spirited desire to improve the light-legged horse stock of Canada by means of the Thoroughbred cross, and especially to develop a type of utility animal which will do a large part of the peaceful work of Canada, and at the same time be suited for cavalry purposes in event of national emergency. This part of the plan is said to have the hearty support of the British war office.

The plan seems to find much favor in localities where proposed, and insistent requests for Thoroughbred horses are coming from all over the Dominion.

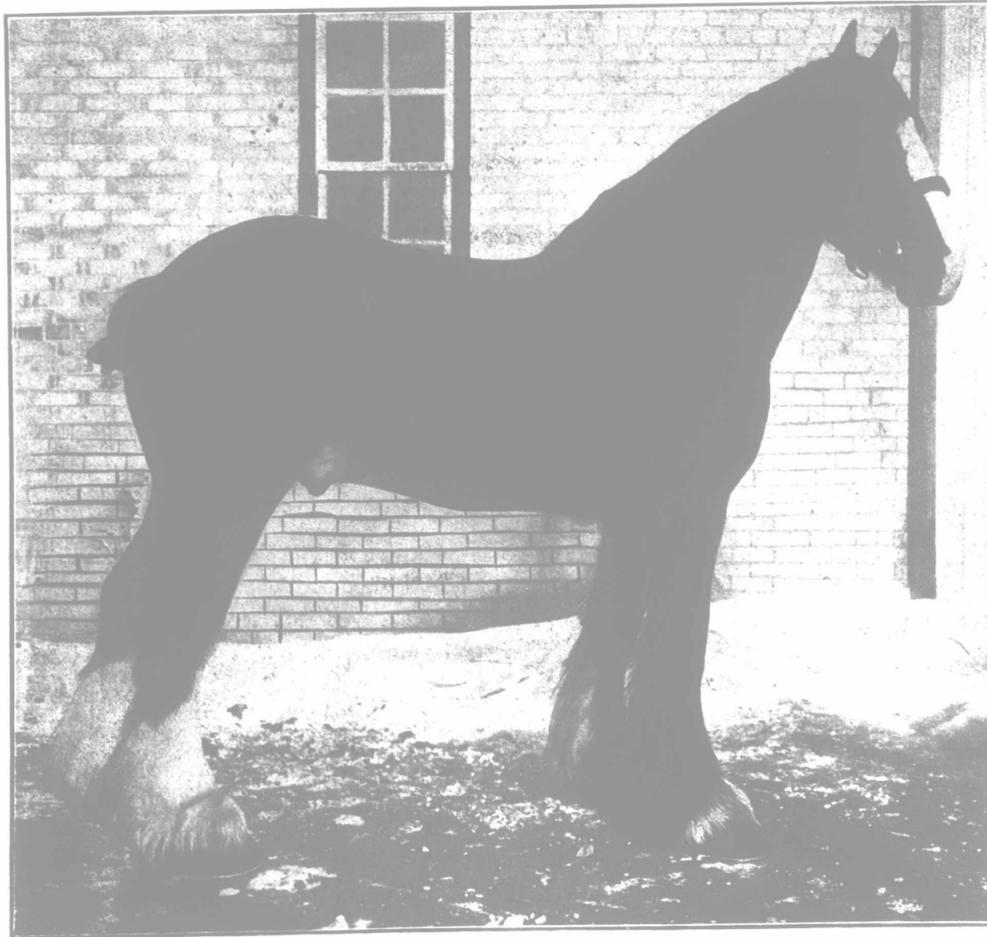
Thoroughbred blood is, in an important sense, the basis of light-horse breeding, and, without a certain infusion of it among the ordinary mares of the country, except those of draft blood, the breeding value of stallions of the other light breeds is not utilized to the best advantage. It is, therefore, urged by expert horsemen that it would be a short-sighted policy on the part of owners of Standard-bred, Hackney or Coaching stallions to offer objection to the introduction of Thoroughbred blood among the common light-legged mares, as the ultimate results of such an infusion would be of great value to their own respective breeds when the mares with a dash of hot blood came to be mated with stallions of the other light breeds.

King Edward's Gift.

A London (Eng.) despatch says that King Edward has presented the Sultan of Turkey with a first-prize horse from the stud of Lord Ribblesdale, Dublin, Ireland, named Rex Imperator (King Emperor). The Turkish potentate wanted one bay in color, with three white feet, a white star in face, and his tail to the ground, on which to ride once a week to the mosque, so that his subjects might see him better than in a carriage. The King, hearing of his desire, had inquiries made for a suitable nag, and sends it as a national compliment.

Anti-horse-thief Organization.

Horse-stealing is yet common enough to make necessary associations for dealing with this form of thieving, says the Horse World, of Buffalo, N. Y. At the recent meeting of the Ohio State Protective Association, a union of all the anti-horse-thief associations in the United States, with but one passport, was urged in resolutions adopted. The secretary of the Ohio Association is reported to be Geo. M. Dietrick, Bellefontaine.



Balladoyle (13967).

Clydesdale stallion; brown; foaled June, 1905. Imported and owned by T. J. Berry, Hensall, Ont. (See page 541.)

LIVE STOCK.

Our Scottish Letter.

WHO IS OUR CLYDESDALE AUTHORITY?

I hope I do not irritate any reader by referring at the outset to the latest resolution of the Canadian Clydesdale Association, with respect to the registration of imported animals. If I understand aright, the Association now desire all pedigrees to be tabulated. This can be done, and, no doubt, will be done, by the home Clydesdale Horse Society, although it means quite unnecessary labor, with no corresponding benefit to anyone. When a pedigree is on record, it is easy for those who want to know the pedigree to learn what it is by referring to the Studbook. The policy of the Canadian Association and the Registry Office is a puzzle to those who come to this country to buy Clydesdales. The things they do, and the restrictions they impose, are admirably fitted to hamper trade, and very little fitted to aid importers in purchasing a superior class of animals, which latter is the main thing. Few of the importers who come here know the Canadian regulations, and the impression made on one is that these regulations are imposed at thinly-attended meetings, that no steps are taken to insure acquaintance with them on the part of importers, and that a burden is thrown upon the Clydesdale Horse Society of this country, of keeping Canadian buyers posted on their own rules, which the officials of that Society should not be called upon to carry. The reductio ad absurdum of the existing Canadian regulations was reached last fall, when a mare which was not allowed to land in Canada, duty free, and was, therefore, brought back to this country, was registered in the Canadian register, and a cross in her pedigree (a Clydesdale-Shire stallion), which cannot be numbered in Great Britain, was numbered in the Canadian register, and an account rendered for the registration fees! On what principle a stallion, which cannot be numbered in Great Britain, can be numbered in the Canadian Clydesdale register, is a mystery which I make no pretence of being able to solve.

Another point to which the Canadian Association or Registration authority might profitably devote a little attention, is the means to be taken to establish the identity of an imported animal in Canada. Time and again applications come to this country for duplicate certificates of animals exported. The allegation is made that the certificate has been lost. The invariable rule observed here is that, on no account, will a duplicate certificate be issued, and, as the animal was certified as exported to the Canadian authorities on a given date, they, and they alone, have the means in their possession of establishing identity. Let the applicant apply to the Registration authority in his own country, and let him satisfy them that his story regarding the loss of certificate is true. But who is the Registration authority for Clydesdales in Canada? What is the relation between the Clydesdale Association and the Registry Office, in Ottawa? To put the question in the concrete, Who is the responsible official as to Clydesdale registration and the rules governing the same—is it J. W. Sangster, or J. W. Brant? These are questions which puzzle one in this country who has to bear the dual strain, not only of seeing that all entries made in the home studbook conform to its rules (which is all he is paid for doing, and should be asked to do), but also of explaining to Canadian buyers what their own rules are, and what they have to do in order to obtain duty-free entry for their horses into Canada. Again I repeat the question, How many Canadian importers know this, and what steps are taken to inform them?

HORSE NOTES.

Bull sales, horse sales and shows, debates as between the butcher and the farmer, college bulletins, and what not of a like nature, have kept us all stirring during the past month. The English horse shows are being held these days, and the whole subject of the future of horse-breeding is naturally forced upon us. The breeding of heavy-draft horses in this country is generally in a thriving state. There is a good trade all round, and, while fancy prices are not quotable, good-paying prices are the order of the day, and healthy trade is going forward. At the dispersion of the late Sir Philip Muntz's stud of Shires, Dunsmore Jameson, one of the leading sires of the breed, was sold for 1,025 gs. The average price of seventeen aged stallions was £197 9s. 3d., and of twelve three-year-old stallions, £339 10s. 4d. There was a big drop after that. Nine two-year-old stallions made £86 18s. 4d.

The Shire is being well boomed by wealthy men, but, as a steady trade on sound commercial lines, the Clydesdale has the best of it. At the London Shire Show, the feature which attracted general attention was the success of the produce of Lockinge Forest King. This is clearly the greatest Shire breeding horse at the present day. He is not at all a big horse, and, when shown,

I understand, his best record was a fourth, or something like that, at the London Show. He is quite easily the most impressive breeding horse among Shires to-day. In the prize list of a fortnight ago, it was a case of Lockinge Forest King first, and the rest nowhere.

The London Hackney Show has just finished. The champion harness sire of the year is Polonius, a son of the great Ophelia. Next to him would come his uterine brother, Mathias, which, in the past few years, has generally beaten Polonius. It is rather remarkable that all the sons of old Ophelia which were kept entire have proved exceptionally good breeding horses; and Heathfield Squire, which was castrated, was a phenomenal harness horse. The champion harness horse at the show (the first week in March) was Authority, a son of the great Ganymede. This is an extraordinarily bold, strong goer. He gets along with tremendous vim, and his victory was generally approved. The reserve was W. S. Miller's Margaretta, a daughter of Polonius, which won champion honors in her own height and age classification. The champion stallion was Mr. Buttle's Kirkburn Treador, which was bred in Ayrshire by the Hon. Mrs. Vernon, now deceased; and the champion mare was Mr. Hickling's Adbolton St. Mary, a three-year-old of his own breeding, which came out in great bloom on this her first public appearance since she was a foal. A very remarkable record was made by Mr. Tubb's stallion, Administrator. He won the Challenge Cup as best stallion in harness for the third time. Prior to being put in harness, he won the Challenge Cup as stallion in hand. Our readers will understand that he is still entire, but is shown in the classes for stallions in harness.

buyers from that part. The highest price of the season has been made at Birmingham, where a yearling Shorthorn bull was sold for 650 gs., and another, bred by Lord Lovat, at 520 gs. The former, a Duke of Barrington, we should judge, by his name, to be of Bates breeding. The Lovat bull, like all from that herd, is Cruickshank, of the real type, strong, and carrying plenty of flesh. At Perth, Shorthorn bulls also sold well. There was a poor demand for heifers. The highest price at Perth was 550 gs., for a yearling which stood second in his class; and others made 410 gs. and 320 gs. A notable feature this year is the revival in demand for Aberdeen-Angus cattle. At Perth, both bulls and heifers sold very well, with enhanced averages. This was largely due to a spirited demand from Ireland, where three or four herds are being started.

Ballindalloch still leads among the blacks for an overhead average, but another Strathspey herd, that of Mr. Grant, Finlarig, produced the first-prize winners in three classes, all got by a Ballindalloch bull. The average price of Mr. Grant's best group of three yearling bulls was £200 11s. The average price of the best group of three Shorthorn yearling bulls (owned by Messrs. Peterkin, Dunglass, Durgivall) was £217. The average price of the three best Ballindalloch bulls was £155 15s. The Shorthorn thus leads. Galloways and Highlanders met a ready sale, but in all breeds there are too many indifferent bulls on offer. This is true in a marked degree of the Aberdeen-Angus, and the large number of such indifferent bulls is detrimental to the improvement of commercial cattle in this country. The broad fact stands out that the quality of the commercial cattle of this country has not improved in anything like the same ratio as the quality of the pedigree cattle. The plethora of indifferent bulls is undoubtedly the main cause of this. The bull in a commercial stock is a good deal more than one-half the herd.

The plethora of indifferent bulls is undoubtedly the main cause of this. The bull in a commercial stock is a good deal more than one-half the herd.

COW-BYRE TEMPERATURES.

Mr. Speir, of Newton, whose name is well known on both sides of the Atlantic as an advanced farmer, is conducting a series of most interesting experiments regarding the housing of dairy cattle. So far, the net results go to overthrow a good many preconceived theories regarding the temperature of cow-houses, and the relation of that temperature to the yield of milk. The theory hitherto entertained has always been that cows yielded milk to best advantage when kept at a fairly high temperature. Mr. Speir's figures go to prove that there is little or nothing in this. My own impression is that the final result will be to establish the old-fashioned truth that cows, like other animals, do best when kept at an equable temperature—neither too hot nor too cold—and that sudden changes of any kind are detrimental to a high milk yield.

"SCOTLAND YET."

Australian Wool.

In a letter from D. H. Ross, Trade Commissioner at Melbourne, Australia, wool conditions are discussed as follows: Since July 1st, 1908, the sales of Australian wool within the Commonwealth, to the latest available dates, totalled 1,199,325 out of 1,211,232 bales offered. The wool exports to the close of January show an increase of 198,278 bales as compared with the same period last season. The abnormal increase is the result of great activity in the local sales, as compared with a stagnant period last year. Later returns will reduce the present increase, as very little wool will be available towards the close of the season. According to reports from Bradford, "The one article of world-wide consumption, the production of which is not keeping pace with the world's requirements, is wool." A steady demand has set in from the United States, contrary to January and February, 1908, with the result that better values are obtained by the



Balnakyle Maxim.

Shorthorn senior yearling bull. First at Perth Spring Show and Sale, 1909. Sold for \$1,680.

FUTURE OF THE HARNESS HORSE.

The question is, What is to be the future of harness-horse breeding in this country. An interesting set of figures have been published by one of the London papers regarding the rapid passing of the London hansom cab. There were licensed to ply for public hire in London the following hansoms and taxis, or motor-cabs, viz:

Year.	Hansoms.	Taxis.
1903	7,499	1
1904	7,137	2
1905	6,996	19
1906	6,648	96
1907	5,952	723
1908	4,747	2,925

Should the ratio of change be kept up during the next few years, it is obvious that we are within measurable distance of the day when there will be no hansoms in the metropolis, and no demand for the misfits of the harness-horse breeder. To what purpose will men then continue to breed Hackneys, for the Hackney is either a harness horse or he is nothing. The secret of success in any breed is the finding of a market for the misfits. Let that be secured, and horse-breeding can always be made to pay. But it will not pay to breed horses on the off-chance of producing a London winner. There are too many blanks and too few prizes in that game.

PROSPEROUS DEMAND FOR BULLS.

Bull sales this spring have been prosperous. The Argentine demand has revived, and at all the sales the highest prices have been paid by

grower. The outlook is considered to be a satisfactory one, and it is expected that present prices will be maintained for some months ahead.

Unsatisfactory Trade in Feeding-stuffs.

In "The Farmer's Advocate" of March 25th appeared the synopsis of an address before the Agricultural Committee of the House of Commons, delivered by Frank T. Shutt, who reviewed the conditions of the trade in commercial feeding stuffs in Eastern Canada, and outlined a proposed law to control the trade in these concentrated commercial feeding stuffs. Subsequent to the delivery of this address, a committee of prominent agriculturists waited upon the Ministers of Agriculture and of Inland Revenue, strongly urging the necessity of such a law. We give below the substance of the address delivered on that occasion, March 17th, by Prof. R. Harcourt, O. A. C., Guelph. Hon. Senator Owens; Prof. H. S. Arkell; Frank T. Shutt; A. W. Smith, M. P.; P. Clarke, and A. P. Murray, of the Edwardsburg Starch Co., all spoke supporting the matter, and giving instances where they had seen injustice in the selling of these feeding stuffs without some guarantee, as well as cases of abundant adulteration of even the common materials, such as bran. Prof. Harcourt's remarks were to the following effect:

"During the past few years an ever-increasing number of feeding stuffs have been placed on the market. Most of these are valuable additions to our list of feeds, and are the residues from the manufacture of some specific product from the crops of the farm. They contain all the food constituents commonly found in fodders, roots, grains, etc., but in different proportions. For instance, the by-products in the manufacture of starch are richer in protein than the corn from which they are made, because the starch has been largely removed. The same is true of wheat bran, because the flour made from wheat is richer in carbohydrates than the wheat. Cottonseed meal, linseed meal, brewers' grains, etc., are all of the same class.

"On the other hand, in the manufacture of oatmeal, one of the chief by-products is the hull of the grain, which is largely composed of crude fibre, a woody, comparatively indigestible substance which contains very little protein.

"Other feeding stuffs are made up of a mixture of various by-products, and are sold under a trade name which gives no clue to their probable value. There is also a tendency to mix low-grade by-products with those the farmer is familiar with, as, for example, oat hulls with wheat bran. With this condition of affairs, it is evident that the purchaser cannot form a correct idea of the probable composition or value of food from the name it bears, and there is a growing desire that something be done to place the selling of these valuable foods on a more practical basis.

"That there is need for some change in the method of selling these materials is further evidenced by the fact that analyses made in the Dominion Experimental Farm by the Inland Revenue Department, and in the Chemical Laboratory at the Ontario Agricultural College, all tend to show that the mistrust of the farmer is based on good grounds. These analyses show that a large number of the various products offered for sale are of a very high quality, but many of the same kinds of foods, sold under the same name, made in different mills, vary widely in composition. For instance, gluten meals, analyzed in the O. A. C. Laboratory, were found to vary from 15.0 per cent. to 34.9 per cent. in crude protein, and pea bran from 7.5 to 15.7 per cent. in the same constituent. If, in addition to the variation in composition of these foods, we remember that many of the by-products are new to the farmer, and that the old familiar ones are, in some cases, being adulterated, it is not surprising that the feeders of live stock, who feel the need of some concentrated materials to use along with the feeds grown on the farm, should be deeply interested in some way being devised whereby they may be able to know the actual, or, at least, approximate, composition of the feeding stuffs they wish to purchase.

"In the United States, as long ago as 1895, Connecticut enacted a law regulating the sale of these cattle feeds. Since then thirty States have passed similar laws. In nearly every case these State laws compel the manufacturer to stamp on the bags, tags, or invoice, the minimum percentage of protein and fat, and the maximum percentage of crude fibre, in the feed offered for sale. Great Britain has also enacted similar laws.

"We do not want to ask our Government to formulate any law that will be unnecessarily burdensome, but we do feel that something ought to be done. We therefore suggest that, as the old standard feeds, such as wheat bran, middlings, the whole grains, or meal obtained by grinding any single grain, are fairly constant in composition, no guarantee be asked for these, but that each be clearly defined. If this is done, the adulteration of these feeds is fully covered in the

Adulteration Foods Act, R. S. V., chapters 24 and 26, and the small millers throughout the country will be put to no inconvenience. With the other newer feeds and mixtures of various mill by-products, we feel that it is only right that the purchaser should know their nutritive value, and, consequently, that the minimum percentage of protein and fat and the maximum percentage of crude fibre should be guaranteed.

"It is felt that if these concentrated feeds were sold according to percentage composition, or under guarantee, as is done in Great Britain and the United States, and as is done with fertilizers in our own country, it would protect the purchaser against low-grade and adulterated materials, the manufacturer and dealer against dishonest competition, and assist in promoting a more intelligent use of these valuable feeding stuffs."

Some Eastern Ontario Pigs.

Editor "The Farmer's Advocate":

Seeing your invitation to readers to favor your paper with results in hog-feeding, I submit the following:

On September 17th we bought six Yorkshire pigs, which were four weeks old on that day. While young, they were fed whey, ground mixed grains consisting of about one-third buckwheat, and the balance about equal parts of peas, barley and oats, ground fine; also a few ears of soft corn. During the last month or so they have been given very small quantities of whole peas, generally at noon. All the coal ashes were fed to them as fast as they were made. They had skimmed milk and buttermilk, when procurable, which we set no value on, as, without pigs, the greater part would have been wasted. When not fed milk on the meal, they were fed cold water from the well. We sold five, and kept smallest for our own use. They never left the pen until shipped, on March 11th.

3,000 Lbs. ground feed, at \$1.25 per cwt.	\$ 37.50	
5 Bush. whole peas, at 85c.	4.25	
20 Bush. corn on cob, at 40 cents	8.00	
10 Bush. corn, soft, on cob, at 25c.	2.50	
Cost of grinding	2.00	
Cost of pigs, at \$2 each	12.00	
Five pigs, 1,230 lbs., at \$7.....		\$ 86.10
One pig (smallest), 230 lbs., at \$7		16.10
Profit	35.95	
		\$102.20 \$102.20

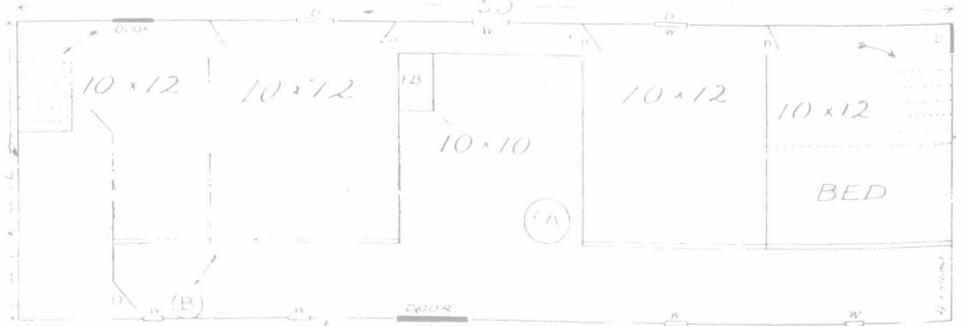
Lennox Co., Ont.

DENYES & SON.

A Handy Pigpen.

Editor "The Farmer's Advocate":

I have read your request for plans of pigpens. I enclose the plan of one I built four years ago, which I think is very handy. The pen is 16 x 50, stands on cement wall, with cement floors and troughs. The hall and feed-room floor is 2 inches higher, which keeps them always dry. Floors in the feeding-pen have 2 inches of a slant toward the back of the pen, where there is a small gutter, 2 inches deep, leading to a 2-inch iron pipe in the wall, so the liquid manure drains off, and keeps the floor dry. Troughs are 6 inches wide in bottom, and 12 inches at top. The feed-board is one foot wide; the back slants back over trough, forming feed-board—4 at top, and 2 at trough. There are two sleeping-beds, 3 feet up from floor (marked by dotted lines). There are four sliding windows on the east side, and three on the west side, which slide on a 4 x 4 girt. There are doors leading out of each pen to yard. In addition to tight doors, there are slat doors, which swing on an iron rod, that the pigs can open at will. The tight doors can be closed in cold or stormy weather. Where windows are directly over doors, they are marked D above and W below. F B is the feed-bin, which is 2 x 3 feet, hopper shape, will hold 75 bushels,



Mr. Mitchell's Pigpen Plan.

and feed comes down as taken out; throat, 1 x 3 inches. F K is furnace kettle. B is large barrel to hold water, and is filled by an underground pipe from the windmill. This pen is frame, the sills and posts being 8 x 8, beams 8 x 9. There is a bent at each side of each pen. The chimney is resting on cross-beam, and supported by partition below. D D is drop door at south-east corner, made strong, and hinged on the under side. In loading hogs, it answers as platform, and a small boy can load a load of hogs in a few minutes. The pen is sided with double-inch pine lumber, with building paper between, and painted. The roof is 1 foot below $\frac{1}{2}$ pitch, with two ventilators. Cost of material and labor, \$100. SAMUEL MITCHELL.

Lambton Co., Ont.

THE FARM.

Bread-making Qualities of Wheat.

At the last annual meeting of the Canadian Seed-growers' Association, Prof. R. Harcourt, O. A. C., Guelph, read a paper on the bread-making qualities of flour, in which he reported the results of experiments made at the College with flour from 64 different varieties of Ontario winter wheats grown under uniform conditions in 1907. He pointed out that, whilst the farmer preferred the variety of wheat that would give the greatest number of bushels per acre, the miller desired the wheat that would give a large yield of flour of a quality to satisfy the demands of his customers. The variety that did not yield well, but which had excellent chemical and milling characteristics, was not desirable; neither was the variety that yielded well, but which had poor chemical and milling properties. The ideal wheat was a heavy-yielding variety, having good milling and baking qualities. In a discussion of the practical and chemical, and considerations relating to the "strength" of flour, Prof. Harcourt quoted Jago's definition of this property as the capacity of a flour for absorbing water; whilst Humphries and Biffen defined it as the "capacity for making large, well-piled loaves." The latter definition suggested that the primary factor was size of loaf, the other factors being shape, and, perhaps to some extent, texture. It was evident that our lack of knowledge of the chemistry of flour and breadmaking was another instance of the fact that many of the most common materials and every-day operations were the least understood. Therefore, the only method available for determining the relative value of flour for bread purposes was by actual baking trials.

Having described the machinery employed at the College in cleaning and milling the grain, and in baking the flour, for which electrically-heated ovens were used, Prof. Harcourt submitted the results of the tests of the 64 varieties of wheat in a table which gave for each variety percentages of the absorption, of the yield of bread, of the size of the loaf, of the average quality, and of the gluten, with the weight in pounds per measured bushel, and the yield in bushels per acre. The strength of the various flours was more clearly shown by the columns giving size and average quality of the loaf, the latter being the average of the points awarded for appearance, color and texture. The largest loaf was obtained from the variety known as Crimean Red, which had a volume of 117.1, and an average quality of bread of 104.0, as compared with a standard of 100. Buda-Pesth had a volume of 109.7, and an average quality of 104.6. These two varieties were the best bread-making wheats tested. The yield per acre of the former was 46.48 bushels, and of the latter, 45.92 bushels. Taking an average of the results, there appeared to be some relationship between yield per acre, weight per measured bushel, and strength and quality of flour. To bring out this point, the wheats were grouped into those yielding less than 45 bushels and those yielding between 45 and 60 bushels,

APRIL 1, 1909

and those yielding over 60 bushels per acre. The average results thus obtained are arranged in the following table:

No. of Samples.	Yield per acre—bush.	Weight per bushel—lbs.	Yield of bread—%	Size of loaf—%	Quality of loaf—%
10 above 60 bush.	63.84	61.78	99.97	91.05	9.85
30 between 45 and 60 bush.	49.27	62.05	100.16	98.25	10.03
23 below 45 bush.	40.52	62.19	100.65	93.39	10.03

The table shows that, taking the average of the results obtained, as the yield of wheat per acre decreased, the weight per measured bushel and the size and quality of the loaf increased. The best variety was the one which would give the largest number of bushels per acre of grain, and that would yield a large amount of flour of a quality suitable for making first-class bread. This variety was not necessarily the heaviest yielder, nor the one giving the best quality of bread, but was one representing a process of compensation between the two extremes.

Frank T. Shutt said that, at the Experimental Farm they had been looking somewhat into the question of the influence of environment upon the quality of wheat. This was a very potent factor in the Northwest, where the season greatly affected the maturation of the grain, and influenced the proportion of gluten and starch. There was a fair amount of satisfactory proof to show that environment, or, more particularly, the climatic conditions, were much more potent in influencing the quality of wheat—that is, its strength, as indicated by gluten content—than the quality of the soil. Consequently, as seasons varied year by year, it was desirable that the grain should be annually examined, and that careful notes should be taken with regard to the season in which it was grown. He believed that the shortening of the ripening period of the grain increased, whilst the lengthening of it tended to reduce, the strength of the flour. The baking of bread was attended by physical and chemical reactions of an extremely intricate character, and it was important that there should be a correlation of chemical with baking tests. At the Ogilvie laboratories, one might infer that the power of flour to absorb and retain moisture was now regarded as secondary to the size, shape and texture of the loaf. It was very important to Canada, as a wheat-producing country, that a definite knowledge should be gained as to the milling properties of different varieties of wheat, and he was glad that at Guelph chemical investigation was being combined with baking tests, the results of which promised to be still more valuable in the future than they had been in the past.

Prof. C. A. Zavitz pointed out that the Manitoba Red Fife spring wheat, which had been grown at Guelph for three or four years as a winter wheat, stood second as regards the size of loaf. Certain varieties were high in yield, and yet were of good baking quality. They were watching for exceptional cases where yield, weight and quality were combined. They should be careful, in drawing conclusions from the shape of loaves during one year's work, because they might emphasize the points of some varieties more than would be justified by the results of several years. Dr. Chas. Saunders said a report upon the work done at the Central Experimental Farm would shortly appear. The results would, he thought, be found in general agreement with those of Prof. Harcourt. Uniformity in shape of the baking tin employed was important, as results with different kinds of tins could not be properly compared.

Save the Clover and Wheat.

Editor "The Farmer's Advocate":

The deplorable state of many winter-wheat fields and new clover seedings in Ontario this season, through alternate freezing and thawing, accompanied by cold, parching winds, is another reminder of climatic conditions against which we must make provision. In many clover fields, last fall, where the tillage had been thorough, there was a grand "catch," but now the plants are all heaved out and dead. More and more a necessity to success on the farm, and some years the seed approaching the worth of its weight in gold, measures must be taken to save these clover seedings. The most effective that I know of is a light top-dressing, in fall or winter, of stable manure, applied carefully with the fork or spreader. I have a field in sight just now where a thin coating of strawy manure saved the clover plants on half an acre, while the rest are all dead. I would like to hear through "The Farmer's Advocate" if other readers cannot accord similar experiences in this all-important matter of not only saving, but improving, the clover and wheat crops. Why not prepare to do more top-dressing?

CULTIVATOR.

British Columbia Seeding.

Editor "The Farmer's Advocate":

All the common kinds of grain are grown here. The quantity of seed per acre varies according to the quality of the soil. Corn will never be an ensilage crop here; maybe the June rains are too heavy. Nearly all the different kinds of roots are grown; the largest acreage is turnips. To seed the land for pasture and hay, I sow 8 pounds of red clover, 3 pounds of alsike, and 4 pounds of timothy, and oats as a nurse crop. About 70 per cent. of the grain crop is seeded. At present, soiling crops are very little grown, but will be in the future; the soil and climate are favorable for growing soiling crops to perfection. Alfalfa has never been grown in sufficient quantities to prove its value. We have no rotation of crops like the English system. I sow peas and oats on new land, and seed with clover. In four years, we plow the sod land, and cultivate well with spade harrow to get as fine seed-bed as possible, then seed with oats and clover. I want to see clover growing in every crop except the root crops. Barnyard manure is used for the root crops, and great quantities are spread on the grass. Three-horse teams have been used for years, and four-horse teams are coming in favor. New Westminster Co., B. C. WM. MEDD.

Handy Post Driver.

Editor "The Farmer's Advocate":

I have devised an outfit for driving posts that I thought might interest many of your readers. Not only can it be used for driving posts in fence-building, but also, in the spring of the year, posts that have "heaved" can quickly be driven down. The equipment consists of a heavy log, mounted on a derrick on wheels. By driving alongside the fence, the posts are readily put in the desired depth. One horse hitched at W, driven along the fence behind the wagon, raises the log pounder. At T, instead of an ordinary pulley, there is a device that works on the same principle as the hay-fork trip (any blacksmith can make it). When the pounder has been pulled up high enough, a small trip-rope fastened to T is pulled, and the heavy pounder falls on the post. The latter is held in place by a lever, one end of which is placed in a clevis (C), so attached to the framework that it swings back as the wagon is moved forward to the next post. On the derrick are two hooks, in which a piece of scantling can be placed to hold the pounder up out of the way when moving. The framework can be modelled to suit. Wheels of the farm wagon, and a tongue from the sleigh can be made use of to keep down expenses. E. J. NIXON, Carleton Co., Ont.

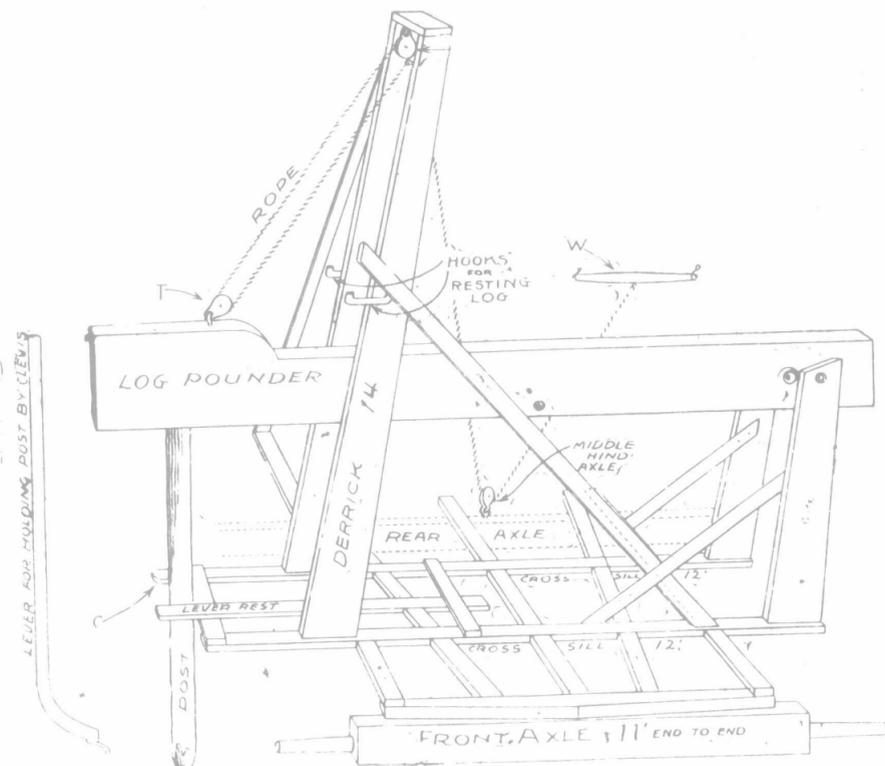
New Brunswick Farmers' and Dairymen's Convention.

The thirty-third annual meeting of the New Brunswick Farmers' and Dairymen's Association took place at Fredericton on the 17th, 18th and 19th ult., and was, without doubt, the greatest success the Association has yet achieved. There was a very large attendance, comprising most of the leading agriculturists in the Province, including many of the members of the Provincial Legislature.

The President, James Good, of Jacksonville, Carleton County, in his opening address, congratulated the members upon the satisfactory conditions which confronted them, both as a society and as individual farmers, and made a strong appeal for greater usefulness as an association. The opinion of that association, as a body, ought to command the greatest respect, and the stronger they could make it, the more respect would it command on the part of the powers that be. Their association represented the class of people which formed the greatest collective wealth of the Province, the greatest in export value, the greatest producing class, and the class which makes the existence of other classes possible. He strongly urged the necessity for higher education, more especially from the agricultural standpoint. The old notion that a farmer needed only bone and muscle, had long since been exploded; in no walk in life was it more recognized nowadays than in the farmer's, that the new methods and new machinery called for the highest skill, if success was ever to be attained, and he concluded by expressing the hope that the Government would recognize this, and provide the necessary facilities for its acquisition by the young men of the Province.

OPPORTUNITY FOR AGRICULTURE.

The Hon. D. V. Landry, Minister of Agriculture, in reviewing the crop statistics for the past year, said that, while the yield of roots had exceeded that of many previous years, there had been a drop in the returns of grain, chiefly accounted for by the want of rain shortly after the seeding period. The late-sown oats had been an excellent crop, whilst those sown earlier had been disappointing. A larger area had been planted to potatoes and turnips than ever before, and the yield of both having been better than usual, good profits had been obtained. He urged the need of greater co-operation among farmers. What the Government might do for them depended mainly on themselves, and the various agricultural societies, representing large groups of men, would naturally have more influence than the opinions of individuals. He hoped soon to see some steps taken to provide better facilities for agricultural education, the elements of which should be taught in all country schools in the Province. There were tremendous possibilities in front of the farming industry, which only needed men to take advantage of them. Even the city of St. John was importing over \$3,000,000 worth of farm produce every year, which surely ought to be raised in the Province.



Pounder Mounted on Wheels, for Driving Down Posts.

Dr. Standish, of Walkerton, Ont., was next introduced, and for upwards of an hour "talked horse," in his most approved style. The substance of his discourse has appeared in these columns on previous occasions.

SAVE THE FORESTS.

Most interesting addresses were given by Prof. Miller, of the University, and M. W. Doherty, of Sussex, on the relation of forestry to agriculture. Each of these speakers urged the importance of conserving the forest resources of the Province, not only on account of their value from the standpoint of the lumber industry, but as conservators of the moisture in the soil, as cover for game, and also from the æsthetic standpoint. It was a mistaken idea to think that the forests would last forever. Unless proper steps were taken to remedy many existing menaces, the time would come when Canada would find herself in the same position, with regard to her forests, as the United States was now doing.

W. H. Moore followed, with a very interesting account of the various kinds of birds to be found in the Province, and their uses in agriculture. He distinguished between birds which were useful to the farmer and those which did harm, and he urged upon his hearers to take more interest in the smaller animal life with which they were surrounded.

SALVATION ARMY IMMIGRATION.

The matter of attracting more immigrants to the Province is engaging the attention of the Provincial Government, particularly as it affects farm help. Captain Jennings, of the Salvation Army, gave an interesting account of the Army's methods of dealing with would-be immigrants. He said that the applications for assistance to emigrate were pouring into the offices at the rate of about 7,000 a week, but these applications were very rigorously sifted, and only those persons who were physically fit and appeared likely to make useful citizens were ever dealt with. Any farmer wanting help could have it by applying to the Army authorities, and if the help supplied should be a misfit, they would gladly find another man. In the past year the Army had supplied over 500 laborers to different farmers in the Province, and only the smallest proportion had turned out unsatisfactory.

A. B. Wilmot, the Superintendent of Immigration for the Province, then spoke on some of the problems with which his department had to deal. The greatest difficulty in providing a farmer with help was that usually a farmer only wanted help during a portion of the year, and at the time when work was generally plentiful. It was a difficult matter to please the farmer and satisfy the laborer; but he had satisfactorily placed a good number of men in various parts of the Province within the past two months. If the farmer could only alter his methods so that he could make the employment of labor all the year round profitable, the greatest trouble would be removed. Mr. Wilmot spoke hopefully of the prospects of the Province in the way of attracting new settlers, a work in which the C. P. R. had promised their active co-operation.

SEEDS.

A very profitable discourse was then given by Mr. Moore, the Dominion Seed Inspector for the Maritime Provinces. He spoke most highly of the good work being accomplished by the Canadian Seed-growers' Association, and urged all farmers to become members of it. No man, he said, who had witnessed the results to be obtained by using only pure seeds, would ever sow the ordinary commercial product in the future. The Maritime Provinces were as well adapted for growing good grain as any part of the country, and any farmer, with little trouble, could provide himself with all the pure seed, free from weeds and other faults he might require.

SELECTION PAYS.

Donald Innes followed, and endorsed all Mr. Moore had said. He said he had been actively engaged in the work of seed selection for many years, and he had found that it paid him. He recommended every farmer to have an experimental plot as a seed-plot, and from it cull the largest and finest heads, and use only the seeds from these heads. It should not be difficult to increase the yield per acre by five bushels or so; and when they came to think that there are nearly 200,000 acres planted to oats in the Province, they could readily see what a difference in the profits the additional five bushels per acre were going to make.

TURNIPS FOR AMERICAN MARKET.

W. H. Moore followed on the same lines, after which Frank Clements gave a very interesting talk on "Commercial Potato and Turnip Growing." Mr. Clements being in quite a large way of business along this line, his remarks were listened to with much pleasure. He said that for the Boston market he found New Brunswick-grown turnips were preferred to any others, and that as long as the market was properly catered for, the business was a paying one. He found that a

medium-sized root, about 5 inches in diameter, was most liked, and he had no difficulty in meeting the demand. In sowing, he had found it more satisfactory to sow on the flat, rather than in ridges.

ECONOMY OF HOME-MIXED FERTILIZERS.

Major O. W. Wetmore, of King's County, next gave an address on commercial fertilizers. He said that, whilst there were several good fertilizers on the market, he had found it more advantageous for the farmer to buy the ingredients and mix them for himself. By adopting this course, a saving of twenty to twenty-five per cent. was effected, and it was also possible to vary the quantities of the several ingredients according to the requirements of the particular crop for which it was to be used. He advocated the various agricultural societies buying the ingredients in large quantities, and reselling them to their members at cost. About \$32 a ton was the average price he paid for materials, as against about \$40 for the ready-made article on the market.

Harvey Mitchell, of the Dominion Dairy Branch, gave some valuable advice on the subject of cow-testing, pointing out the folly of a farmer keeping cows when he did not know whether they were paying him or not. He showed some testing apparatus which could be purchased for \$1.25, so there would be no excuse for ignorance on that point in the future.

A. G. Gilbert, Poultry Manager of the Experimental Farm, Ottawa; Rev. J. B. Dagget, and Seth Jones, of Sussex, N. B., gave some very practical advice on the subject of poultry.

The officers for the ensuing year were selected as follows: President—O. W. Wetmore, Clifton, King's County; Vice-President—J. M. Donovan, Coldbrook; Treasurer—Harvey Mitchell, Sussex; Corresponding Secretary—Geo. E. Fisher, Chatham; Recording Secretary—Bliss M. Fawcett, Sackville. G. B.

P. E. Island Seed Fair.

Fine weather and good roads brought out a very large attendance at the Seed Fair, in Summerside, held last month. The exhibits of seeds were the most numerous, and the best quality ever shown here. There were over 1,100 entries, including the Domestic Science section. The different sections were all well filled, and the competition so close that the judges said they had great difficulty in placing the awards, and remarked that, if they were doing it over again, they would not likely place them the same.

The wheat class contained many specimens that were almost perfect. White Fife and White Russian were most in evidence. The Two-rowed barley section contained over 20 entries, and the Six-rowed a like number. Donald Innes, the veteran seed-grower, of New Brunswick, who judged these classes, pronounced them the best lots he ever saw, while he said of the Two-rowed class, that, "Take one bag of it out, and any of the lot would be good enough seed for any farmer." Potatoes were a very large class, and were judged by R. Robertson, of Nappan, who pronounced them a grand exhibit, that would take many first honors anywhere shown. Timothy seed made a fine exhibit of the choicest quality. There was only a small exhibit of clover seed, as clover did not fill on the Island last summer, owing to some unknown cause. The sample of red clover that took first prize was from a second crop. It is seldom that seed is grown from a second crop on the Island, but last season was warmer than the average, and the first crop of clover matured early, and the fine fall weather gave the second crop a chance to ripen. Alsike seed failed almost entirely last year, though there was a good growth of alsike clover. Root and garden seeds were also shown, the equal of any imported.

The Domestic Science Department occupied a large space in the center of the show-room, and many and varied were the exhibits of the skill of the P. E. Island ladies in the matter of baking, cooking, pickling and preserving; and they certainly demonstrated their ability to prepare the choicest viands from the products of the field, the garden and orchard.

During the Show, public meetings were held in other halls in the town. The first meeting, on Wednesday, was under the auspices of the Convention of Farmers' Institutes. The Market Hall—the largest in town—was packed with an eager, interested audience, who listened to an eloquent practical address on "Agricultural Education," by Prof. Cumming, of N. S. Agricultural College. The address was a strong plea for the education of the farmer's son who was to stay on the farm, claiming that he was as fully entitled to the higher education in agriculture as was the brother who took up law or any other of the so-called learned professions. He also outlined the course of study given at the Truro institution, both in the long and short courses. He was also strongly in favor of teaching some of the lesser branches

of science in the country schools, such as botany and insect life, and nature-study in general. This was a grand and convincing address, and will likely result in drawing many students of agriculture from the Island to the Truro College next term.

In the evening, another very large meeting was held in St. Paul's Hall. Rev. Dr. Gauthier presided, and delivered an eloquent and optimistic address on the possibilities of Prince Edward Island agriculture, as evidenced by the great success of the present Seed Show. He spoke very highly of the excellent work done by the Farmers' Institute, and said the time had now come when a Superintendent of Institutes should give his whole time to our Institute system, to enable it to do its best work.

Governor McKinnon followed with a short, encouraging address. Premier Haszard said that, though he was not going to promise anything just now, he heartily approved of the suggestion of the chairman re the appointment of a Superintendent of Institutes. He also highly complimented the ladies for the magnificent display in the domestic-science part of the show.

On Thursday morning, at 10 o'clock, another large audience gathered in the Market Hall, the occasion being a meeting of the Maritime Stock-breeders' Association. A stirring address was given by Prof. Cumming on "Stock-farming, the Salvation of Maritime Agriculture." The keynote of this excellent address was better stock, better fed, suitable feeds grown on the farm. The speaker thought we ought to grow more roots and clover, and not import so much millfeed, as they did in Nova Scotia. He believed, with stock-farming and clover-growing, the soil could not only be kept up, but improved. He made the statement that the average milch cow in the Maritime Provinces gave only 3,000 pounds of milk in a year, while a mixed herd at Truro College averaged 9,000 pounds, and that the cow that cost most for feed in their herd gave the biggest profit.

A good-seed meeting was held in the afternoon, at which the judges gave reasons for placing their awards; and at night, a large meeting under the auspices of the Dairymen's Association was held, but was largely a failure, for want of a little foresight in arranging a programme. A Household Science meeting was held in the afternoon, which was confined to the ladies, and at which there were interesting discussions along their lines of work.

The Committee of Management of the Seed Fair deserve great credit for excellent arrangements of all matters, which were carried out without any friction. Everybody was pleased, whether they got a prize or not, and all seemed determined to make the Seed Fair even a greater success next year.

W. S.

Assistance in Underdrainage.

DEMONSTRATION OF METHODS OF SURVEYING FOR DRAINAGE.

Underdrainage will pay for itself in from one to three years. Perhaps no example in Ontario demonstrates this more conclusively than the drainage of the Rittenhouse farm, now the Horticultural Experiment Station at Jordan Harbor, in the Niagara Peninsula, referred to in "The Farmer's Advocate" of January 21st, 1909. Originally, it was very wet; so much so, indeed, that often the crops were scarcely worth cutting. In 1907 it was underdrained, the lines of tile being laid about four and a half rods apart. In many places the subsoil was very, very heavy, so that the digging was hard and the cost high—about \$25 an acre. In 1908, on the part that was formerly the wettest, it grew 65 bushels of oats to the acre, thereby practically paying for the drainage in one season; for, the year previous the oats on the same land were not worth cutting.

The Rittenhouse farm was surveyed, and the drainage system for it planned by the Department of Physics at the Ontario Agricultural College. Any farmer in Ontario who is contemplating underdrainage may, on application, have his farm surveyed, the drains planned, and the grades determined. A finished map containing this information, and also the size of tile advisable, is sent to the owner as soon as completed. The only outlay connected with the survey is the travelling expenses of one man from Guelph to the farm, consisting of railway fare, meals, and cartage of instruments. The railway fare is only one cent a mile each way for this work.

At the conclusion of each survey, a drainage demonstration is held in the field, and simple, practical methods of surveying a drain, determining its grade and securing a true bottom are demonstrated, and the benefits of drainage discussed.

Anyone desiring a survey and plan should apply to Prof. Wm. H. Day, Department of Physics, O. A. C., Guelph. A large number of applications are already in for this season.

Course of Lightning.

Editor "The Farmer's Advocate":

Having read, from time to time, articles in your paper re lightning-rods as a protection against lightning, I would like to see the subject handled in a more definite manner than it has been in the past; for, although it has been stated that a certain protection is afforded by their use, I have never seen it stated as a fact that no building having such protection has been known to be burned by being struck by lightning. I mention one reason why I would doubt the efficiency of the rods as a fire-protector, namely: I have frequently noticed, after an electric storm, the telephone and telegraph posts along the highway have been shattered by the lightning, notwithstanding the fact that the wire is separated from contact with the post at the top by a glass socket, showing that the lightning must jump from the wire to the post, which should be protected by the glass at top; and if it will jump from the wire in one case, why not in the other?

Trusting to have this important matter more fully discussed through your valuable paper, I remain,

J. M. T.

Ontario Co., Ont.

[Note.—It is estimated by the best authorities that at least six out of seven of the cases of buildings struck by lightning would have been prevented had the buildings been properly rodded. When it comes to being set on fire, the percentage of cases of protection by rods is still larger. Some lightning bolts are of such a character that they can be diverted from their course but slightly by metallic conductors of any kind. But still, though their force may be only lessened by the presence of lightning rods, the shock is in many cases so reduced that a fire is averted. Cases could be cited where the rod was burned in two, but the building saved, or only slightly damaged.

The fact of telephone and telegraph posts being shattered by lightning, which is given as a reason for doubting the efficiency of rods, is really an added proof of their value. When lightning darts from a cloud downward, it is seeking the earth, and though its direction may be changed for a little by the presence of telegraph wires, yet its course is still downwards; and if nothing better is encountered, it will take the best medium available, namely, the poles. Of course, they are shattered. But if a wire had run down the length of each post to the ground, the posts would have been unharmed. Telegraph and telephone companies have become aware of this, and, to guard against loss, attach to a post every half mile or so a rather thick wire having good ground connection, and extending upwards two inches above the top of the post—a miniature lightning-rod, in fact.

Our correspondent need not stumble at lightning jumping a few inches from the wire to a post, when, in its course, it has already jumped one or two thousand feet through dry air, one of the worst mediums known. Speaking generally, lightning will not leave a good conductor for a poorer one, if the good conductor leads in a downward direction.—T.]

Taking Awns Off Barley.

Editor "The Farmer's Advocate":

In your issue of March 4th I notice that a farmer asks for a quick way to take the awns off barley that has been poorly threshed. In this Province, on account of the dampness of the atmosphere, a great many awns remain on the barley when it is threshed, and the way we remove them is to simply run the grain through the threshing machine again. This breaks off the awns, and does not take much time.

Prince Co., P. E. I.

FARMER.

THE DAIRY

Cost of Pasteurization.

Editor "The Farmer's Advocate":

In answer to inquiries of Thos. Nimmo regarding whey question, would say cost of equipment for heating, also quantity of piping required, depend altogether upon where the whey tank must stand. Cost of fuel varies according to location; here, it is about one dollar per ton of cheese. It cost us about one hundred dollars to equip our factory for pasteurizing whey. Where it costs fifty cents per thousand to draw milk, it cost seventy-five cents per thousand to draw milk and return the whey. ROBT. SNELL.

Oxford Co., Ont.

"Easily the Best."

I have taken "The Farmer's Advocate" for several years, and would not like to be without it. I also take several other good agricultural papers, but, for good solid reading matter, "The Farmer's Advocate" easily excels them all. Excepting when the time has arrived for renewing my subscription, I think it well worth many times your subscription price.

King's Co., N. B.

J. HAYES KING.

Producers and Cheese-buyers.

In offering suggestions for the new cheese season, "Trade Bulletin" refers to unprofitable methods adopted by dealers, and points out that last season was not a prosperous one for the exporters of cheese.

"The cause of lean profits year after year," says Trade Bulletin, "has been undue competition between the dealers and shippers themselves. It is by such cut-throat tactics that they have flung the big gains into the hands of makers, and helped to rear the gentlemen farmers of today. We question, however, if this has been for their best interests, as we are inclined to believe that such easy profits have bred a somewhat lazy or indolent disposition, which have accounted to some extent for the manner in which they have allowed their herds to decrease, and the production to fall off."

No doubt, all will agree that among Canadian dairymen there are very many gentlemen farmers. But that they have risen to such standing because of the benevolence of cheese-buyers, will be news to those who for many years have handled the raw product. It is seldom that "cut-throat tactics" on cheese boards put much undue cash into the pockets of those who supply the milk from which high-grade cheese is made. Occasionally, prices may be too high for low-grade cheese, but this is because the buyers make little or no discrimination.

Again, Trade Bulletin may be right when it says there are some lazy and indolent dairymen. Such dispositions, however, are not bred by "easy profits." These are the men who, as a rule, supply milk to factories where low-grade cheese is found, or whose milk is returned frequently because of off-flavors, and whose herds are decreasing in production each year. The man who is prospering is the man who takes good care of his milk, who is building up his herd, and who has a higher average cash return per cow each season.

Admit, if you will, that there is "undue competition among the dealers and shippers," but do not try to make farmers believe that the extra profits turned over because of this competition has so filled the pockets of the producer that he considers no further effort on his part is necessary.

Early Cheesemaking in Canada.

Interesting data regarding the inception of Canadian cheesemaking are given by Prof. H. H. Dean in The Busy Dairymen's Page of a recent issue of New York Produce Review. The Professor writes:

There is in attendance at the dairy school in connection with the Ontario Agricultural College, a very interesting person—Jas. A. Crawford by name—who has testimonials as a good cheesemaker dated 1867. He is probably the oldest cheesemaker in active work to-day. Mr. Crawford has kindly furnished me with the following history of the early beginnings of the cheese industry in Canada:

A Mr. Rennie, in Oxford Co., Ontario, made cheese in his house from 80 to 100 cows before any factories started. The late Robert Tracy, of Harrietsville, was at that time connected with Mr. Rennie's farm, and helped the women to make cheese. In after years, he was owner of one of the largest and best cheese factories in Canada. The late James Harris, who married a daughter of Mr. Rennie, also assisted in making cheese at the farmhouse, which seems to have been a center for dairying at that time. We can readily believe that love-making and cheesemaking were carried on simultaneously. As the curds were stirred in the vat, there was an excellent opportunity for that pressure of the hand which carries love's message to the heart.

About 1863, the late Harvey Farrington came from Herkimer County, State of New York, and settled near Norwich, Ont. He began talking with Messrs. Harris, Galloway, Jarvis and Ballantyne about cheese factories which he had seen in operation in his native State. In 1864 these men began erecting factories in the neighborhood of Ingersoll, Ont., and the business soon began to pay. The late Mr. Caswell, of Ingersoll, was one of the first cheese-buyers to engage in the export trade.

Mr. Galloway made his own cheese, and Mr. Harris imported a cheesemaker from New York State. (This was before the alien-labor laws of modern times.) Mr. Tracey was made assistant to the American cheesemaker, and afterwards was put in full charge of the factory.

In September, 1866, Messrs. Farrington, Chadwick, Noxon, and others interested, met at the Maple Leaf factory, owned by J. Jarvis, to consider the advisability of forming a dairymen's association. This meeting was addressed by X. A. Willard, of Herkimer County, N. Y., who had been brought over by Mr. Farrington. In July, 1867, the first regular meeting of the Ontario Dairymen's Association was held. The only one living of those who attended this meeting is Mr.

Galloway, who now resides in one of the Dakotas.

From the foregoing, we see how closely the development of the cheese business in Ontario, Canada, has been associated with the pioneers of the State of New York. We are glad that this friendly feeling still exists. We in Canada are not ashamed to own our obligations to the Empire State for our first start in what is now a valuable and extensive trade.

Mr. Crawford also says that X. A. Willard went to Scotland about 1870, and learned the secret of the hot-iron test from a lady cheesemaker. I presume it was a case of a woman giving way to the "irresistible American." Mr. Tracey went to Herkimer County and got the secret from Mr. Willard, and thence it spread among all cheesemakers. It is probable that the value of the hot-iron test has been over-estimated. In early days it was useful, but in modern times it has been largely replaced by the acidimeter.

Value of Proposed Licensing.

Editor "The Farmer's Advocate":

The value of the proposed legislation to license cheese and butter makers in Ontario will depend upon the standard of qualification decided upon as necessary to secure a certificate, and upon the means and authority upon which certificates are issued or withheld. If the standard is such that a certificate will be a guarantee that its possessor is fully capable of managing a cheese factory or creamery and producing a first-class article of cheese or butter, good may come of such legislation. Unless a certificate will carry with it a guarantee of merit, and the act is properly enforced, legislation of this kind had better not be put upon the statute books.

From the standpoint of the maker, this legislation, if carefully administered, should place his business on a better footing. Under present conditions, his calling does not receive the recognition which the responsibility and close application to duty attached to it calls for. If no one is allowed to manage a cheese factory or creamery unless he possesses a certificate of qualification, the trade of a cheese or butter maker becomes of greater value to those who are licensed to engage in it. The dairy schools furnish ample opportunity to makers to qualify for a dairy-school certificate. The cost of learning the business will probably be increased somewhat, though that will depend upon the standard required. On the other hand, with the supply of makers limited to those who can qualify, it is reasonable to suppose that the rate of wages for makers would be increased.

How the factory-owner and the patron will receive this legislation, remains to be seen. Those who desire the welfare of the industry, and wish to produce a product that will command the highest price in the open market, should welcome it. If it should bring an increase in the price of making, this will be more than compensated for by the assurance the employer will receive that the man he engages to manage his cheese factory or creamery is fully capable of doing the work satisfactorily. This fact should be noted, however, that, no matter what qualifications a maker may have, he cannot be expected to turn out a first-class article from an inferior raw product, or in a factory where conditions are unsanitary, or where suitable equipment for making cheese or butter is not provided. Given a good quality of milk or cream, and a building properly equipped, with nothing lacking from a sanitary point of view, an employer will have a right to expect from the holder of a maker's certificate some guarantee that his work will be well done, and that the cheese or butter he turns out will be of the finest quality. If the proposed legislation will not do this, then it should not receive the sanction of the Legislature. W. J. W.

Keeping Milk Records.

In Great Britain, leading dairymen do not hesitate to point out the advantages of keeping regular milk records. At a Farmers' Club meeting, a short time ago, H. M. Everard, of Terling, Essex, dealt with the matter fully. A report in the Agricultural Gazette states that, after referring to the importance of good breeding, and particularly the use of a sire of undoubted milking strain, he spoke as follows regarding his herd, composed largely of grade Shorthorns:

"Our object is to provide as large a quantity of good-quality milk as possible, and, when we have obtained it, to have a record of whence it came. I fear a large majority of the dairy farmers of this country do not know which cows are paying their way and which are not. They have to depend on their head cowman for what answers are given to their questions, and it is not a very satisfactory position for any master to have to depend entirely on what is told him by his servants, without being able to verify it in any way himself. I have heard many farmers say that they quite agree in keeping milk records, but that they are rather reluctant to start, owing to the

labor which it entails. I think they would be greatly surprised at the little time and trouble it involves, and that they would be amply repaid by the pleasure they would obtain in looking through their book when the cows are doing well; and when they are not doing well, to be able to point out the individual cow to the responsible man, and obtain his reason for the difference. For any ordinary farmer, I think measuring the cow's milk one day in the week would be quite sufficient. Of course, this would not do where pedigree herds are kept, and where an accurate record is essential. On the estate with which I am connected upwards of 1,000 cows are kept, and their milk is all measured and recorded one day in the week. At the end of the year this is multiplied by seven, and the result is near enough for our purpose. Some other farmers I know of measure their milk (or weigh it) fortnightly, but I consider the weekly system the best. The time it would take (say for a herd of fifty cows) to measure and enter up in the milk-record book would not be more than three hours at the most, so the question of the time it takes ought not to be considered. I think the best way is for the farmer, his son, or the bailiff, to be present for the entire time of milking one morning and one evening every week, with a list of every cow's name, and, as the milk from each animal is measured, to record the quantity given; also a note taken at the time whether any animal has been bulled during the week. It can also be seen at the same time if any animal is off its feed, and a reason can be asked for and a note made of it. This list can be copied into a milk-record book, and, at the same time, any useful information respecting the individual cow noted.

"The average quantity of milk given by the cows here is about 650 gallons per annum. I suppose the quantity given by the cows of the country generally would be something under 600. When we realize the possibility of this being increased, by judicious management and breeding, to 700 and 800, we see the immense importance of this subject; and even when we have attained the 800 minimum, we must not stop there, as we know it is possible for cows to give 1,400 and even 1,600 gallons in the year. The largest quantity of milk we have ever had from a cow in one year was from a Shorthorn cow, which calved on October 28th, was bulled on December 17th, and dried off on September 14th, during which period she gave 1,674 gallons, and averaged, for 30 weeks, no less than 24½ quarts daily."

Retention of Afterbirth.

Editor "The Farmer's Advocate":

Have been bothered lately with a few of my cows retaining the afterbirth. Would like to know the cause, and prevention, if any. Cows are all in good condition at freshening time—exceptionally so—and calve without any trouble; calves good and strong. Always make a practice of giving warm drink after calving; scalded bran, quite thin, and do not begin to feed anything heavy until all signs of fever have abated, or from one to two weeks after calving. Have heard that raw linseed oil, one pint to a dose, after calving, was a sure method. Would any of your readers kindly give their experience?

SUBSCRIBER.

POULTRY.

Hatching of Duck Eggs.

Editor "The Farmer's Advocate":

In hatching ducks, it is well to select a quiet place, where the broody hen will not be disturbed by the laying hens; a special room for hatching purposes is best.

See that the nest has a good edge, so that the eggs will not roll out, but not deep enough so that the hen will have to jump down on the eggs. Bed it well with chaffy straw. Dust both the hen and the nest with insect powder. Always keep the sitting hen free from lice. Place from 9 to 12 eggs under each hen, according to the size of the sitter. If a special room is used, it is necessary to move the hens, as they become broody, from the laying-room to this hatching-room. To do this, it is best to move them at night, give them a few china eggs, and shut them on the new nest for a day or so, until they become settled; then give them the genuine eggs.

The hatching hens should be put off their nests every morning and evening, when feed, water, and a dust bath, should be within their reach. If the nests are in a very dry place, it is well to take a piece of factory cotton, or linen, dip in water, ring out, and spread over the eggs while the hen is off the nest, say, once or twice a week. If the eggs are set in incubators, the directions accompanying each machine should be followed as closely as possible.

When the ducks are hatched, leave them in the nest for at least twenty-four hours, then take them out and place them and their foster-mother in some clean, dry quarter, and feed them. Their first feed may be bread soaked in water, after

they get a little older, a little milk may be substituted for some of the water, and soon, fine ground oat chop may substitute the bread. Always keep plenty of clean, fresh water before them. It is not necessary that they should have enough water to swim in, but, where a swimming pond can be provided, the ducks grow much faster. Young ducks should be confined in a pen on the grass for at least a month, and then they may be allowed free run if they are not to be fattened until later; but, where they are to be marketed as soon as possible, it is not advisable to allow them to run, as they do not fatten while at large. If they are not to be marketed until later, they may be allowed free range, where, on the average farm, they will pick up almost all the food they require until time to fatten them. A yard for the young ducks can be easily made by placing a few of the boards often found lying around the farmyard in front of the coop, and driving a few stakes at the corners.

A pen like this often saves a great many ducks that otherwise would be lost, for if you watch a hen with a big flock of young ducks, living at large, you cannot help but feel sorry for her, to see how she frets about the ducks, as they seem to be so unconcerned about their foster-mother, each one going its own way quite independently, often wandering away and becoming lost, or snatched up by a merciless hawk.

Perth Co., Ont. EXPERIENCED QUACK.

Best Advertising Medium.

I have found "The Farmer's Advocate" to be the best advertising medium I have ever tried. I received more inquiries from one 15-word (30-cent) advertisement in "The Farmer's Advocate" than from a six-months' display advertisement in one of the leading poultry papers, which cost me \$10.92. I have also tried several other weekly papers, with very poor results, compared with "The Farmer's Advocate."

W. W. DODS.

Peel Co., Ont.

Poultry Producers Organizing.

At a meeting of the special poultry class at Macdonald College, the question of a Producers' Organization was discussed, and unanimously agreed that such an organization should be formed, and that all persons interested more or less in the production and marketing of poultry and eggs be eligible to membership. A committee was appointed to consider the steps necessary to forming such an association for the Province of Quebec, and instructed to proceed with the organization with the least possible delay. The committee named is Messrs. F. C. Elford (Chairman); E. A. Chapman, Emileville; Jas. A. Cochrane, Lennoxville; A. G. Taylor, Dewittville; Lorne C. Ogilvie, Brockville, Ont.; L. P. Shortall, Washburn, Ont.—these with power to add to this number.

The committee arranged to correspond with secretaries of local poultry associations in the Province of Quebec, and with prominent poultrymen, as well as with the members of Macdonald College special poultry class of 1908, asking for suggestions and their co-operation.

The object of this organization would be to encourage the co-operative spirit, to promote the interests of the poultry industry, especially in the utility branches; to disseminate information for the benefit of poultry-breeders; to assist in the sale, as well as production, of good poultry products; to bring the producer and consumer closer together; to promote good fellowship among the poultrymen, and to serve their interests in any way in which they may be helpful to co-operative effort, and to exercise all powers necessary to improve, dignify and advance the poultry industry.

It will be seen that this organization will not overlap the work done by existing societies, but should receive the hearty co-operation of such. It does not exclude fanciers from its membership, for, without such men, the poultry industry would not have reached its present proportions; but the farmer who sells fresh eggs and dressed poultry will be especially welcome, and it is with such that the organization wishes to co-operate.

The present system of selling poultry products might be improved. Through the ordinary way, eggs leaving the farmer to-day may not reach the consumer for several weeks, and the seller objects to the small price he gets for his eggs, while the buyer complains of the lack of quality he has to accept. There is no reason why there should be such a difference between the price the consumer pays and the price the producer receives. The way is too long. The two ends

might to advantage be brought closer together. For this, united effort will be necessary. Why should there not be a recognized standard of grading for poultry produce, the same as in other products? Public inspection is found necessary in fruit, and would it not be an advantage in poultry? These and similar questions should be considered, and might well be discussed by this organization.

It is hoped by the Committee that all interested in the production and selling of poultry or eggs will give their support. Some time in April a meeting will be called to meet at Macdonald College, for the purpose of organization.

The Committee will be glad to hear from all interested. Suggestions will be thankfully received if addressed to

F. C. ELFORD,
Chairman of Com.

Poultry Department, Macdonald College, P. Q.

GARDEN & ORCHARD

Fruit Conference in B. C.

Fruit inspection and freight rates stood out prominently among matters that received attention at a conference of British Columbia Fruit-growers, representatives of Boards of Trade, and Railway officials, held at Victoria, B. C., early in March. It was pointed out that leniency in regard to inspection of fruit sent into the Prairie Provinces from the Western States was responsible for injury to the market for fruit grown in British Columbia. A larger staff of inspectors was suggested. A request that the C. P. R. reduce the minimum on carload lots from 30,000 pounds to 24,000 pounds, was met by a promise of such reduction on shipments from British Columbia to points east, on mixed cars of apples, pears, fresh fruits and vegetables. J. H. Lanigan, of the freight department of the C. P. R., pointed out that the request had not been made until the season of 1908 was almost closed, or the matter would have been attended to earlier. A demand for a reduction of the minimum on car lots, consisting of prunes, plums, apricots, cherries, peaches and berries, from 20,000 pounds to 18,000 pounds, was refused, because the general practice was to ship such products by express. The growers pointed out, also, that rates from Ontario points, and from British Columbia points, to Winnipeg were not equal. R. H. Rogers, of the Okanagan District, stated that, while Ontario rates were 55 cents per cwt., they were obliged to pay 75 cents. In view of the fact that express rates were the same, it was considered that freight rates, also, should be uniform, in order to permit a fair competition on the market. A thorough investigation of market conditions led Mr. Lanigan to conclude that American fruit was the most serious competitor on Canadian markets. Washington growers shipped second-grade fruit, and made the prices so tempting that retailers of the West found it profitable to handle their product. A reduction of Canadian freight rates, he said, would not drive out that competition.

According to A. J. Alcock, of Penticton, exorbitant freight rate was not the most serious grievance British Columbia fruit-growers had to meet. It was a lack of proper methods of distributing and marketing their products. Last season he knew of fruit being sold at 3 cents a pound, and, after a freight charge of ½ cent a pound, the retail price on markets on the Canadian prairies was 15 to 20 cents a pound. He would like to know who got the difference between these figures. Arrangements should be made whereby the producers could deal direct with the consumer. J. J. Campbell, of Nelson, and J. C. Metcalf, of Point Hammond, favored co-operative exchanges or district unions, with a central association.

"Cold Storage" proved to be a very interesting topic. W. F. Stout, of the Dominion Express Co., announced that experiments would be conducted in handling soft fruits. Some suggested that the C. P. R. be asked to provide a number of cold-storage warehouses in Manitoba, Saskatchewan and Alberta, or at least a large central plant at Vancouver. Others considered that the Government should loan money for supplying cold-storage plants on similar lines to State aid to creameries.

By a small majority, it was decided to ask the Dominion Government to raise the duty on fresh fruit coming into Canada from the United States, making it equal to that imposed by the Americans. Some maintained that additional inspectors and more rigorous laws regarding marketing and grading of American-grown fruits would suffice. The Fruit Marks Act was pronounced all right, but it was thought too great leniency was exercised by those in charge.

Calendar Guide to Spraying.

BY W. T. MACOUN, HORTICULTURIST, AND ARTHUR GIBSON, ACTING ENTOMOLOGIST AND BOTANIST, CENTRAL EXPERIMENTAL FARM, OTTAWA.

PLANT.	1ST APPLICATION.	2ND APPLICATION.	3RD APPLICATION.	4TH APPLICATION.	5TH APPLICATION.	6TH APPLICATION.
APPLE. Black spot fungus, codling moth, leaf-eating caterpillars, borers, apple aphids, scale insects.	Copper sulphate or poisoned Bordeaux. Just when leaf buds open. (Important.)	Poisoned Bordeaux. Just before blossoms open. (Important.)	Poisoned Bordeaux. As soon as blossoms fall. (Important.) Alkaline wash. For borers at end May.	Poisoned Bordeaux. 10 to 15 days later.	Poisoned Bordeaux. 10 to 15 days later if spot disease is severe. Alkaline wash. For borers at end June.	Poisoned Bordeaux. For winter apples.
Kerosene emulsion, whale-oil soap or tobacco and soap wash before buds start, for aphids and scale insects; again in June when young scale insects hatch. For oyster-shell scale, spray trees late in autumn with lime wash, two coats, applying second as soon as first is dry. Lime-sulphur wash for San Jose scale.						
CHERRY. Rot, leaf diseases and injurious insects. Cut out and burn black-knot, whenever seen.	Poisoned Bordeaux. Before flower buds open. Kerosene emulsion or whale-oil soap solution. For aphids.	Poisoned Bordeaux. When fruit has set. (Important.)	Poisoned Bordeaux. 10 to 15 days later. (Important.)	Ammoniacal Copper Carbonate. 10 to 15 days later. (Important.)	If a late brood of the "cherry slug" appears, dust with fresh-slaked lime, or spray with Paris green. (Important.)	
CURRANT. Leaf spot, "currant worm," currant aphids.	Paris green. When worms appear. For aphids, kerosene emulsion, whale-oil soap solution, or tobacco and soap wash.	Hellebore. When fruit is fully formed.	Bordeaux. After fruit is picked.	Bordeaux. 10 to 15 days later.		
GOOSEBERRY. Mildew, "currant worm."	Copper sulphate. Before buds start.	Poisoned Bordeaux or potassium sulphide. (1 oz. to 2 gals. water) Just before buds burst.	Poisoned Bordeaux—Hellebore (applied separately); or potassium sulphide. 10 days later. (Important.)	Ammoniacal Copper Carbonate or Potassium Sulphide. 10 days later.		
GRAPE. Mildew, rot, anthracnose, "thrip" (or leaf-hopper).	Copper sulphate. Before buds start for anthracnose only. (Important.)	Bordeaux. Just before blossom. (Very important.)	Bordeaux. As soon as fruit has set. Kerosene emulsion. For leaf hopper (Very important.)	Bordeaux. 10 to 15 days later. (Important.)	Poisoned Bordeaux. 10 to 15 days later. If disease persists. (Important.)	Ammoniacal Copper Carbonate. If disease persists. (Important.)
PEACH, APRICOT, NECTARINE. Rot, leaf-curl, curculio, bud moth, bark borer.	Copper sulphate and Paris green. Before buds start. (Very important.)	Bordeaux. 8 lbs. copper sulphate, 3 lbs. lime, 50 gals. water. Paris green (3 ozs.). Just before blossoms open.	Bordeaux (as before). Paris green (3 ozs.) Soon after fruit has set.	Bordeaux (as before). Paris green (3 ozs.) 8 to 12 days later.	Bordeaux (as before). 8 to 12 days later. If rot is prevalent.	Ammoniacal Copper Carbonate. 10 to 15 days later. If rot is prevalent.
PEAR. Spot, cracking, leaf blight, codling moth, "slug," pear psylla.	Copper sulphate. Before buds start. (Important.) For pear psylla, lime wash in winter; kerosene emulsion or whale-oil soap.	Poisoned Bordeaux. Just before blossoms open. (Important.)	Poisoned Bordeaux. Soon after blossoms fall. (Important.)	Poisoned Bordeaux. 10 to 12 days later.	Bordeaux. 10 to 15 days later.	Paris green. If late brood of "slug" appears.
PLUM. Rot, blight, shot-hole, bud moth, curculio, aphids. Cut out and burn black-knot.	Copper sulphate and Paris green. Before buds open. (Important.)	Poisoned Bordeaux. Soon after blossoms have fallen. (important.)	Poisoned Bordeaux. 10 to 12 days later. Kerosene emulsion, Whale-oil soap, or Tobacco and soap wash For Aphids.	Poisoned Bordeaux. 10 to 15 days later. Kerosene emulsion, Whale-oil soap, or Tobacco and soap wash For Aphids.	Ammoniacal Copper Carbonate. 10 to 15 days later. If rot is prevalent.	Ammoniacal Copper Carbonate. 10 to 20 days later. If rot is prevalent.
ROSE. Mildew, leaf blight, "rose slug," "rose thrip."	Mildew in Greenhouse. Paint heating pipes with paste made of equal parts of sulphur, lime, water.	Leaf Blight. Ammon'1 Copper Carbonate. "Rose Slug." Paris green (1 oz. in 12 gals. water) or Hellebore.	"Rose Thrip." Kerosene emulsion, or whale-oil soap. When "thrip" appears.	FORMULAS OF INSECTICIDES.		
RASPBERRY, BLACKBERRY, DEWBERRY. Anthracnose, rust.	Copper sulphate. Before buds burst.	Bordeaux. 10 to 15 days later.	Bordeaux. Soon after old canes are cut out.	PARIS GREEN. For Foliage-eating Insects. Paris green 1 lb. Unslaked lime 1 lb. Water 100 gals. Dry Mixture.—1 lb. Paris green with 50 lbs. flour, land plaster, slaked lime or any other perfectly dry powder. Poisoned Bran.—Mix 1 lb. of Paris green with 50 lbs. of slightly moistened bran. Scatter on surface of soil.		
STRAWBERRY. Rust, white grubs.	Bordeaux. Just before blossoms open. For white grubs, grow strawberries on one-year system.	Bordeaux. Soon after picking season, or burn foliage.	Bordeaux. 10 to 15 days later.	HELLEBORE. White Hellebore 1 oz. Water 2 gals. Or to be dusted undiluted over attacked plants. PYRETHRUM (or Insect Powder). Pyrethrum powder..... 1 oz. Water 3 gals. Dry Mixture.—Mix thoroughly 1 part by weight of Insect Powder with 4 of cheap flour, and keep in a close vessel for 24 hours before dusting over plants attacked. KEROSENE EMULSION. For Bark Lice and Other Sucking Insects. Kerosene (coal oil)..... 2 gals. Rain water 1 gal. Soap 1 lb. Dissolve soap in water by boiling; take from fire, and, while hot, turn in kerosene and churn briskly for five minutes. For use dilute with nine parts of water		
BEAN. Anthracnose, cutworms.	Use clean seed.	Bordeaux. When rough leaves appear.	Bordeaux. At intervals of 8 to 12 days.	FLOUR-KEROSENE EMULSION. 1. Kerosene 1 quart Dry flour 8 ozs. Water 2 gals. Stir together the flour and kerosene; then add the water and churn violently for two to four minutes. (To be used immediately.) 2. Kerosene 1 quart Flour scalded in water 2 ozs. Water 2 gals. Scald the 2 ozs. of flour in water before adding the kerosene; churn as above. (Can be kept for a week or more, if necessary.) WHALE-OIL SOAP. For brown or black aphids, 1 lb. in 4 gallons water. For scale insects (young), 1 lb. in 5 gallons water. For green aphids or thrips, 1 lb. in 6 gallons water. For San Jose scale (in winter), 2 lbs. in 1 gallon water. TOBACCO AND SOAP WASH. Soak in hot water for a few hours, 10 lbs. of tobacco leaves (home-grown will do); strain off and add 2 lbs. of whale-oil soap. Stir until all is dissolved, and dilute to 40 gallons. Apply early, and two or three times at short intervals.		
CABBAGE, TURNIP. Flea-beetle, caterpillars, aphids, root-maggots.	Paris green—dry mixture. For flea-beetle immediately plants appear above the ground. For root-maggots, tarred-paper disks around stems of cauliflowers, etc., and Hellebore or Pyrethrum infusion at roots when set out.	Pyrethrum—dry mixture. For cabbage worms.	Kerosene emulsion, or Soap washes. For aphids.	SOAKING TUBERS. Soak tubers in solution of formalin. For scab.		
POTATO. Scab, blight and rot, insects.	Keep foliage constantly covered with Bordeaux throughout season.	Paris green. 1 lb. or more to 80 gals. water. For Colorado potato beetle. Bordeaux for flea-beetle.	Poisoned Bordeaux. For rot and beetles. From 15th July till end of season, two weeks apart. Keep foliage covered.	ASPEN. Keep foliage constantly covered with Bordeaux throughout season.		
CELERY. Rust.	Bordeaux and Resin soap. Before rust appears in latter half of July and 2 to 3 weeks later (not very satisfactory). Burn tops in autumn.	Bordeaux. On first appearance of rot.	Bordeaux. When necessary.	TOMATO. Rot, blight.		
ASPARAGUS. Rust.				TOBACCO AND SOAP WASH.		
TOMATO. Rot, blight.				TOBACCO AND SOAP WASH.		

NOTE—All the above recommendations are dependent on weather. If heavy rains falls within 24 hours, applications should be repeated. Always wash out thoroughly with clean water all pumps and nozzles immediately after using. The gallon mentioned above is the Imperial gallon.

(Continued on next page.)

LIME WASH.

Unslaked lime ... 1 to 2 lbs.
Water ... 1 gallon.
Strain through sacking before spraying.

LIME-SULPHUR WASH (WINTER WASH).

For San Jose Scale and Fungous Diseases.
Lime ... 20 lbs.
Sulphur, powdered ... 15 lbs.
Water to make ... 40 gals.

Slake the lime with only enough water to do it thoroughly. Add the sulphur by dusting it over the lime while slaking; stir well, and boil for at least an hour, adding only so much hot water as is necessary for easy stirring. When thoroughly cooked, strain through sacking, and apply warm.

LIME-SULPHUR-SODA WASH.

Lime ... 25 lbs.
Sulphur, powdered ... 12½ lbs.
Caustic soda ... 5 lbs.
Water to make ... 40 gals.

Put the lime in a barrel; add enough hot water to make it boil rapidly; while slaking, stir in the sulphur, previously made into a thin paste with hot water; then add the caustic soda, dissolved in hot water. Add more water as required to prevent boiling over, and stir briskly all the time. When all bubbling ceases, add hot water to make up 40 gallons.

Cook sulphur washes in iron pots or by steam in wooden vats or barrels; never use copper vessels, either for cooking or for spraying sulphur washes from.

ALKALINE WASH.

For Borers.

Soft soap, reduced to the consistency of thick paint, by the addition of a strong solution of washing soda in water. If applied with a brush about the first of June, on the morning of a warm day, this will dry in a few hours, and form a tenacious coating not easily dissolved by rain. If one pint of crude carbolic acid to the gallon of wash be added, it will make it more effective.

Formulas of Fungicides.

BORDEAUX MIXTURE.

For Fungi.

Copper sulphate (bluestone) ... 4 lbs.
Unslaked lime ... 4 lbs.
Water (1 barrel) ... 40 gals.

Dissolve the copper sulphate (by suspending it in a wooden or earthen vessel, containing 4 or 5 or more gallons of water). Slake the lime in another vessel. If the lime, when slaked, is lumpy or granular, it should be strained through coarse sacking or a fine sieve. Pour the copper-sulphate solution into a barrel, or it may be dissolved in this in the first place; half fill the barrel with water; dilute the slaked lime to half a barrel of water, and pour into the diluted copper-sulphate solution, then stir thoroughly. It is then ready for use. (Never mix concentrated milk of lime and copper solution.)

A stock solution of copper sulphate and milk of lime may be prepared, and kept in separate-covered barrels throughout the spraying season, but Bordeaux mixture deteriorates with age, and should be used as soon as made. The quantities of copper sulphate, lime and water should be carefully noted.

To test Bordeaux mixture, let a drop of ferrocyanide of potassium solution fall into the mixture when ready. If the mixture turns reddish-brown, add more milk of lime until no change takes place.

POISONED BORDEAUX MIXTURE.

For Fungi and Leaf-eating Insects.

To the 40 gallons of Bordeaux mixture prepared as above, add 4 to 8 ounces of Paris green.

For Potato Rot.

Instead of 4 lbs. copper sulphate, use 6 lbs.; and for potato beetles, 8 ozs., or more, of Paris green may be used, instead of 4 ozs. in 40 gallons of wash.

SODA-BORDEAUX (BURGUNDY MIXTURE) FOR POTATO BLIGHT AND ROT.

Copper sulphate (bluestone) ... 6 lbs.
Washing soda (carbonate of soda) ... 7½ lbs.
Water (1 barrel) ... 40 gals.

Dissolve copper sulphate as for Bordeaux mixture. Dissolve 7½ pounds washing soda in 4 gallons water. Pour the copper-sulphate solution into a barrel, half fill the barrel with water, then stir in the solution of washing soda, and finally fill the barrel with water. It is now ready for use. The soda-Bordeaux adheres better to the foliage when freshly made than the ordinary Bordeaux mixture, but it deteriorates rapidly in this respect, and must be used as soon as made. If left standing for 24 hours it will have lost

nearly all of its adhesiveness. The soda-Bordeaux is not recommended in preference to the ordinary Bordeaux mixture, but where lime cannot be obtained it may be used with good results. Furthermore, on account of its freedom from gritty matter, there is less likelihood of the nozzles becoming clogged when it is used. As washing soda is more expensive than lime, this mixture costs a little more than the ordinary Bordeaux mixture.

Note.—If the soda-Bordeaux is used for spraying fruit trees, the formula is: Copper sulphate, 4 lbs.; washing soda, 5 lbs.; water, 40 gallons. Arsenical poisons should not be used with soda-Bordeaux.

RESIN SOAP.

Resin ... 8½ lbs.
Washing soda (sal soda, carbonate of soda) ... 6 lbs.
Water ... 4 gals.

Dissolve 6 pounds of washing soda in 4 gallons of hot water, and then bring the solution to a boil. In another vessel melt 8½ lbs. resin. When the latter is melted, pour it slowly into the boiling soda solution until all the resin is added, stirring it well at the same time. After all the resin is added, continue boiling for one hour, or until a homogeneous mixture is obtained. If properly made, this will mix well with water or Bordeaux mixture. As some water will be evaporated in boiling, sufficient should be added to make the stock mixture 4 gallons.

Two quarts of the above stock mixture should be used with 40 gallons of Bordeaux mixture.

Resin soap may be added to Bordeaux mixture (2 quarts to 40 gallons), and makes it adhere better to foliage.

COPPER-SULPHATE SOLUTION.

For Fruit Trees Before Buds Burst.

Copper sulphate (bluestone) ... 1 lb.
Water ... 20 gals.

As soon as dissolved it is ready for use. Use only before the buds open. To destroy wild mustard, spray before bloom, with 5 lbs. in 20 gallons.

AMMONIACAL COPPER CARBONATE.

Copper carbonate ... 5 ozs.
Ammonia ... 2 qts.
Water (1 barrel) ... 40 gals.

Dissolve the copper carbonate in the ammonia. The ammonia and concentrated solution should be kept in glass or stone jars, tightly corked. It is ready for use as soon as diluted with 40 gallons water. To be used when Bordeaux cannot be applied, on account of staining the fruit.

FORMALIN.

For potato scab, soak the whole tubers before cutting up or planting.

For 2 hours in a solution of commercial formalin (formaldehyde), 8 ozs. in water, 15 gallons; or 1 oz. in water, 2 gallons.

For smut in small grains, soak the seed for two hours in formalin solution, 16 ozs. in 40 gallons water, before sowing.

Australian Onions for Canada.

Writing to Trade and Commerce Report, D. H. Ross, of Melbourne, Australia, says: Melbourne exporters of the "Brown Spanish" variety of onions have for some time past been completing arrangements with Canadian buyers to increase this season's exports to Vancouver and other points in Western Canada. Early in March the onions have matured sufficiently to carry long distances, although some are even now being marketed and exported. The quality of Victorian onions has established a superior name wherever exported. The total production for this season is estimated to be 20,000 tons, of good quality, but the size is smaller than usual, owing to lack of rain in the growing districts. The demand for cargo on the Vancouver steamers for shipment of onions and produce has caused cables to be sent from Melbourne to Canadian buyers that no space is now available for March shipment.

High Prices for Potatoes.

The potato crop is dealt with in a letter to Ottawa from J. S. Larke, Trade Commissioner at Sydney, N. S. W. He writes: The Tasmanian crop of potatoes, from which New South Wales and Queensland draw its largest supplies, is estimated to be 11,000 tons, as against 16,000 tons of the previous year, and merchants have already advanced prices, and claim that the prices will continue very high. There seems to be some truth in this, though it is not unusual for sellers to raise this cry as the crop is going into the market. The possibilities are that there may be a demand for Canadian potatoes next October, though the autumn and spring crops of this State and of Queensland are yet to be reckoned with.

Farmer's Lawn and Flower Garden

Editor "The Farmer's Advocate":

Many a busy farmer will say, "I have no time to fool with a law or flower-garden." Well, perhaps he has not; but to such as love the beautiful, there is a very strong appeal in a well-kept lawn. Did you ever sit out on your front veranda, after the smoking shower had passed, and let the mingled incense from the climbing honeysuckle and rose-bed steal over your senses? When taking a noonday rest in the shade, do you like the healthy, resinous odors of the cedars, spruce and pines? How interesting, on a peaceful Sunday morning, to stroll around the lawn and note each opening bud and blossom, and learn the development of each particular tree and shrub! And even in the busy season of harvest, you will find five minutes at noon or supper time to steal out to look at the bed of new gladioli that you planted in the spring—such variety, such diversity of colors! You will gradually learn that there are other things on this earth worthy of attention, besides dollars and cents.

In planning a lawn, much depends on local circumstances, but there are a few simple rules to remember. First in importance is this: Mass your shrubs and trees on the borders, leaving an open space of grass towards the center, and do not plant trees or flower-beds indiscriminately all over the lawn, making it look like a checker-board. Plant the tall-growing shrubs and trees in the background, and the smaller ones in the foreground.

My experience may perhaps be a help to those thinking of making a lawn.

On the north side of the house, stretching from the road to the barn, a distance of a hundred yards or more, we planted a wind-break of Norway spruce. A little care in planting this evergreen is well worth the extra time. We plowed a ridge about eight feet wide, throwing it up high in the center. Holes were dug twelve feet apart, and the trees set carefully. A top mulch of long, strawy manure was spread over the whole ridge from end to end. This kept down the weeds and grass till the trees were able to fend for themselves. They have not been set out more than twelve years, and the limbs are interlocking. It is a good plan to check them every four or five years by cutting back the top. This forces them to make lateral growth, and they will make much shapelier trees, and be much longer-lived than if uncut.

In planting a hedge, the best material is cedar—the common Arbor-Vitæ of our swamps. We worked the ground thoroughly, so as to get it fine, then opened up a big double furrow where we wanted the hedge, throwing the dirt to right and left. Trees were then obtained from a swamp about 12 miles away, and planted 16 inches apart in the furrow. Large balls of muck were dug up with each cedar, so that the roots were disturbed as little as possible. The dirt was then shovelled into the furrow, and carefully worked firm around the trees. Of all thus planted (there were nearly 500), not one died. The swamp where the trees were obtained was very open, and the cedars were not shaded, but exposed to full sunlight. Cedars from a dense swamp, where the sunlight would be excluded, would not be worth planting.

In seeding down the lawn, we used a mixture of Kentucky blue grass and white clover—about half and half. This makes a nice sward, and the clover remains green during the dry weather, when the blue grass is liable to turn yellow. During May and June the lawn requires mowing once a week (twice a week is better if you have the time), but, during July and August, if the weather be dry, once every two weeks will do. Get a good lawn mower at the start. A 16-inch, four-knife, high-wheel, ball-bearing machine can be bought for about \$9.00, and you will not regret the price when you come to use it.

Now as to shrubbery, and how to plant it. Group the shrubs. It will give much better effect. Low-growing evergreens are very interesting, and need little care. *Retinospora Plumosa* is a beautiful thing, and I find it perfectly hardy; *Retinospora Filifera* is a good companion to it. *Arbor-Vitæ Pyramidalis* is a monument of green, and takes up but little room. Hovey's Golden, Ellwanger's, Vervoeen's, Golden, and Tom Thumb, are all interesting varieties of *Arbor-Vitæ*, and are perfectly hardy. The Irish Juniper is a handsome evergreen, but will not stand the winter in this section. Blue spruce is a pretty evergreen, with leaves as sharp as needles, unlike the Norway variety. Among deciduous shrubs, I have tested the following, and found them hardy, and easy of cultivation: Persian Lilac, *Viburnum* (both the common and the Japanese variety), *Spiræa Van Houttei*, *Spiræa Anthony Waterer*, *Deutzia*, *Pride of Rochester*, *Weigelia* (*Rosea* and *Varietata*), *Climbing Honeysuckle*, and *Hydrangea Grandiflora*, *Purple Fringe* or *Smoke Tree*. The *Althea* or *Rose of Sharon* is very pretty, but will not stand the winter. *Clematis Paniculata* is a good climber for covering a trellis or veranda, and is free from insects and blight. *Clematis*

Jackmanii is fine, but, in common with all the large-flowered clematis, is subject to blight, and consequently very uncertain. Ampelopsis Veitchii, or Boston Ivy, is a fine climber, but, unfortunately, is rather tender, and when killed back the vines make an unsightly patch on a brick wall.

For the flower-lover, a rose-bed has a strong attraction. The soil must be deep, rich, and well spaded, with good drainage. For bedding roses, I have found the following good: First and foremost, Gen. Jacqueminot; then Mrs. John Laing, Salet, Glory of Mosses, and Madame Plantier. For climbing roses, the following are satisfactory: Crimson Rambler, White Rambler, Dorothy Perkins, Queen of Prairie. Yellow Rambler is a humbug; it is shy of flowering, and will not stand the winter, even with protection. For winter protection, I find evergreen boughs or old canvas the most satisfactory. I have found by experiment that it is not the extreme cold that kills, but the hot sun shining on the frozen wood. Anything that will serve to protect the bushes from the winter's sun will bring them through successfully. I tie up the bedding roses into a compact bunch, and then lay them down, holding them in position with a few stove-wood sticks; some old canvas is then thrown over them. The climbers may be covered where they are, or else taken off the trellis and covered. A good plan is to train on chicken netting, and then the netting can be unhooked and put down, together with the rose canes, so that there is no danger of breaking the canes.

For early-spring flowering a bed of bulbs is very desirable. They are very little trouble, and will continue to flower for several years with one planting.

Narcissus are perhaps the most satisfactory of spring flowering bulbs. If planted in good ground, and given an occasional top-dressing of manure, they will practically never run out. They should be left undisturbed in the same place for ten or fifteen years. I have seen the old yellow, double narcissus of our grandmothers' gardens flowering successfully in an orchard, although surrounded by tough sod. They must have been planted in this place full forty years ago. Tulips and hyacinths, if planted in good rich, well-drained soil will last for three years, without serious deterioration, but will finally run out, even with the best cultivation.

Among the summer-flowering bulbs, gladioli are the most satisfactory. They are as easily grown as potatoes, and if planted at intervals of two weeks, will furnish a succession of bloom for a long time. Groff's Hybrids and the Childs varieties are the finest. Lemoine's Hybrids resemble orchids in the variety of their colors. Dahlias are fine for cut flowers. A large bouquet of dahlias or gladioli on the dinner table lends an added interest to the meal.

Among the old-fashioned perennials, Sweet William and hollyhocks are good. Perennial phlox, calliopsis lanceolata, golden glow, lemon lily, platycodon grandiflora and perennial daisies make a bed that will hold your interest all summer.

Among herbaceous plants, the peonies are par excellence the plant for the farmer's lawn. Running from deep crimson to pure white, and extending over a whole month in their flowering season, they form a fine ornament, either singly or in clumps. They are hardy, unaffected by drouth, and free from insects. Once planted, they can be left for ten years undisturbed. A very interesting plant is the Yucca, or Spanish Bayonet. It is hardy, almost evergreen, and a very effective decorative plant during the summer.

Among annuals, asters, stocks, petunias, portulaca, sweet peas, and a host of other beautiful things, are desirable, but, as they have to be planted every year, they take more time. Hence, I have found it desirable to rely for effect principally on perennials, and flowering shrubs, with a background of evergreens.

These few notes are taken from my personal experience. I do not pretend to a professional knowledge of the florist trade, but am simply an amateur flower-lover. I manage to snatch a half-hour now and then from the farm work to look after the shrubs and trees.

Apart from the real pleasure a lawn and shrubbery gives to its owner, it has a real commercial value. How many hundred dollars' value will a neat, well-kept lawn add to the value of a farm? This is a question that can well be left with each reader to solve. W. E. WILLIAMS.

Middlesex Co., Ont.

Monthly Meetings at Ottawa.

The Ottawa branch of the Ontario Vegetable-growers' Association have arranged a series of monthly meetings, to be held the second Tuesday of each month, except June, July and August, at 8 p. m. in Allan's Hall. In addition, prizes are offered for competitions as follows: Radishes, in April; rhubarb, in May; musk melons, in September; fruit, in October, and potatoes, in November.

Ornamental Planting.

I wish to plant an ornamental hedge around my lawn, and I am undecided what kind to plant. Some recommend Arbor-Vitæ, some recommend California Privet, and others recommend Barberry. I am writing you to see which you would recommend—one that would stand the climate of Essex County.

Ans.—Any of the plants you mention would make an excellent hedge, and are all hardy in your district. For this purpose, the plants should be set from two to three feet apart.

I may say, however, that the plan suggested, of shutting in a lawn with a hedge is not a desirable one. I would recommend, instead, grouping shrubs in clumps or groups, so that they will appear natural, rather than putting them in a formal hedge, which always requires more or less attention in the way of trimming, and, if neglected, or any of the plants fail, the hedge soon becomes unsightly.

A far more natural and pleasing effect can be obtained by grouping together a number of kinds of flowering shrubs at the sides of the lawn, and leaving the center more or less open, with unobstructed view from the front of the house. Even if a hedge or screen is wanted, it could be made by planting together a number of kinds of flowering shrubs in a somewhat irregular line, which will answer the purpose of a hedge or screen, and yet not appear so formal as a straight-line hedge.

O. A. C. H. L. HUTT.

Preparing Lime-sulphur Wash in Quantity.

Editor "The Farmer's Advocate":

The preparation of lime-sulphur wash must be considered from two standpoints: from that of the fruit-grower who requires a large amount of the mixture for his extensive orchards; and from that of the small orchardist, who needs only small quantities. The formula generally recommended, of 20:15:50 (meaning 20 pounds lime, 15 pounds sulphur, and 50 gallons water) will probably be used in both cases; but, whereas the large grower will require a special and expensive plant to boil the mixture, the small grower can do very well with a large iron kettle. The method of preparation in the latter case is, briefly, as follows: Place the lime in the kettle. Add hot water gradually in sufficient quantity to produce the most rapid slaking of the lime. When the lime begins to slake, add the sulphur, and stir together. After slaking has ceased, add more water, and boil the mixture one hour, keeping the mixture covered, if possible, to save the heat. As the sulphur goes into solution, a rich orange-red or dark-green color will appear. After boiling sufficiently, add water to the required amount, and strain into the spray tank.

In the above method of preparation, direct heat, obtained from a fire under the kettle, has been used, and, although the resultant mixture should be perfectly satisfactory if properly done, it is obvious that only small quantities can be prepared at a time, and that large growers will require a method of obtaining a much greater amount in the same time. This is accomplished by the use of steam generated by any large steam boiler, the well-known steam engine used with threshing outfits suiting the purpose admirably.

In this immediate neighborhood, an association, comprising eight fruit-growers, was formed in 1907, with a view to erecting and operating one of these steam outfits, and it has worked so well that I am glad to give you details, if you consider they will be of value to your readers.

In the first place, all members of the association were required to take equal shares, whether their individual requirements would amount to 10 barrels or 100 barrels, and any future expense in keeping the plant in order was to be borne equally. A president and a secretary-treasurer were elected, and the association has been carried on on a thorough business basis.

The plant was built by the side of a concession road, easy of approach, and accessible to water; in fact, the platform straddles the stream from which the water is obtained. In general, it consists of a strong platform holding three large vats on one side, and on the other side (and on the large platform) a smaller platform holding two large casks for hot water, and high enough so that the bottoms of the casks are on the level with the top of the vats. These are all fitted with the necessary pipe and hose connections for filling and emptying the vats and casks, and, during the spraying period, a 20-horse-power threshing engine is rented, which furnishes the necessary steam for boiling the mixture, and also power for raising the water from the stream into the receptacles above. It should be noted that, after the water is pumped up by the engine, our casks and vats are so arranged that all the emptying is done by the force of gravity.

The platform is 17 ft. 9 in. long, by 13 ft. 3 in. wide, and is constructed of 2-in. hemlock plants. It stands 6 ft. 8 in. high, and is supported by heavy cedar posts. The smaller plat-

form is 6 ft. 2 in. long, by 2 ft. 6 in. wide, of lighter construction, and, as said before, is carried high enough so that the bottom of the barrels are on a level with the top of the vats. The vats are 40 inches high, with a middle diameter of 51 inches—both inside measurements. The capacity of each is 353.8 gallons, or seven barrels of 50 gallons each. The casks are discarded olive casks, which were obtained from a grocer in Hamilton, and have a capacity of about 175 gallons each. The main steam-pipe from the engine is one inch in diameter, and the arms leading from it to the casks and vats are 1/2-inch. The discharge pipes from the vats are 2 inches in diameter. The best globe and gate valves are used, the latter being made of brass. Rubber hose is used to connect the casks with the vats, and to discharge the mixture into the spraying tanks.

The following is a detailed account of the cost of our boiling plant:

2 Casks (200 gals. and 150 gals.) for hot water	\$ 5.50
3 Vats (350 gals. each) for boiling	31.50
Lumber and timber for platform	22.00
Nails	1.75
5 1/2-inch globe valves	6.00
2 1-inch globe valves	4.20
3 2-inch gate valves, to empty vats	11.25
Elbows, couplings, lock-nuts, etc.	3.00
1/2-inch, 1-inch, and 2-inch pipes	6.50
25 Ft. 2-inch rubber hose	8.75
8 Ft. 1-inch rubber hose	2.40
2 Strainers	3.25
Hinges, screens, etc.	1.00
Labor	30.00
	\$137.10

Now for the preparation and operation. We used sublimed sulphur, which we are buying this year at \$1.88 per cwt., delivered at the plant, and the best lime obtainable in Hamilton, costing 25 cents per bushel, delivered. Our formula is 15:14:50 (being 15 pounds lime, 14 pounds sulphur, and 50 gallons water), and, as far as we know, it has given good results. The required quantity of lime is first dumped into the vats, then 50 gallons of hot water from the casks run into each vat to slake the lime; the sulphur is added while the lime is slaking, and the whole is stirred well. More water is added, and the boiling continued for an hour. All the water is pumped up through the engine, and is hot before entering the vats, so that the addition of the water does not stop the boiling. When the boiling is completed, the mixture is discharged into the spraying tanks through 2-inch rubber hose, a fine wire strainer being used over the opening into the tank to keep out as much sediment as possible. As an insecticide, the mixture is most effective when applied warm, but we have experienced so much trouble from the destruction of washers if the mixture is used directly as it comes from the vats, that we shall this season boil the mixture double strength, and in a spraying tank of 100 gallons capacity use 50 gallons of cold water to 50 gallons of the boiling mixture. We tried this method last season, and experienced no trouble with our spraying apparatus; and, besides, the mixture adhered as well and as evenly to the trees as when no cold water was used.

The estimated cost per barrel for two seasons' operations has run slightly over 60 cents. Last season this cost was distributed or itemized as follows:

Sulphur	26.3
Lime	7.5
Rent of engine and labor	20.0
Coal	7.2
	61.0

This cost per barrel does not include depreciation of plant, which we estimate at 20 per cent. per annum, and which is charged to capital account.

The number of barrels required for a five-acre orchard of six-year-old peach trees will depend on several circumstances, such as number of trees in orchard, thoroughness of spraying, kind of nozzle used, and degree of pressure on spraying machine. Suppose the trees are planted 18 x 18 ft., we will have 670 trees in five acres; and, with a continuous pressure of about 100 pounds, I should estimate that about 500 gallons, or 10 barrels, would be required.

With reference to the question of direct heat versus steam as a means of boiling the mixture, I should think either way would be satisfactory if properly employed. My experience has been only in connection with steam boiling, and I cannot speak with authority, but it seems to me mainly a question of convenience and cost, as viewed from the two standpoints previously mentioned.

I am indebted to Major J. E. Orr, Secretary-Treasurer of our association for the figures given above, relating to cost of plant and operation expenses. R. H. DEWAR.

Wentworth Co., Ont.

A Novel Pomological Banquet.

The writer recently had the pleasure of attending a banquet given by the Connecticut Pomological Society, in connection with their annual meeting at Hartford, which was so unique, and such a pleasant feature of their meeting, that he is tempted to report it for the benefit of his friends in Canada, who might find it worth adopting in some of their fruit gatherings. Perhaps it might as well be admitted at the start that the writer believes very strongly in the value of the "social" side of our annual meetings. The fact that a meeting gives him a chance to get better acquainted with such men as Father Burke, R. W. Starr, George Vroom, Chip Parker, and W. T. Macoun, has usually a greater influence in making the meeting attractive than the actual part these men may take in the programme. And the fact that a banquet offers an opportunity for this social side to be brought to the front, is the chief reason why he believes that it has a legitimate place at our larger fruit meetings. But it should not be inferred that eating and getting acquainted, and having a good time, are the only functions of such a banquet. With the right kind of speakers after it, and with the right kind of a menu, such as the Connecticut meeting provided, the strictly educational side is very much in evidence, too.

The general plan of the menu for the banquet was to have fruits (particularly the apple) and nuts appear in every course. The menu follows:

MENU.

Steamed Apples.	De Laval Sauce.
	Connecticut Style.
SOUP.	
	French Nut.
	Kellogg-Battle Creek Style.
ROAST.	
Protose, with Dressing.	Apple Sauce.
ENTREE.	
Hickory Chop.	Jelly. Fritter De Pom.
SALAD.	
	Pomological.
DESSERT.	
Peach Dumpling, Hale Sauce.	Apple Pie—
	(The Kind Our Mothers Made).
Ice Cream—Orchard Style.	Nuts. Raisins.
Apple Juice.	Coffee. Grape Juice.

Most of these "dishes" are self-explanatory, or at least easily guessed, and the thing could be varied in many directions; but I am sure that everyone who attended got new ideas as to the ways of cooking fruits, especially the apple, and that if the scheme could be generally adopted, it would really lead to an increased consumption of these fruits. I know it has in my own household.

As to the after-dinner speeches, the value of that feature would depend a good deal on the speakers, of course, but I believe that if a systematic attempt were put forth, they could be made not only interesting and entertaining, but of practical value. The writer recalls a session of the American Pomological Society where five-minute speeches were given, (and the presiding officer kept the speakers rigidly to the time), each speaker taking as his theme his "ideal" of some subject or institution. "The Ideal Market Apple," "The Ideal Grape," "The Ideal Fruit Show," etc., were discussed. Some such scheme might be carried out at a pomological banquet, to make it both profitable and pleasant.

At the Connecticut meeting, such speakers as H. W. Collingwood, Editor of Rural New Yorker; Prof. John Craig, of Cornell, and E. S. Fullerton, of the Long Island Railway, insured a lot of bright and interesting remarks. And, with J. H. Hale for toast-master, there was "something doing" all the time. I shall hope to hear that some of the Provincial fruit-growers' meetings of Canada try this plan next winter.

F. C. SEARS,

Department of Pomology, Amherst, Mass.

Tree Planting in the West.

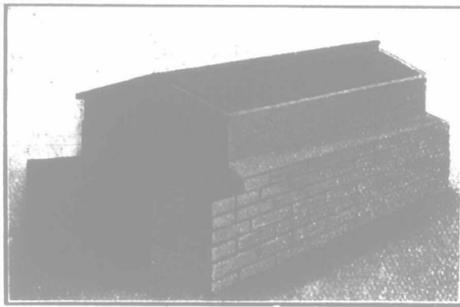
Following an announcement made by Norman M. Ross, Indian Head, Sask., Chief of the Dominion Tree-planting Division of the Department of Agriculture, regarding applications for trees to be planted for shelter or forest purposes, 2,500,000 trees will be distributed to settlers in Manitoba, Saskatchewan and Alberta this spring. These trees will be divided among about 2,500 farmers. It is expected there will be on the application list at Indian Head this summer in the neighborhood of 5,000 settlers, and it is hoped that the majority of these will be supplied with trees for planting in the spring of 1910 or 1911. Applications which, through delay, did not reach Indian Head until after the first of March, will be held over and filled in for 1911.

Lime-sulphur Pan-boiled.

Editor "The Farmer's Advocate":

Lime-sulphur wash can be prepared by rigging a threshing engine, and attaching a pipe from some point on the boiler, extending it out to one side, and arranging half-inch pipes to convey the steam into barrels or tanks, and boil by steam. But this is not necessary. Lime-sulphur can be boiled equally well with fire heat, and it saves time to have the boiling plant at home. An agricultural boiler can be used, but many fruit-growers are using the flat pan, made by placing 2 x 12 in. plank, 6 ft. long for sides, and 3 ft. long for ends, and nailing sheet iron of, say, No. 20 gauge for bottom, and setting this on a fireplace built of brick and cement, or concrete walls. The base should be a trifle narrower than the pan, so that the plank sides will come well over on the wall, away from fire and heat. The walls should be from 6 to 8 inches thick, and from 15 to 18 inches high, to allow for ashes to accumulate, and to put in limbs and rough wood for fire. At the back end, build a thimble in the wall, in which to set a stovepipe and elbow for draft. The back end of the pan should be built three inches lower than the front, and a spout or tap arranged to run off the liquid after it is boiled; or it can be all lifted out at last with a scoop shovel, if no tap is placed. Arrange either for a flat cover, with a hole for hoe to stir, or have a pointed roof cover, as shown in the accompanying illustration.

Begin by bringing to a boil 16 gallons of water; take 18 pounds of No. 1 ground sulphur, mixed with warm water to form a paste; pour into the pan of boiling water; then throw in 20 pounds of good calcium, unslaked lime; stir occasionally while the lime is slaking. Add a little water if the mixture threatens to boil over. Boil well for one hour, stirring occasionally. At the last, add more water to bring the quantity up to 45 or 50 gallons when in the spray barrel. Strain well when putting into spray tank, using a strainer 50 meshes to the inch. If using a 100-gallon spray tank, add double of above ingredients and 32 gallons of water, and enough can be boiled to fill tank.



Inexpensive equipment for boiling lime and sulphur by means of bottom heat. Boiling on a large scale is done by the use of steam from a boiler.

By using the fire-box, as above described, the mixture can always be kept warm. If rain or storm stops spraying, no time is lost going to a distant boiling plant and waiting for your turn to get a supply of the mixture. If mixture has been boiled strongly for one hour, it should be a dark-amber color, with sometimes a greenish color, when cooked enough, and no free sulphur would appear. The approximate cost of this boiling equipment would be: Two planks 2 x 12 in., 6 feet long, and two planks 2 x 12 in., 3 feet long (36 feet), \$1.00; one sheet of No. 20 sheet-iron, 30 in. by 6 ft., \$1.25; cement and bricks, \$2.75 (labor extra); total, \$5.00.

One barrel of mixture—18 pounds sulphur, at 14 cents, 32 cents; 20 to 22 pounds lime, at 25 cents per bush., 8 cents; total, 40 cents. Fuel and labor, extra.

The cost of home preparation, after rigging up, is small, and will not exceed 50 to 60 cents per barrel. When a batch is cooked, it can be run off and put into a barrel, and held until wanted, but must be kept warm, and another batch prepared.

One acre of apples will contain 40 good-sized trees, and one barrel of mixture will spray 12 trees. An acre of peaches will contain from 100 to 120 trees, a proper distance apart, and one barrel will spray from 24 to 30 trees well. Always spray with the wind, spraying one side, and then waiting until the wind changes nearly opposite before you spray the other side. All spraying can be better done on good breezy days, especially high trees. Lime-sulphur wash makes the trees take on a new appearance, and sticks on the bark for one year. It cleans them of all fungus growth and injurious scale and insects.

Lincoln Co., Ont. ROBERT THOMPSON.

Vegetable Varieties for Farmer's Garden.

Progressive farmers in all parts of Canada each year devote at least a small area of the choicest land to the production of garden crops. From an economic, as well as a health-giving standpoint, home-grown vegetables cannot be dispensed with. Experienced growers, and particularly those who grow garden crops for commercial purposes, already have a supply of seed, and many have young plants of many crops well started. Reliable seedhouses, as a rule, recommend standard varieties, and a selection according to advice given, and cultural methods as directed, generally give satisfactory results. It must not be forgotten that the garden plot should be a rich, well-drained loam, free from weeds, and that a well-pulverized seed-bed is essential. Opinions differ among individuals as to choice varieties, but a canvas of prominent growers and leading authorities shows that certain standard sorts are popular all over the country. It may be well to consult a neighbor who has had a wide experience, but, for general planting, there will be little disappointment from a selection of the following:

Asparagus.—Conover's Colossal ranks highest, but in some districts, where rust is prevalent, Palmetto or Argenteuil are planted.

Beans.—For early crop, Kenney's Rustless Golden Wax and Wardwell's Kidney Wax. The former is fairly resistant to anthracnose and rust. Of the green-podded varieties, Stringless Green Pod is best. Burpee's Bush Lima stands first among the dwarf autumn varieties. Refugee can be used to lengthen the season.

Beets.—Among the Globe sorts, Egyptian Turnip is a favorite for early crop, followed by Eclipse. Black Red Ball, a very dark beet, is also popular. Long Smooth Blood is the best of the long beets.

Borecole or Kale.—Dwarf Green Curled Scotch is best.

Brussels Sprouts.—Improved Dwarf gives most satisfactory returns.

Cabbage.—A satisfactory succession can be produced by using Early Jersey Wakefield and Late Flat Dutch. Some plant Succession for medium crop. Other choices include Winningstadt for early, and Danish Round Head and Savoy for late. Houser is a late variety, rather coarse, but freer from disease than the others. Mammoth Rock and Red Dutch are good red cabbages.

Carrots.—Chantenay and Danvers are strong rivals in general popularity.

Cauliflower.—Early Erfurt and Snowball are among the best. Some recommend successive plantings and the use only of the former.

Celery.—Paris Golden Yellow is best for general planting. White Plume comes in earlier, but is not of high quality. For winter use, Giant Pascal and Evan's Triumph rank highest.

Citron.—Colorado Preserving.

Corn.—Authorities recommend successive plantings of Golden Bantam, on account of its earliness and superior quality. Other popular varieties include White Cory for early, and Country Gentleman for late crop.

Cucumbers.—White Spine is best for slicing, and Westerfield Chicago Pickling for pickling purposes.

Egg-Plant.—New York Improved is a special favorite. Some select Long Purple or Black Beauty.

Kohl Rabi.—Early White and Purple Vienna are standard varieties.

Lettuce.—For outdoor culture, Black-seeded Simpson and Hanson rank highest. For greenhouse forcing, Grand Rapids stands first.

Musk Melons.—There are many varieties of excellent quality. Hackensack, a large and early melon, is desirable for early market. Montreal Market is a favorite for main crop. Rocky Ford, a green-fleshed, and Emerald Gem, a yellow-fleshed are also good standard sorts.

Onions.—Yellow Globe Danvers and Red Wethersfield stand out prominently in every garden. Where transplanting is practiced, Prize-taker can be used to advantage. For pickling purposes, Silverskin is commonly used.

Parsley.—Champion Moss Curled, or other varieties recommended by reliable seed houses.

Parsnips.—Hollow Crown is recognized in all parts of Canada as being the best.

Peas.—Alaska is the best hardy pea for first planting. Nott's Excelsior, also, is good. Gradus is satisfactory for home use, and profitable for market. Stratagem is a standard late variety. Telephone is preferred as a late, tall-growing sort.

Peppers.—Cayenne and Chili, two small-fruited kinds, are the best for Canadian conditions. Early Neapolitan, a large fruiting sort, does early well.

Potatoes.—Too many varieties of this crop are planted. For first planting, Early Ohio and Early Fortune are good. Empire State and Carman No. 1 are popular among the late varieties.

Pumpkins.—Sugar is one of the best sorts for banking pies.

Radishes.—Of the early varieties, Rosy Gem and Scarlet White-tipped Turnip are among the best. Popular late sorts include Scarlet China and Long Black Spanish. Succession crops of early radishes can be had by planting at intervals of about two weeks. For winter crop, planting can be done when early peas are finished, so that they mature when cool weather comes, and can be stored under favorable conditions.

Rhubarb.—Victoria is a vigorous-growing pink variety, and is one of the best. Linnaeus, also, is good.

Salsify or Vegetable Oyster—Long White and Sandwich Island are two of the best.

Spinach.—Victoria is a favorite. For use throughout the season, sow at intervals of about two weeks.

Squash.—For summer use, Crookneck and White Bush Scallop are commonly grown, and of good quality. In late squash, for winter use, no variety has been produced to displace the Hubbard.

Tomatoes.—Earliana for early, Chalk's Jewel for medium, and Stone for late crop, are popular standard varieties. In Northern sections Earliana is almost exclusively grown; some prefer Wealthy.

Turnips.—For summer use, there are none superior to Extra Early Purple-top Milan. Champion Purple Top and Hartley's Bronze Top are the best garden turnips for winter use. The seed for summer varieties should be planted early, and those for winter about June 20th.

Vegetable Marrow.—Long White Bush is one of the best.

Watermelon.—Cole's Early, Hungarian Honey and Phinney's Early are three of the best among the numerous varieties mentioned in seed catalogues.

Strawberries in Cold Climate.

Editor "The Farmer's Advocate":

I wish to get some more information about the growing of strawberries in cold climates, and would like you to ask some of your subscribers who have failed to let us know something of their failures—whether their efforts resulted in ultimate success or failure, and why.

Kootenay District, B. C. S. S. FRASER.

THE FARM BULLETIN.

To Our Club-raisers.

There are thousands of farmers who do not know what they are losing every year through not being subscribers to "The Farmer's Advocate and Home Magazine." Therefore, we want all readers of "The Farmer's Advocate" to act as club-raisers this year, and send us large lists of NEW SUBSCRIBERS.

If you send us two new names and \$3.00 to cover same (each new subscriber paying \$1.50), we will mark date on your paper forward one year as remuneration to you; or, for each single NEW NAME, accompanied by \$1.50, we will advance the date of your address label six months. Cash commissions or premiums, as preferred, for larger lists of new names.

In clubs of FOUR RENEWALS OR OVER, we will accept \$1.25 each.

Premiums not included in club offers.

Start raising your club immediately. Get "The Farmer's Advocate and Home Magazine" into every household in your locality.

"The beginning of a movement to secure legislation to raise the standard of the profession of veterinary surgery in Ontario, by establishing a proper code of professional ethics, and by other means," is the newspaper explanation of the purpose of a cordial and largely-attended banquet held in Toronto recently by a comparatively new organization called the Toronto Veterinary Medical Association, composed of graduated veterinary surgeons, most of whom live and practice in Toronto. The speeches contained many tributes to Dr. Andrew Smith, who has recently relinquished the principalship, contemporaneously with the taking over of the institution by the Provincial Government.

Farmers Appreciate It.

"The Farmer's Advocate" is our leading agricultural paper. Those in charge deserve a great deal of credit for the way they handle the farmers' interests, and farmers generally appreciate it. JAS. R. ANDERSON. Prince Edward Co., Ont.

For Comparatively Free Trade.

Editor "The Farmer's Advocate":

Some time ago there appeared a letter in your paper from a correspondent in York Co., N. B., replying, in part, to one of mine, re Protection and Free Trade. He characterizes me as the greatest protectionist of all, which is quite amusing, he being, very evidently, a most thoroughgoing one. However, I will try to answer some of his remarks. If there was not reciprocity, but only what many would consider a one-sided arrangement, whereby American, British and other goods could come in duty-free, subject to an anti-dumping law similar to that now in force, does he consider that our factories would enjoy as much protection as now? Everyone would buy the necessities at a large reduction from present figures. We would be relieved of a large increase on everything we use, and would we not be happier? The American tariff is much higher than ours, and yet most of the articles we buy are cheaper there than here. On the one hand, there is a free-trade area containing 86,000,000 people, and, on the other, one containing 6,500,000 people. The United States has flourished, not because of protection, but in spite of it, and through the large measure of internal free trade it enjoys. It has tens of thousands of manufacturing establishments, as compared with our few thousands. Despite the organization of the trusts, there is far more competition there than here. Not that there are more trusts in the United States than in Canada, because there are not; combines flourishing as locusts in South Africa. I will take up one trade I am familiar with. There are about a dozen establishments in Canada, comparatively small, for the most part. About two-thirds of these are in an association to boost prices to all the tariff will allow. There having been too much competition among themselves in the past, despite their written agreement, they have concluded to stop it, which action is raising prices about 15 per cent. more than they were a year ago. To illustrate the tendency still further, they buy the entire product of the trust controlling the sale in Canada of a certain material used in manufacture by their rivals. About two years ago there was an attempt made to increase the tariff on that class of goods, made, not by themselves, but by the head of the trust controlling its manufacture and sale. I cannot say whether it was successful or not. All this is engineered to squeeze the very last cent the people will stand. And can it be said to build up Canadian industry and morals? Mind you, all these combinations are distinctly against the law, and the law is never put in motion by any Government, although there are ways and means at hand. My friend believes in the protection of everything from competition. To be logical, he ought to desire everything bought and sold in Canada to be effected through a monopoly, which would give as little for what he has to sell, and charge him as much as he could possibly pay for what he has to buy. And, again, he should not grumble if a one-per-cent. tax was collected on everything he took upon his premises by revenue officers at his gate. In fact, the tax he would bear would be far lighter than now, with 25 to 35 per cent. collected on most goods which can be produced in Canada—a wide range, indeed. On all goods manufactured at home he pays upwards of the same increase on the foreign price. Of course, the farmer and the artisan have very little benefit from this protection, as the farmer's price for his produce is regulated by the great outside markets, and the latter's price for his labor by the great influx from other lands.

There will still be a tariff, but upon the articles not produced here, or upon the same rate as the inland revenue on certain goods. To see that the declarations filed under the anti-dumping law were correct, would, perhaps, require a small staff. All this, under my plan of comparative free trade. My friend speaks of it as being paternal. What about the present habit of giving Peter from Paul's pocket? Oh, Father Canuck is very good to his little adopted son, Paul! Is not that nice, fatherly regard—perhaps more than many others care for—but, then, maybe, we ought not to be jealous? I wonder if my friend thinks of the farmer's burden?

Oxford Co., Ont. S. W. C.

Annual Meeting of Quebec Holstein Association.

The annual meeting of the Holstein Breeders' Association of the Province of Quebec was held at Montreal, Thursday, March 18th, the President, J. E. K. Herrick in the chair. The election of officers resulted as follows: President, J. E. K. Herrick, Abbotsford; First Vice-President, Dr. L. de L. Harwood, Vaudreuil; Second Vice-President, Ogden Sweet, North Sutton; Third Vice-President, Neil Sangster, Ormstown; Fourth Vice-President, Jas. Ferland, Sorel. Directors.—P. Sally, Lachine Rapids; Dr. Godreux, St. Sebastien; Felix Ashby, Marieville; R. A. Gillespie, Abbotsford; J. Woodworth, Lacolle; J. C. Pet-

tus, West Brome; F. E. Came, Sault au Recollet. A. W. Deland, St. John's, Que., Secretary and Treasurer; Major J. J. Rielly, Jr., Montreal, Assistant Secretary and Treasurer.

Experiments with Farm Crops.

The members of the Ontario Agricultural and Experimental Union are pleased to state that, for 1909, they are prepared to distribute into every township of Ontario material of high quality for experiments with fodder crops, roots, grains, grasses, clovers and fertilizers, as follows:

EXPERIMENTS.	
No.	Plots.
1	Three varieties of Oats
2a	Three varieties of Six-rowed Barley
2b	Two varieties of Two-rowed Barley
3	Two varieties of Hulless Barley
4	Two varieties of Spring Wheat
5	Two varieties of Buckwheat
6	Two varieties of Field Peas
7	Emmer and Spelt
8	Two varieties of Soy, Soja, or Japanese Beans
9	Three varieties of Husking Corn
10	Three varieties of Mangels
11	Two varieties of Sugar Beets for feeding purposes
12	Three varieties of Swedish Turnips
13	Two varieties of Fall Turnips
14	Two varieties of Carrots
15	Three varieties of Fodder or Silage Corn
16	Three varieties of Millet
17	Two varieties of Sorghum
18	Grass Peas and two varieties of Vetches
19	Rape, Kale and Field Cabbage
20	Three varieties of Clover
21	Testing two varieties of Alfalfa (Lucerne)
22	Four varieties of Grasses
23	Three varieties of Field Beans
24	Three varieties of Sweet Corn
26	Fertilizers with Swedish Turnips
27	Sowing Mangels on the level and in drills
28a	Two varieties of Early Potatoes
28b	Two varieties of medium-ripening Potatoes
28c	Two varieties of Late Potatoes
29	Three grain mixtures for grain production
30	Three mixtures for Grasses and Clover, for hay

Each plot is to be 2 rods long by 1 rod wide, except No. 28, which is to be one rod square.

Any person in Ontario may choose any ONE of the experiments for 1909, and apply for the same. The material will be furnished in the order in which the applications are received, while the supply lasts. It might be well for each applicant to make a second choice, for fear the first could not be granted. All material will be furnished entirely free of charge to each applicant, and the produce will, of course, become the property of the person who conducts the experiment. C. A. ZAVITZ, Director.

Ontario Agricultural College, Guelph.

Mounted Police Report.

The annual report of the Royal Northwest Mounted Police contains much valuable information, and tells of work accomplished under the most trying circumstances it is possible to conceive. The strength of the force is 649, distributed through Alberta, Saskatchewan, Northwest Territories, and the Yukon Territory. During the year ended October 31st, 1908, there was 7,624 cases entered, in connection with which there were 6,377 convictions, as compared with 5,685 in 1907, and 4,256 in 1906.

The principal charges in Saskatchewan were drunk and disorderly, for which there were 574 convictions; common assaults, 453; theft, 448; master and servants, 332; and vagrancy, 249. Prairie and forest fires were responsible for 172 convictions, and liquor-license contraventions, 77. In Alberta there were 531 convictions for drunkenness, 313 for common assaults, 262 for theft, 163 master-and-servants, 400 for vagrancy, 123 for forest and prairie fires, and 130 for breaches of the liquor license. In the Northwest Territories there were ten cases only entered, a conviction being secured in each.

The commissioner points out in his report that the serious crimes "have received careful attention, and some have been brought to justice, though years have elapsed since the crimes were committed." Justice Hunt, of the United States Federal Court, paid a high tribute to the men of the force, when, having an extradition case before him, he said: "It is seldom that a judge hears more straightforward, open and accurate testimony than they have given here."

Details of cases in which the display of special bravery is called for are not given, but the report bears out the claim that mounted police render the most efficient service in Canada.

Useless and Old-fashioned.

Discussing Ontario's rural constabulary, the writer of "Facts and Fancies," in the Grimsby Independent, says:

"I do not suppose that in the world, to-day, there exists as useless and as old-fashioned and out-of-date system as that of the present rural constabulary of Ontario. The fact of the matter is that a constable in Ontario is of no use, except he actually sees a law-breaker commit the act, and gets close enough to him to catch him; or, if two little boys get in a fight, or two old women get in a jawing-match, then the constable may be useful to serve the subpoenas. Outside of that, he is little or no use, on account of the fact that the law that appoints the constables makes no provision for him doing any work. I have known constables who drove night and day with their own horses, or hired livery horses, to catch law-breakers, and never got a cent for their trouble or expenses.

"I have studied the Northwest Mounted-Police system pretty well, and I have no hesitation in saying that life and property were safer in the wildest part of the new Northwest, under the protection of the Northwest Mounted Police, than in Ontario, with all its churches, schools, city police, Government detectives, sheriffs, county crown attorneys, jails, lockups, county constables, attorney-generals, and a lot of other useless, moth-eaten officials, that never found out that a crime was committed, or caught a criminal, till several days after the newspapers told them all about it."

Seed-corn Growers' Association.

On Monday, March 22nd, farmers from far and near, throughout Kent Co., Ont., assembled in the Foresters' Hall, in the Village of Fletcher, which was entirely too small to accommodate the enthusiastic crowd.

The object of the meeting was to further discuss the selecting and growing of the proper type of different varieties of seed corn suitable for Eastern markets. Delegates from Dover, Chatham, Tilbury and Raleigh were present, and took an active part in the discussion.

Co-operation seemed to be the keynote throughout the meeting, and the intense interest that was taken will do much to improve present conditions in South-western Ontario.

A large number of delegates favored having the next Provincial Corn Show held in a more central location than the Town of Essex. A number favored Chatham, while a great many favored the Town of Tilbury. This, however, will be decided by the Executive.

The directors in Tilbury East and in the County of Kent would be pleased to receive the hearty co-operation and assistance of every farmer in Kent, along with the small fee of 50 cents, to become a member of the Ontario Seed-corn Growers' Association.

It is the yield that makes the profits. Plant the purest and best corn that money can command, cultivate your soil in the proper way and time, and you will be tickled with the results when you harvest your corn. J. A. F.

Horsemen and Sheepmen Seek Legislation.

The Horse-breeders and the Sheep-breeders presented their cases to the members of the Agricultural Committee of the Ontario Legislature last week. Both asked for legislation in the interest of their respective branches of live stock.

The Horse-breeders, who were represented by Messrs. Wm. Smith, Peter Christie, John Bright, and John and J. M. Gardhouse, made an urgent request that some form of legislation regulating the stallion business should be enacted. The report of the Ontario Horse-breeders' Association upon legislation in the interests of horse-breeding, was presented. This report was fully discussed at the Winter Fairs at Guelph and Ottawa a year ago, so that what the horsemen desire in the way of legislation has been before the people for some time.

Some difference of opinion was expressed by members of the Committee as to the advisability of licensing stallions. A few urged an energetic educational campaign to bring this and other questions affecting horse-breeding before the people, before enacting legislation.

Messrs. John Campbell, A. W. Smith, M. P.; Geo. H. Telfer, R. H. Harding, Lieut.-Col. Robt. McEwen and Lieut.-Col. McCrae, representing the sheep interests, asked that the Act for the protection of sheep from dogs be amended, and made more effective. They asked that the annual dog-tax be \$1.00 for one dog, \$2 for the second or additional dog, where more than one are kept, and \$5 for a bitch; and also that, instead of it being left optional with the municipality to enact a dog-tax by-law, as is provided by the present Act, it be made compulsory upon township councils to tax dogs, and to compensate sheep-owners for sheep destroyed, to the extent of, at least, two-thirds of their value. Other minor changes

were asked for, but these two are the chief ones.

As with the request of the horsemen there was some difference of opinion expressed by the members of the Committee, as to the advisability of compelling township councils to enforce the Act, it is not likely that anything will be done in either case at this session of the Legislature, which is expected to close its deliberations in a couple of weeks. The Agricultural Committee will discuss both matters more fully, and present a report to the Minister of Agriculture which will probably be published for distribution, and action, if any, taken next year.

Fertilizer Formula—A Warning.

Editor "The Farmer's Advocate":

During the past few weeks I have received from correspondents in several parts of Canada the fertilizer formula given on the enclosed sheet (see below). It is stated to have been bought from a firm in the United States, who claim that it was prepared by an officer in the employ of the United States Department of Agriculture. The price of the formula is, apparently, \$1.00. As I have already written several letters pointing out its character, it has occurred to me that it might be well to advise the agricultural public generally, through your columns, of its true nature.

1. It contains several substances of fertilizing value—that is, their use would furnish the essential elements of plant food—but these are all well known, and the majority of them widely employed at the present day for fertilizing purposes, though some of them are too expensive forms for this use. No benefit is to be gained by the use of these latter compounds that could not be equally secured from the materials commonly employed.

2. Several of the substances mentioned in the formula are positively injurious to vegetable life if present in the soil in quantities larger than traces, while others are inert, or practically valueless from the fertilizing standpoint.

3. The mixing, according to the directions in the formula, of the various ingredients named, would result in the liberation and loss of much of the nitrogen—the most valuable of the elements furnished by the formula—and, further, certain of the compounds in the mixture would tend to destroy, rather than improve, the manure to which it is to be added.

In conclusion, I wish to make it clear that this formula has not been devised or constructed upon any scientific or rational principle; that the mixing of the ingredients detracts from, rather than enhances the value of those substances contained in it which possess plant food, and that the application of the result may do as much harm as good. To those who have already purchased the formula, we would say, do not throw good money after bad by its employment.

FRANK T. SHUTT, Chemist.

Dominion Experimental Farms.

[Note.—The following is the recipe to which Mr. Shutt refers in the above article.—Editor.]

FERTILIZER FORMULA.

Two pounds of saltpetre, 2 pounds sal soda, 2 pounds bluestone and nitrate of ammonia, 4 pounds potash (crude or lye).

Dissolve this compound in 12 gallons of water. Spread 200 pounds of stable manure under a dry shed, and sprinkle with 2 gallons of this solution. To this, add 50 pounds wood ashes, 16 pounds salt, 16 pounds lime, 8 pounds phosphate (acid), 5 pounds kanit or kanite.

Mix thoroughly the entire pile, and let it stand in a dry place for fifty days.

Apply from 200 to 400 pounds per acre before planting, or at time of first cultivation.

Continue to mix and put up the fertilizer as above until you get the desired quantity. Each batch will amount to 300 pounds.

Note.—As with many other fertilizers, it does not do to put too much on poor, thin or droughty lands; 150 to 200 pounds per acre is enough for such land. Too much causes the vegetation to "fire," or burn up quickly, during a very dry or very wet season.

Swine-breeders' Interviewed Minister.

A deputation from the Dominion Swine-breeders' Association, consisting of Messrs. D. C. Flatt, J. W. Featherstone and J. E. Brethour, accompanied by W. O. Sealey, M. P., A. W. Smith, M. P., and H. B. Cowan, waited on the Dominion Minister of Agriculture, Hon. Sydney Fisher, on Tuesday morning, March 23rd. There was a general discussion regarding the present state of the hog industry in Canada, but no definite conclusion was reached, except that the Minister promised to consider the question of sending a commission of investigation to Denmark.

An Essex, Ont., fruit grower, judging by the fruit buds and other appearances, reports that the prospects for a good peach crop were never better than the present season.

Annapolis Valley Notes.

The weather through the winter has been above the average in temperature; very little snow has fallen. The heaviest fall was about 6 inches, on January 25th, which lasted for two weeks, and gave a fair chance for hauling the necessary wood. Besides that, we have had a few light falls, with rains to take it off after a few days. An open winter, with considerable steady cold, but no low temperatures. There has not been snow enough for the hauling of the usual amount of cordwood, but a larger number of logs have been hauled. In this part of the Valley, on our small farms, the yearly income is considerably augmented by the sale of cordwood and lumber. A number of the farmers also haul sufficient small and rough logs to make the necessary staves and heading for their apple barrels, itinerant coopers making up the necessary number for each farmer during the summer.

Probably there is no product of our farms where the profit to the middleman is greater than in lumber, stock which is bought from the farmer here for \$15 to \$20, selling in England and South America for \$40 to \$70 per thousand superficial feet.

Stock is coming through the winter in condition above the average. This is due to several causes:

1. More Intelligent Breeding.—The mongrel sire is rapidly disappearing. Years ago, any likely mongrel youngster in the herd was allowed to go entire, as a herd-header; but now, thanks to the educative influence of the agricultural press, the agricultural departments and societies, sires are almost universally pedigreed animals of one of the approved breeds.

2. More Intelligent Feeding.—Though very few silos are to be found in the Valley, owing, no doubt, to the want of the necessary machinery, and the difficulty of growing corn, still, the value of roots as the succulent part of the ration is evidenced by the growing of a greater quantity of these every year. Hay is better cured, and a greater proportion of clover is put in the seeding-down mixtures. Recognition of the value of protein in the stock ration is also shown in the increased production of grain and purchase of such millfeeds as middlings, bran and cottonseed meal.

3. Better Care.—Feeding and milking are being more regularly practiced, and warmer stables, as well as purer and better water supply, are being provided. Some attempts are also being made toward intelligent ventilation, though the need of the latter is very little recognized yet. Not many years ago, cattle were allowed to lie in their manure, until, by spring, the coating of manure was so thick that the color of the creature could only be ascertained by the head and fore shoulders. Now, gutters and high platforms of proper length are turning out a cleaner creature in the spring.

The endeavor to get a dual-purpose animal has injured the stock of the Valley, as elsewhere, but in the last decade, the feeling that the special-purpose animal is the profitable one, has led to the starting of some good dairies and beef herds, albeit on a small scale. For beef, Shorthorns and their grades undoubtedly take the lead; while in dairying, the grades of Jerseys and Ayrshires are most popular. The Holstein has few friends in the Valley. The Department of Agriculture has been strenuous in advocating the possibilities of Nova Scotia as a dairy country, and this is certainly having its effect.

Annapolis Co., N. S. R. J. MESSENGER.

City, County and Province.

A proposition for the improvement of the roads in York County, by the co-operation of the City of Toronto, County of York, and Province of Ontario, has been advanced in the Queen City by the Good Roads Committee of the Board of Trade. In general terms, the proposition is that the County of York should adopt of system of county roads, to which the Province should contribute the usual proportion of one-third. To aid in bringing this about, the Toronto Board of Trade and the Mayor of Toronto have expressed the opinion that it would be in the interests of the city to supplement the County's expenditure by a grant of \$100,000. The roads adjacent to Toronto are heavily travelled by traffic from the city, as well as from the more distant townships, and their maintenance is, in consequence, exceptionally difficult—as their condition testifies. The proposed grant by Toronto is also a recognition of the principle that country roads are an essential part of the greater transportation system. The railways merely take the place of what were formerly or would have become the trunk wagon roads. Close up the country roads, and the railways will starve in idleness, steamships will rust at their moorings. The full development of the Province by means of good country roads is better for the cities than a proportional extension of railways would be.

Dairy Legislation.

Following our intimation of last week comes the introduction of a bill into the Ontario Legislature intended to further regulate the manufacture of dairy products. The bill, as introduced by Hon. J. S. Duff, Minister of Agriculture, provides that, after January 1st, 1910, every cheese factory, creamery, milk condensory, milk-powder factory or other establishment for the manufacture of milk products in the Province shall be registered with the Department, and that new factories cannot be established without a permit, following a report from the Government's inspector, showing that the factory is sanitary and properly equipped. It is also provided that, after January, 1911, no person will be permitted to act as chief maker unless he holds a certificate of qualification from the dairy school at Guelph, or at Kingston, or a permit from the Minister of Agriculture, on general grounds of experience and competency. On report from an inspector, the Minister may order the owner or manager of a factory to close it down forthwith, and keep it closed until it has been put in a satisfactory and sanitary condition, and is adequately equipped for the manufacture of dairy products. An appeal from the decision of the Minister may be made by the applicant to the Lieutenant-Governor-in-Council, whose decision shall be final.

The Act specifies that "creamery" means any place to which is brought the milk from the herds of three or more persons for the manufacture of butter for public sale; and "cheese factory," any place to which is brought the milk from five or more herds for the manufacture of cheese for public sale.

Maritime Stock-breeders' Association.

The annual meeting of the Maritime Stock-breeders' Association was held in Truro, N. S., in January. The election of officers and the report of the last Winter Fair was the chief business. The Manager's report went to show that, although something more than \$500 has been added to the prize list, they came out with a balance on the right side of the ledger. An evening meeting, held in the Assembly Hall of the Agricultural College, was largely attended.

In order to arouse further interest in the work of the Association, meetings have been held in New Brunswick and Prince Edward Island. On Wednesday evening, March 3rd, a very successful meeting was held at Sussex, N. B., following a Seed Fair at that place. On March 11th a similar meeting was held at Summerside, Prince Edward Island. This meeting was presided over by Hon. John Richards, Commissioner of Agriculture, and Vice-President of this Association for Prince Edward Island. Prof. Cumming again interested a large audience on the subject of "Live Stock the Salvation of Maritime Agriculture." These meetings were much appreciated, and it is the intention to hold, at least, one general meeting in each Province annually. We believe it is one of the conditions under which the Maritime Stock-breeders' Association receives its grant from the Federal Department of Agriculture that this should be done.

Grain Rates by Rail.

To meet the situation created by the announcement that the Trunk Lines Association would reduce the rail grain rate from Buffalo to New York to four cents a bushel, in order to recapture a portion of the export-grain trade, which last year switched almost completely to Montreal, it is expected that the grain rates from Georgian Bay ports to Montreal this year will be reduced to a figure below the American rate. J. W. Loud, freight-traffic manager of the Grand Trunk, interviewed on the subject last week, said:

"We meet the rate on the American trunk lines with a rate of four cents a bushel from Georgian Bay ports to Montreal to-day. What we may do in the future, I am not prepared to say. I consider that Canadian lines are perfectly justified in doing everything in their power to protect their own traffic. I will say, further, that if the Americans cut down the rate to draw the wheat that is grown in Canada from the Canadian routes, for shipment by way of New York, Boston and Philadelphia, we have a perfect right to make a rate that will bring American wheat and American corn from the American lake ports by rail or water, or both, for ocean shipment here in Montreal. So, you see, if we have to fight to protect our own, we do so with weapons that cut both ways."

Canadian-bred Mare Wins.

At the Saskatchewan Winter Fair, at Regina, last week, R. H. Taber won the brood-mare class in Clydesdales with Eva's Gem, an excellent female of his own breeding. P. M. Bredt's imported mare, Irene, was second, and Taber's Baron Stambam third. In the aged Clydesdale stallion class, Traynor Bros. won with Black Ivory. Mack & Son had second with Baron Cedric.

The Late J. S. Pearce.

Death last week removed an estimable citizen, a well-known horticulturist, and a diligent public official, in the person of J. S. Pearce, Parks Superintendent of the City of London, Ont., who, after a week's slight illness, succumbed to uremic poisoning, induced by an old attack of grippe. The late Mr. Pearce was born in Tyrconnell, Elgin Co., Ont., sixty-seven years ago, the oldest son of John Pearce, one of the pioneer settlers in Dunwich Township. He was a life-long lover of flowers and trees. Thirty-six years ago he moved to London, and entered into the commission business, branching out from this to become senior partner of one of the largest and most extensive seed businesses in Canada, known as Pearce, Weld & Co. Subsequently, owing to the ill-health of his partner, Mr. Pearce acquired full control of the business. About eight years ago he sold out the seed business and retired, being shortly after engaged by the city as Parks Superintendent, in which capacity he served with much acceptance and zeal. He was one of the oldest subscribers and earliest contributors of "The Farmer's Advocate," and served from time to time on the Farmers' Institute and lecture platform. He leaves a widow and two brothers, but will be mourned by a very wide circle of friends and acquaintances.

Rigid Fruit Inspection.

An abiding faith in fruit-growing in Canada, and a desire to make conditions more satisfactory to the consumer, without injury to the dealers, led to suggestions for legislation in the interests of fruit-growers during last week's sessions of the Dominion Parliament. M. Burrill, member for Yale-Cariboo, B. C., appreciated the benefits derived from the Fruit Marks Act, but he urged that the regulations be more rigidly enforced. A greater number of inspectors was necessary. In Western Canada, particularly, should the force be increased. Mr. Burrill also suggested that steps be taken to insure a more uniform system of grading and packing. J. E. Armstrong, member for East Lambton, Ont., also put in a request for more inspectors. M. S. Schell, of South Oxford, Ont.; D. A. Gordon, of West Kent, and Dr. J. B. Black, of Hants, N. S., took part in the discussion regarding inspection, and also introduced the question of adequate cold-storage facilities.

Hon. Sydney Fisher reviewed the situation, and stated that the prime intention of inspection was to protect the export trade. Although the Government would increase the number of inspectors as circumstances demanded, the appropriations for that purpose were not sufficient to warrant any additions to the staff at present.

Provincial Control of Telephones.

I. B. Lucas, M. P. P., has introduced into the Provincial Legislature a resolution asking that legislation might be passed by the Parliament of Canada, enabling the Province of Ontario to appropriate upon fair and equitable terms all the property within the Province of Ontario, of any person, company or corporation carrying on a telephone business within the Province, or, in the alternative, to vest in the Legislatures of the several Provinces, or the Legislature of the Province of Ontario, full power and authority to control and regulate, within their or its respective territorial jurisdiction, all persons, companies or corporations carrying on a telephone business therein, reserving to the Government of Canada the control and regulation of interprovincial business only.

Jas. Fletcher Memorial Fund.

The Ottawa Field Naturalists' Club, of which the late Dr. Jas. Fletcher was one of the founders, has resolved that his life-work was of such a national character that a permanent tribute to his memory should be made. Several suggestions have been offered as to the form the memorial should take, but no decision can be reached until it is known approximately, at least, what amount of money can be raised. A representative committee has been appointed to ascertain what response might be forthcoming. The chairman of the committee is E. R. Cameron; secretary-treasurer, Arthur Gibson, Central Experimental Farm, Ottawa. "Peace hath her victories, no less renowned than war," and Dr. Fletcher's achievements were in the realms of peace.

Less Toll for Millers.

An act respecting millers, introduced into the Ontario Legislature, provides that a miller shall not demand or take as toll a greater proportion than one-twelfth of any grain brought to him to be ground or bolted. The penalty suggested is \$40 for each offence. A further clause states that bags or sacks brought to a mill must be marked with initials and surname, or that the miller cannot be chargeable with loss.

Protection by Mounted Police.

The agitation for a more efficient constabulary in the rural districts of Eastern Canada is meeting with general support. Writing to Toronto Saturday Night, Henry J. Woodside, of Ottawa, says:

It is indeed welcome news to learn that the Ontario Government is planning a police force upon the lines of the Northwest Mounted Police. Let us hope that the pattern will not be departed from.

Those of us who have, in the Northwest and in Yukon, enjoyed the protection of a real police force, will welcome the needed protection to Ontario. In protesting against the withdrawal of the N. W. M. P. from the new Provinces, foreshadowed in 1906, I wrote that, instead of reducing the force, it ought to be extended to every part of Canada. Nor was it a joke to say that a man's life or property is safer, and always has been as safe, in the Klondike as in any part of Ontario. Considering the rough, diversified population of the Klondike, this is a credit to the mounted police.

Time was when the old style of constable might do for this Province, but the influx of strangers, the rich finds of mineral, attracting a restless population, have changed conditions. Ontario, of late years, is earning a reputation for domestic crime and violence. The country and town constabulary is totally unfit to cope with serious crime and disorder. Imagine, if you can, the Malone atrocity being perpetrated in the West.

Comparing the work and effectiveness of the mounted police to that of our local police is like comparing "a singed cat to a Bengal tiger."

It is quite true that the Western policeman cannot always be on hand when the crime is committed, but, by a careful and systematic study of the passing population, he is usually not far from a tragedy when it occurs. Their perpetual vigilance, organization, resources, system of disseminating information, and, above all, their relentless, never-tiring pursuit of criminals, is a powerful deterrent, and puts the fear of Canadian law into the would-be bad man who has killed his one or more men in the "States."

The N.-W. M. P. not only has reflected honor upon our country among the incoming armies of immigrants, but has repaid its cost from the beginning more than twentyfold. As an immigration agent, the mounted police has been invaluable, protecting, directing, informing, warning and reassuring the strangers from afar.

If the new Ontario force is actually formed and directed upon the lines of the famous Western police; if the members are taught to patrol the whole country; if they are given jurisdiction everywhere in the Province; if they are properly trained to use their common sense; if they are taught that when they go after a man they must bring him, dead or alive, and walk coolly up to a loaded pistol, then the force will justify its formation, and both crime and disease will be less prevalent in the Province.

As long as the present useless system of untrained, independent police units continues, as long as increasing and unprotected wealth accumulates to tempt the criminal, as long as the present fool system operates, to warn tramps and toughs to move on and prey upon successive localities (instead of having them locked up whenever found) so long will crime flourish and increase in Ontario.

[Vanderbilt President New York Horse Show.

Advices from New York inform us that Alfred G. Vanderbilt has been elected President of the New York Horse Show, and proposes to reorganize it, especially in extending inducements to foreign exhibitors, in decorative display, etc. The English International Show, at Olympia, in which Mr. Vanderbilt takes an active interest as one of the Board of Directors, will, as a result, probably be brought into closer contact with the New York Show, and its accession to the Union of Continental Shows affiliated with the English exhibition will universally enhance the interests of horse-breeders.

The Minister of Agriculture at Ottawa has decided to establish an experimental station at Harrow, in Essex County, Ont., for carrying out experiments in tobacco culture. W. A. Barnet, B. S. A., Assistant of the Tobacco Division, Ottawa, will be in charge.

P. H. Bowyer, M. P. P., proposes to amend the Municipal Act of Ontario, by enabling township councils to give a prize of \$10 for the best-kept roadside, farm front, and farmhouse surroundings in each public-school section in the township.



FOR THE FARMER

is a Savings Account at the Bank of Toronto. Your spare money deposited there will earn interest for you, and will be as available to you at all times as though in your pocket. Also the money will be safe.

BANK OF TORONTO
ASSETS. \$39,000,000

MARKETS.

Toronto.

LIVE STOCK.

On Monday, at West Toronto, the receipts were 72 cars, consisting of 1,615 cattle, 42 hogs, 71 sheep, 86 calves. Quality of cattle good. Trade easy. Export steers, \$5.40 to \$5.70; bulls, \$4.25 to \$4.75; prime picked butchers' for Easter, \$5.50 to \$6; loads of Easter cattle, \$5.50 to \$5.70; loads of good, \$5 to \$5.40; medium, \$4.60 to \$4.80; common, \$4 to \$4.50; cows, \$3.25 to \$4.40; milkers, \$3.50 to \$6; calves, \$4 to \$7 per cwt. Sheep, \$4.50 to \$5 per cwt.; yearling lambs, \$6.50 to \$7.50 per cwt. Hogs—Selects, fed and watered, \$7.15; and \$6.90, f. o. b. cars, country points.

REVIEW OF LAST WEEK'S MARKET.

Receipts of live stock were again moderate last week at both the Union and City Yards, totalling 287 carloads—4,452 cattle, 5,571 hogs, 873 sheep, 413 calves and 201 horses. The quality of cattle, generally, was better at both markets than for several weeks. Trade was brisk in nearly every class of live stock. Prices also were better in all classes, excepting for hogs, which were 25c. per cwt. lower.

Exporters.—Steers sold from \$5.40 to \$5.75, and the best load offered during the week brought \$5.75 per cwt. Bulls sold at \$4 to \$4.60 per cwt. Export cows sold at \$4.50 to \$5.00.

Butchers.—Prime picked lots of butchers' cattle sold nearly as high as the best exporters, at \$5.25 to \$5.50, and one three-year-old Shorthorn heifer, weighing 1,390 lbs., was bought by a Jewish butcher for \$6.50 per cwt.; loads of good, \$5 to \$5.25; medium, \$4.50 to \$4.80; common, \$3.85 to \$4.40; cows, \$3.25 to \$4.40; canners and common cows, \$1.50 to \$2.75; butcher bulls, \$3.25 to \$4.00.

Stockers and Feeders.—Trade was light in both stocker and feeder classes. Stockers, 500 to 700 lbs. each, sold at \$3.25 to \$3.75; feeders, 900 to 1,100 lbs. each, sold from \$4 to \$4.65 per cwt.

Milkers and Springers.—Trade in milkers and springers was brisk at steady prices, at \$35 to \$60 each, with about half a dozen selling as high as \$70. Buyers from outside cities caused trade to be good. N. Hill, of St. Mary's, bought one carload at an average of \$46.50 each; and George Hooper, of Montreal, one load at an average of \$53 each.

Veal Calves.—Receipts were fairly liberal. Prices were a trifle easier, at \$3 to \$7 per cwt.

Sheep and Lambs.—Receipts were light, but equal to the demand, at the present high prices. Both sheep and yearling lambs have about reached their limit as regards high prices, as the public refuse to use them after they reach a certain value. Export ewes sold at \$4.50 to \$5; rams, \$3.75 to \$4.25; yearling lambs, \$6.50 for common, \$6.75 to \$7.25 for medium, and \$7.75 to \$8 per cwt. for choice grain-fed ewes and wethers.

Hogs—Receipts were moderate, with prices 25c. per cwt. lower than a week

ago. Selects, fed and watered at the market, sold at \$7.15; and \$6.90 to \$7 f. o. b. cars at country points.

Horses.—About 150 horses were offered at Monday's and Wednesday's sales at the Union Horse Exchange last week. The quality, generally, was exceptionally good. Messrs. Groff & Auman, of Elmira, Waterloo County, Ont., had a shipment of 12 of the finest heavy drafters seen on the market this season, eight of which sold at an average of \$208 each. There were buyers from Port Arthur; Melfort, Saskatchewan; Elkhorn, Alberta; Montreal, and many points of Ontario. The attendance being good, bidding at times was spirited, although prices were not much ahead of last week's quotations. Manager Smith reports prices as follows: Drafters, \$160 to \$195; general-purpose, \$130 to \$165; expressers, \$140 to \$192.50; drivers, \$100 to \$150; serviceably sound, \$30 to \$85 each.

BREADSTUFFS.

Grain.—Wheat—No. 2 white or red, \$1.05½ to \$1.06; No. 2 mixed, \$1.05 to \$1.06, outside points. Manitoba—No. 1 northern, \$1.20; No. 2 northern, \$1.17 on track at lake ports. Rye—No. 2, 72c. to 72½c. outside. Peas—No. 2, 95c. outside. Oats—No. 2, white, 45½c. to 46c.; No. 2 mixed, 45c. outside. Barley—No. 2, 65c. to 66c.; No. 3 extra, 62c. to 63c.; No. 3, 56c. to 57c. Corn—American yellow, No. 2, 73c. to 73½c.; Canadian, 71c. to 71½c. Flour—Ontario, 90 per cent. patent, \$4.10 bid for export; Manitoba, special brands, \$5.90; second patents, \$5.40; strong bakers, \$5.20.

HAY AND MILLFEED.

Bran—Scarce and firm, at \$24 in sacks outside. Shorts—Prices firm, at \$25 in sacks outside. Hay—Car lots, baled, on track, Toronto, \$10.50 to \$11. Straw—Baled, car lots, on track, Toronto, \$6.50 to \$7. Caldwell's Manitoba meal, \$28 per ton. Flaxseed meal, \$3 per cwt.

COUNTRY PRODUCE.

Butter—Supplies of inferior or poor quality butter are large, with prices easier, but choice, fresh creamery, of good quality, is none too plentiful. Creamery pound rolls, 25c. to 26c.; creamery solids, 20c. to 21c.; separator dairy, 23c.; store lots, 17c. to 18c. Locust Hill creamery still leads, at 28c. per pound.

Eggs.—Receipts were large, with prices lower, at 18c.

Cheese.—Dealers report stocks of cheese as being light, with prices very firm, at unchanged quotations; large, 13½c. to 14c.; twins, 14c. to 14½c.

Honey—There is little doing in honey, dealers having all in their own hands. Prices are being held higher. Extracted, 11c. to 13c.; combs, \$2.75 to \$3.25 per dozen sections.

Potatoes.—American buyers have been operating on the Canadian potato markets, which has caused a firmer feeling. Car lots on track, Toronto, are firm at 65c. for good quality.

Beans.—Market firm. Primes, \$1.90 to \$2; hand-picked, \$2 to \$2.10.

Poultry.—Receipts light. Prices have reached their limit. Chickens, 18c. to 22c. per pound; fowl, 14c. to 16c.; turkeys, 24c. to 30c.

HIDES AND WOOL.

E. T. Carter & Co., wholesale dealers in wool, hides, etc., quote prices as follows: Hides—No. 1 inspected steers, 60 lbs. up, 11c.; No. 2 inspected steers, 60 lbs. up, 10c.; No. 1 inspected cows, 10½c.; No. 2 inspected cows, 9½c.; No. 3 inspected cows and bulls, 8c. to 8½c.; country hides, 8½c. to 8¾c.; calf skins, 12c. to 14c.; horse hides, No. 1, \$2.50 to \$2.75; horse hair, per lb., 30c. to 32c.; tallow, per lb., 5½c. to 6c.; sheep skins, each, \$1.10 to \$1.20. Raw furs, prices on application.

VEGETABLES AND FRUIT.

Onions, per bag, 90c. to \$1; turnips, 35c. per bag; parsnips, 35c. to 40c.; carrots, per bag, 25c. to 35c.; beets, per bag, 35c. to 40c. Apples—Prices very firm. Spies, \$5 to \$5.50 per bbl., and \$6 is being asked by the dealers; Baldwins, \$4 to \$4.50; Greenings, \$3.50 to \$4.25; Russets, \$3 to \$4 per bbl.

SEED MARKET.

The seed market is unchanged, with prices as follows: Alsike, fancy, \$7.25 to \$7.50; No. 1, \$6.90 to \$7.20; No. 2, \$6 to \$6.50; red clover, \$1.60 to \$5.75; timothy, \$1.30 to \$2.25.

Montreal.

The local markets continue steady. Receipts of cattle were light last week, but the demand was anything but active. There was little buying for out-of-town account, and local butchers did not take much, while exporters were bearish on account of lower cables. Choice steers sold at 5½c. to 5½c. per lb., a few bringing 5½c., fine were 5½c., good being 4½c. to 5c. per lb., while medium were 4c. to 4½c. and common 3c. to 3½c., inferior being down to about 2½c. per lb. Receipts of sheep and lambs showed little improvement. Prices were steady, yearling lambs being 5½c. to 6½c., according to quality, and sheep being 3½c. to 4½c. per lb. There was not many calves offered on the market, and the young ones were, in many instances, undesirable. Prices, however, ranged about the same, being \$2 to \$10 each, some being not worth anything save what the hides would bring. Hogs were the feature of the market, being exceedingly firm, at 7½c. to 8c. per lb., for select lots, weighed off cars.

Horses.—Dealers reported that trade was not quite up to the previous week, although they were not complaining about demand. On the whole, an excellent winter has been experienced in the horse trade. Demand from the East—around Quebec—was good during the early part of the season, and now that it has fallen off, there is a very fair demand from the carters and express men. Shortly will appear, it is hoped, a demand from the West for farm horses. Meantime prices hold steady, as follows: Heavy draft horses, weighing 1,500 to 1,700 lbs., \$225 to \$300 each; light draft, weighing 1,400 to 1,500 lbs., \$185 to \$240 each; good blocks, weighing 1,300 to 1,400 lbs., \$175 to \$200 each; small and inferior animals, 1,000 to 1,100 lbs., \$100 to \$150 each; broken-down horses, \$50 to \$75 each, and fine saddle and carriage horses, \$300 to \$500 each.

Live Hogs and Provisions.—The market for dressed hogs continued steady. The firmness in the price of live hogs communicated a feeling of firmness to dressed, but, as in the case of dressed, no actual advance took place. Fresh-killed, abattoir-dressed hogs sold at 10½c. to 10½c. per lb., Manitoba dressed being 10c. to 10½c. per lb., and country dressed 9c. to 9½c. per lb. Provisions of all kinds were in rather light demand, but prices held steady all round. Lard was 9c. to 9½c. for compound, and 13½c. to 14c. for pure.

Potatoes.—The market for potatoes continues exceedingly strong, and there were further advances. Shippers would not accept less than a cent per lb., Montreal, for Green Mountains, and these were not resold at less than 9c., track, per 90 lbs. In small lots, \$1 per bag of 80 lbs. was paid. The cause of the strength was the continuance of demand from the United States, as well as the fact that the season is advancing and stocks are growing lighter.

Maple Products.—There was talk of new syrup arriving, but no genuine instances were heard of. The weather, however, was good, and receipts might begin at any moment. Old syrup sold at 60c. per small tin, while sugar ranged from 6c. to 8c. per lb., according to quality.

Eggs.—The market continued to show a slightly easier disposition, and quotations on Monday were from 20c. to 21c. per dozen. Some quoted as high as 24c., but this seems too high, although the price is bound to be uncertain at this season of the year. Production is increasing, and dealers do not seem to anticipate much advance on present prices unless a movement takes place towards Easter. Owing to the low prices nothing more is heard of importations of United States stock.

Butter.—The market was rather easier, and consumers enjoyed cheaper butter than for many years, at this season of the year. It was said that some mixed new and old milk butter arrived, and was available at around 20c. per lb. Finest fall makes were quoted at 21c., and ordinary fall and summer goods at 20c., dairies being 15c. to 17c., and rolls at 17c. to 17½c. per lb.

Grain.—Very little change took place in the grain market, the tone being, however, slightly easy. Prices were Canadian Western, No. 2, 51c. to 51½c. per bushel; No. 1 extra feed, 50½c. to 51c.; No. 1 feed, 50c. to 50½c.; No. 2 Ontario, 50c. to 50½c.; No. 3 a cent less, and No.

IMPERIAL BANK OF CANADA

CHARTERED 1875.

Capital Authorized, \$10,000,000.00
Capital Paid Up, - 5,000,000.00
Rest, - - - - 5,000,000.00

SAVINGS DEPARTMENT.

\$1.00 opens an account. Interest paid at highest current rate from date of deposit.

Farmers' sale notes discounted. Branches throughout the Dominion of Canada.

4 yet a cent less. Manitoba feed barley was firmer, at 59c. to 60c., and No. 2 barley was higher, at 66c. to 67c., No. 2 peas being 98c. to 99c.

Flour.—Demand was light, but prices were apparently firm, quotations being \$5.80 to \$6 per barrel, in bags, for Manitoba first patents, and \$5.30 to \$5.50 for seconds, strong bakers' being \$5.10 to \$5.30. Ontario flour was quoted at \$5.40 to \$5.50 for patents, and \$5 to \$5.10 for straight rollers.

Feed.—The market held strong, supplies being light. This was particularly the case with bran, which was quoted at \$22 to \$24 per ton, in bags, to cover Manitobas and Ontarios; shorts were \$24 to \$25 per ton. Cottonseed and oil cake were quoted nominally at \$32.50 to \$35 per ton.

Hay.—The market showed little change. Prices were \$12.50 to \$13.50 per ton for No. 1, No. 2 extra being \$11.50 to \$12 and No. 2 from \$9 to \$10, while clover mixed was \$8 to \$8.50, and clover \$1 less.

Seeds.—Dealers reported that they were busy making shipments to various parts of the country. They quoted steady prices, at \$13 to \$14 per 100 lbs. for red clover, \$16 to \$18 for alsike, and \$5.25 to \$6.50 for timothy, in bag lots.

Hides.—Trade in calf skins was active, at 12c. for No. 2, and 14c. for No. 1, per lb. Hides were poor and trade dull, at 7c., 8c. and 9c. per lb., respectively, for Nos. 3, 2 and 1, while sheep skins were \$1 each, and horse hides \$1.50 to \$2 each. Tallow was 1½c. to 3½c. per lb. for rough, and 5c. to 6c. per lb. for rendered.

Chicago.

Cattle—Steers, \$5 to \$5.75; cows, \$4 to \$5.75; heifers, \$3.25 to \$6; bulls, \$3.75 to \$5.25; calves, \$3.50 to \$8.35; stockers and feeders, \$3.30 to \$5.40.

Hogs—Choice heavy shipping, \$7 to \$7.10; butchers', \$6.95 to \$7.05; light mixed, \$6.70 to \$6.85; choice light, \$6.85 to \$6.90; packing, \$6.75 to \$6.90; pigs, \$5.25 to \$6.40; bulk of sales, \$6.85 to \$7.05.

Sheep and Lambs.—Sheep, \$3 to \$6.60; lambs, \$6 to \$8.25; yearlings, \$6 to \$7.35.

Buffalo.

Cattle.—Prime steers, \$6.50 to \$6.75. Hogs—Heavy, \$7.25 to \$7.35; mixed, \$7.20 to \$7.30; Yorkers, \$6.75 to \$7.25; dairies, \$6.75 to \$7.20.

Sheep and Lambs.—Lambs, \$5 to \$8.50; yearlings, \$7 to \$7.50.

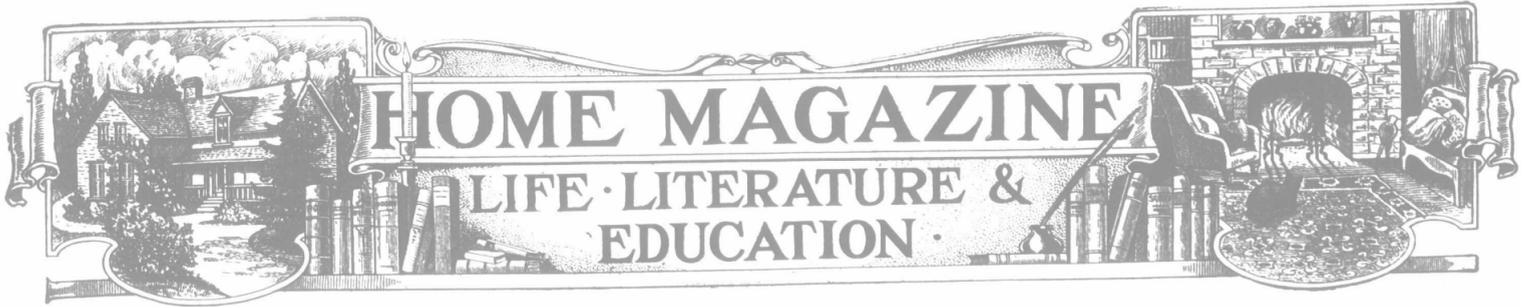
British Cattle Markets.

London cables quoted cattle at 13½c. to 14c. for Canadian steers, dressed weight; refrigerator beef, 9½c. per lb.

TRADE TOPICS.

We are advised that the Imperial Bank of Canada has opened a branch of the bank in Lethbridge, Alta.

In regard to the advertisement of W. I. Kemp Co., Ltd., of Stratford, Ont., readers should remember that the machinery manufactured by this firm is handled by the following agents: T. C. Rogers & Co., Guelph, Ont.; D. Bryson, Westmount, P. Q.; and Parlin & Orendorff, Canadian Plow Co., Winnipeg, Man., Regina, Sask., and Calgary, Alta.



The first rural High School to be established in Ontario will be opened at Flesherton, Grey Co., at Easter. The career of the school will be watched with interest by the farmers of the Dominion.

The loss of three lives by the burning of the Windsor Hotel, at Cornwall, again shows the necessity for proper fire escapes in every building that consists of more than one floor. Not only hotels, but public buildings of all kinds, and private houses, require such provision. Even a thick rope, securely fastened beneath the window of each sleeping-room, and concealed by a box, would be better than nothing; and yet, how seldom is even this device, inexpensive as it is, resorted to?

The discovery that Germany has been making such provision for a navy as will, at the present rate of ship-building in Great Britain, place the British navy as a back number within a very few years, has created such a sensation in the British Isles as has not been known, perhaps, since the Napoleonic wars. During the recent debates on the navy at Westminster, the statement was made that, unless the subsidies for ship-building be greatly increased, the outlook is that, by the end of 1912, Germany will have 25 Dreadnoughts to Britain's 20. This estimate, given by men who are used to cool calculation, is, to say the least, startling, and the excitement has spread to the colonies. Already, New Zealand has offered to defray the cost of building one first-class battleship, and perhaps two; while, in Australia, the suggestion has been made by the Era that a Dreadnought be immediately built and presented to the mother country. From another Australian paper comes the sterner suggestion that Britain should issue an ultimatum to Germany to cease battleship-building—an ultimatum which, it is hazarded, would likely be upheld by other nations, since British naval supremacy means peace, whereas German supremacy means war. In Canada, the matter is being agitated in various quarters, and has been, during the past fortnight, a subject for serious consideration by the Parliament at Ottawa.

It is noteworthy that the disagreement between Newfoundland and the United States in regard to fishing rights along the Newfoundland coast is the first question concerning Great Britain and the United States which has been referred to The Hague Tribunal. The trouble has arisen in the fact that definite adjustment to new conditions has not been made as occasion arose. In 1783, by the Treaty of Paris, Great Britain gave the seceded colonies very liberal fishing rights. These rights were forfeited by the United States, when, in 1812, she declared war upon Canada; and when settlement was again made, the privileges to the United States were restricted, but the right and boundaries of the fishing-grounds were, it appears, not definitely enough fixed, and hence the trouble of "the line fence" over again. A complete statement of the case has, however, been made out, and there is hope that the long irritation may be soon done away with. The Commission at The Hague will consider the question is made up of Dr. Lammasch, of Austria, umpire;

His Excellency, Luis M. Drago, of Argentina; Jonkheer A. F. Lohman, of The Netherlands; Hon. Geo. Gray, of Delaware, Judge of the United States Circuit Court; and Sir Chas. Fitzpatrick, Chief Justice of the Supreme Court of Canada.

The surprising fact in connection with the verdict acquitting the Standard Oil Co., and setting aside the famous fine of \$29,400,000, imposed by Judge Landis two years ago, is the remarkable passivity—almost indifference—with which the news has been received by the public. The American papers, of course, are making copy of the affair, with comments more or less dyed with Rooseveltian or per contra sentiments. Some hold that the verdict simply shows the way the wind is blowing, and gloomily predict that, in the reaction from Rooseveltian strenuousness, the pendulum is likely to go too far the other way, and give the Trusts again the right of way which was to some degree checked during the last administration. Others call the decision a triumph for law and order, rather than a victory for the Trusts; while still others hold that the fight against rebating will still go on, and claim that, though the Government failed to prove its charge in this particular instance, no question as to the power of Congress to restrain great corporations has been raised.

The last idea is presumably the right one. Public sentiment flows and ebbs, and wears itself out in excitement; the problem which may have every man on the street afire one year, may scarcely arouse a passing comment the next; but, on the whole, the tendency is for the power of the public to grow, and for the fight for fairness to go on. The ebb is ever followed by the flow. An overstep on the public patience is ever sufficient to bring on a crisis, and at each struggle the cause of justice gains ground. The day of autocracy, of oligarchy in Government, has passed, and every day brings nearer the day upon which the oligarchy of wealth, upheld by a wire-pulling and underhand trickery, which enables a few men to wax exceedingly rich at the expense of the rights of many, shall end. There is a socialism of dreams and impracticable theories; but there is also a Christian socialism which is rapidly gaining ground, and with which many evils of the world must yet reckon.

Spelling Reform—Paper V.

SURGERY VERSUS MUTILATION.
Editor "The Farmer's Advocate":

A youth of my acquaintance had two thumbs on his left hand. When in his 'teens, someone in whom he had confidence advised him to have what he called his "bobby thumb" cut off. On discussing the subject at home, the boy and his mother favored amputation, but the father opposed "mutilating the lad," on the ground that they had all got used to the "bobby thumb," and the boy would not seem natural without it. In the course of time, however, the father consented to a surgical operation, and I never heard of any regrets. It is safe to say that, within a year or two, even to the father, the boy looked natural with only one thumb on his left hand. The boy's digital deformity may be

very well compared to each of a multitude of orthographical excrescences that have grown in or upon the written or printed form of a corresponding number of words—for example, in "phthisicky," "furlough," "island," "honour," etc. It seems strange to those who have studied the history of our words, and the needs of the youthful learner and foreigner, that the proposal to apply a little skillful surgery to their improvement raises an outcry of mutilation. Persons who have made duly-considered and well-intentioned efforts to improve and beautify the visible form of our noble language, are denounced as raiders. It is remarked, however, that the most clamant denouncers proclaim their feelings and prejudices, and not knowledge; nevertheless, their cries serve the useful purpose of keeping the subject before public attention. Further, such of them whose scholarship is pretty nearly limited to the spelling-book cannot be blamed for remonstrating against what seems a raid on their educational capital.

At this distance we heard little or nothing of protest against the reforms in spelling decreed by the French and German authorities—a fact that made the opposition in this country, and in the United States, to the proposal of more greatly-needed reform of English spelling, appear all the more singular. Of course, in German spelling, there was comparatively little to reform; but in France the case was different. The application of the rules for simplification, authorized since 1900 by the French Council of Public Instruction, affect the spelling, it is said, of approximately fifteen thousand words, chiefly in respect to grammatical inflections. I was rather pleased to hear from a teacher who was in that country, that he thought there was nearly as much opposition to spelling reform there as here. It shows that the French are not so much ahead of us, after all, and also what enlightened rulers can do when they set about it.

Returning to the correspondence that has been published in these columns, I feel free to assert that no one has advanced an argument to prove that English spelling is perfect, and, therefore, needs no reforming. Its errors and excrescences are too numerous and too well known to admit of debating its perfection. But the method of improving it, the extent to which improvement should be carried, and the rapidity that progress should make, are all properly debatable. Your courteous correspondent, signing himself "B. A. Oxon," has made some statements worth discussing.

People who have formed an opinion on this subject, divide, broadly speaking, into three classes: First, those who say, let the "bobby thumbs" stay, we are accustomed to them; change would now be mutilation. Second, those who would remove the glaring errors first, and gradually introduce the simplifications justified by the theory and practice of recognized scholars, submitting gracefully to the charges of inconsistency sure to be directed against them by both the other classes. And, third, those who will be satisfied with nothing short of strictly phonetic spelling.

"B. A. Oxon" states that "English can be spelled phonetically." Applying his own correct test of a

phonetic spelling, that "it restricts every individual symbol to one distinctive sound," I hold that it is impossible to spell English phonetically with our present alphabet. A correct speaker differentiates the sounds of "a" in the following words: Water, wager, calm, cat, fast, elegant. These differences cannot be represented by our present alphabet. English possesses more than fifty sounds, but the alphabet we use has only twenty-six symbols. This fact shows that strict phoneticism is impossible.

For the British Simplified Spelling Society, it is easy to answer the question why "ought" is not spelled "aut." Every change advocated thus far by the eminent scholars composing that body is based on reason, economy and authority. For "aut" there are reason and economy, but it lacks authority. They consistently apply the principle, and hence they prefer "honor" to "honour," "rime" to "rhyme," "tho" to "though," "program" to "programme," etc., because, while there is authority for both spellings in each pair, the first one of the alternatives is more reasonable and economical.

The present active indicative of "have" in French, quoted by "B. A. Oxon," illustrates what the spelling reformers contend for, namely, that the simplicity of English grammar gives the language a great start over every other European language towards the goal of a world-speech. Of course, it is easier to learn the two forms, "has" and "have," than the six distinct verb-forms in French. But, taking an equal number of words from each language, say from a story and its translation, it will usually be found that the French words have more silent letters, and the English ones the larger number of irregularities and inconsistencies. J. DEARNESS.

The Temperance Question

Editor "The Farmer's Advocate":

I noticed in your issue of March 11th, an article by "Nemo," re "Hotel Accommodation in Local-option Towns." He says that a large number of the best travellers will not patronize a temperance hotel. In local-option towns, there are no licensed hotels, and if they patronize a hotel at all, it must be one which is supposed to be a temperance house. There is no doubt but that the putting in force of the local-option act will cause some inconvenience to hotelkeepers, and also to the travelling public, but these things will right themselves in time, and any man who has any regard for his influence in this world will be quite willing to put up with a little inconvenience for the sake of taking temptation out of his brother's way.

It was clearly proven in Owen Sound, Ont., some time ago, that a hotel could be run, and made to pay all right, without selling liquor, and I have no doubt but that there is business enterprise enough in any local-option town to provide suitable accommodation for the public if the hotelkeepers refuse to do so. It is quite evident that "Nemo" is not a temperance man, for a truly temperance man will not countenance the traffic in intoxicating drink in any shape whatever, and, possibly, if he was one of those whose will-power had become so weak that he

could not keep from falling before the tempter, or was one of a drunkard's family, living a life of wretchedness and despair through no fault of his own, and having no power to free himself from this wretched life, he might sing a different song. One of the proofs that the temperance cause is a just one is the fact that preachers, as a rule, are so closely identified with it; and to call temperance workers fanatics is a slander, because, as a rule, temperance people go about their work in a quiet, unobtrusive way; and fanaticism is enthusiasm, and there never was very much accomplished in any good cause in this world without enthusiasm. GEO. H. LAMB.
Perth Co., Ont.

Something More About Our Goodly Heritage.

II.

Whilst pondering upon how I might best make use of my little space in the columns of the Home Magazine, and fingering hesitatingly, meanwhile, some really interesting facts and incidents touching upon my last topic, "A Goodly Heritage," which I had gathered with the intention of passing them on to our readers, I came across no less than three dear little poems, which, with the sweet promise of spring so soon to be realized by all of us to whom our goodly heritage is so dear, I made up my mind to offer them to you, first, as a message of inspiration and hope. To some the words may be familiar, but whether or no, they will all bear re-reading; and, anyway, the sunshine above us, and the stirring of the seed-life below and around us, are as much a part of the glorious heritage bestowed upon the people of Canada by the Giver of all good, as are the vast territories cultivated already, or to be cultivated in the coming years, which form the Dominion of which we are so justly proud. I will take the poem by Nora Chesson first:

THE GREEN LADY.

A lady sat singing alone in the mire:
"The New Year must come, and the
Old Year retire;
But I the Green lady,
Smell lilacs already,
And I hear in the tree-veins the sap
rising higher."

The wind was as sharp as the fang
of a snake,
But the lady's warm fingers bade
snowdrops awake.
"I saw you, I heard you,
When no vision stirred you
Of bursting your buds for the Green
Lady's sake."

The lady went smiling with rain in
her face,
And the puddle she trod turned a
beautiful place,
Where thirsty birds, drinking,
Might sudden be thinking
Of downy broods warm in a feather-
lined space.

She passed, the Green lady, and with
her and after
A beam of clear sunshine pierced
heaven's cloudy rafter;
It struck to earth's bosom,
And there it bade blossom
The rapture of roses, the hyacinth's
laughter.

And this is what Frank Dempster
Sherman writes:

A CHILD OF SPRING.

Stern winter lingers, loath to leave
us yet:
Only to-day in the bare woods I
found
His frozen banners white upon the
ground,
And in the trees his shining lances
set.
The wind song was a murmur of
regret
For all the joy departed, and a
sound
Of sorrow filled the frosty air
around
With melancholy whispers of "For-
get."

But I beheld, behind a curled leaf,
Hiding in vain her loveliness and
grace,

A timid flower intently listening
In this deserted world worn gray
with grief—
Arbutus, with her fresh and frag-
rant face,
Impatient for the mother-call of
Spring.

And somewhat in the same vein,
but with a chord of sadness which,
while hinting of past sorrows, tells
also of awakening hope, Christina
Rossetti sings:

THE FIRST SPRING DAY.

I wonder if the sap is stirring yet,
If wintry birds are dreaming of a
mate,
If frozen snowdrops feel as yet the
sun,
And crocus fires are kindling one by
one;
Sing, robin, sing!
I still am sore in doubt concerning
spring.

I wonder if the springtide of this
year
Will bring another spring both lost
and dear;
If heart and spirit will find out their
spring,
Or if the world alone will bud and
sing;
Sing, hope, to me
Sweet notes, my hope, soft notes for
memory.

The sap will surely quicken soon or
late,
The tardiest bird will twitter to a
mate;
So spring must dawn again with
warmth and bloom,
Or in this world, or in the world to
come;
Sing, voice of spring!
Till I too blossom and rejoice and
sing.

Let us, then, sing and be thankful
for what God's rain and sunshine
have done for Canada in the past
years, so will they do, and more
still, as a reward to the honest labor
of a diligent and grateful people.

H. A. B.

The Quiet Hour.

Saints.

While reading "The Farmer's Advocate"
I noticed on page 344, some important
questions, such questions as would be,
and are, of benefit to any enquiring soul,
providing they are answered by God's
Word, that is to stand forever; and not
by what I, or some other person thinks.
I take it for granted that "Enquirer" be-
lieves there were Saints in the Apostles'
days.

Question 1. What is a Saint? Rom. 1-7, we are told the "beloved of God" are called "Saints." 1 Cor. 1: 2. Addressing the Church of God, "them that are sanctified in Christ Jesus," called "Saints" ("to be" is in Italics, consequently not in the original), "with all that in every place call upon the name of Jesus Christ our Lord." In Eph. 1: 1, the "Saints" and "faithful in Christ Jesus" are addressed as one; in Phil. 1: 1, the Saints are said to be in Christ Jesus, and are addressed with the bishops and deacons; in Col. 1: 2, "Saints and faithful brethren in Christ" are classed together, and the blessings where-with they are blessed are "from God our Father and the Lord Jesus Christ." I think the above, through the Holy Spirit, will teach us what a Saint is.

Question 2. Are there any saints in the present day? We must know what constituted a Saint in the Apostles' days, and if we can find that out we shall know what would constitute a Saint in the present day.

First, the Apostle Paul was the speaker in the Scriptures noted, therefore the person that called these people Saints, so we will appeal to him to tell us how they were constituted Saints.

We will turn to Gal. 1: 11. Paul there certifies that he preached a gospel, v. 12, that he did not receive it from man, but that he received it by revelation of Jesus Christ. Now you see that Jesus Christ, the Apostle Paul, the Gospel and Saints, are all connected together. Next, what was this gospel he preached? 1, Cor. xv., 1 to 4. Now, the Apostle tells the people that he called "Saints" in Ch. 1, that he preached a gospel, and that they received it and are saved by it, and verses 3 and 4 says Christ died for our sins, according to the Scriptures, that He was buried and that He rose again the third day, according to the Scriptures. I trust that we may be shown by the above Scriptures that these people were made Saints through the Gospel that Paul preached, and that the Gospel was revealed to him, and that it was according to the Scriptures. Heb. 1: 2, tells us that God has spoken in these last days through His Son. In John xx., 29, Jesus, God's Son, told Thomas some people were "blessed" because they had believed, and had not "seen," and v. 31 says these things were written that they might believe that Jesus is this Christ the Son of God, and that believing they might have life. If Paul's gospel constituted Saints in his day, it will constitute Saints in these days; a Saint is a religious person, because God hath made Christ to be Sin for us (the sinner) that we (the sinner) might be made the righteousness of God in Christ. 2 Cor. v., 21.

Rom. v., 19, tells us that by one man's disobedience, many were made sinners, so by the obedience of one, many shall be made righteous. Paul says in Phil. ii., 8, that Christ humbled Himself and became obedient unto death, even the death of the Cross. Be it known unto you therefore, men and brethren, that through this man (that died, was buried and rose again) is preached unto you the forgiveness of sins and by Him all that believe are justified from all things from which ye could not be justified by the Law of Moses. Acts xiii., 38 and 39 and verses 28, 29, 30, give us what Paul preached to these people that he called Saints afterward in the Epistles, and if people in this day believe the same Gospel, it will make Saints of them.

Question 3. What characterizes Saints? Paul tells us in 1 Thess. 1-9, 10, that they are a people that have turned to God from idols to serve the Living and true God, and to wait for His Son from heaven. You see they are waiting and serving people, and they are to deny ungodliness and worldly lusts, and live soberly and righteously and godly in this present world, looking for that blessed hope and glorious appearing of the great God and our Saviour Jesus Christ.

Question 4. Is the name gained by attainment? The above shows that the title is of God, through the gospel preached to us, and believed by us, and not attainable by works of righteousness, which we can do. Titus iii., 5-6. I have in a feeble way sought to answer the questions propounded by "Enquirer."

A SUBSCRIBER.

I am sure "Enquirer" will feel grateful to "A Subscriber" for the careful way in which he has answered the questions asked. As for Mrs. Payward's verses, given below, they need no words of introduction. Her beautiful, trustful lines are always welcomed by the readers of the Quiet Hour. I am stepping aside this week to give others a chance to speak, not forgetting to thank those whose letters of encouragement have helped me much.

DORA FARNCOMB (HOPE).

Alone with God.

Alone with God! Oh, blessed time,
Oh, precious moments calm and sweet,
When, for a little while, I kneel
Before my Father's mercy-seat.
No other eye to see me there,
No other ear my words to hear,
When all the longings of my soul
I pour into His listening ear.

Alone with God! No earthly friend
(However dear that friend may be)
Can so fully share my joys and griefs,
Or love me half so tenderly.
For He my every longing knows,
Can all my earnest strivings see;
He strengthens every good desire,
And bears each weakness patiently.

Alone with God! 'Tis there I find
The needed strength to do His will;
There, when the way I cannot see,
He gives me faith to trust Him still.
When the tempter's subtle voice I hear,
I seek at once that safe retreat;
He never can my soul o'ercome
In the shadow of God's mercy-seat.

Alone with God! No words of mine
Can speak the peace that fills me there,
When in a confidence complete,
I cast on Him my every care.
His presence seemeth very near;
And though His face I cannot see,
Life holds no sweeter, purer joy,
Than just "Alone with God," to be.

—M. CARRIE HAYWARD.
Corinth, Ont.

Current Events.

Count Zeppelin's airship recently made a flight of 150 miles, carrying 26 passengers.

The Shackleton expedition has reached within 111 miles of the South Pole.

Ex-President Roosevelt sailed from New York on March 23rd, on his way to Africa.

Admiral Lord Charles Beresford resigned command of the Channel Fleet last week, at the age of sixty-two.

It is announced that the construction of a railway from Edmonton to Fort McMurray, a distance of 350 miles, will be begun this summer.

The C. P. R. is negotiating for an elevator site at Vancouver, in connection with its plan to ship wheat over the Pacific.

The Railway Commission will next month start an investigation into the telephone and telegraph rates in force in Canada.

Lord Strathcona's offer of \$10,000 a year to encourage physical and military training and rifle practice among the public schools of the Dominion has been accepted by the House of Parliament, at Ottawa.

The Lancaster Level-crossings Bill, after being passed four times by the Commons, has been again killed by the Senate of the Dominion, and a Bill prepared by Senator Beique substituted. This Bill aims to put the Railway Commission into immediate motion to order the protection of grade crossings.

God's Way of Giving.

'Twere bliss to see one lark
Soar in the azure dark,
Singing upon his high celestial road,
I have seen many hundred soar, thank
God!

To see one spring begin
In her first heavenly green
Were grace unmeet for any mortal-clod,
I have seen many springs, thank God!

After the lark the swallow,
Blackbirds in the hill and hollow,
Thrushes and nightingales, all roads I
trod,
As though one bird were not enough,
thank God!

Not one flower, but a rout,
All exquisite, are out;
All white and golden every stretch of
sod,
As though one flower were not enough,
thank God!

—Katharine Tynan.

The Ingle Nook.

Letter from "Merry."

Dear Dame and Friends,—May I come in for just a wee chat? I do enjoy the chats from week to week so much. We have taken "The Farmer's Advocate" ever since we were married eleven years ago, and I read nearly everything in it from week to week. I certainly have a fellow feeling for Jack's Wife when she speaks of having too much to do. I have been just there myself and know what it is like, and those are the times that I had "nerves." And let me whisper, my little girl only weighed 3½ lbs., with clothes on, when she was a week old, my first baby. I confess I felt my position as a mother greatly. Being so very small, she needed added care, and summer, with the usual work on a big farm, was very trying; but now she is almost eight, and when at home is a great little helper.

But I wonder if any of the mothers have had anything to do with the trouble I am going to speak of. My little girl has grown very fast and has never been real strong. She has never eaten meat, and does not care for milk. I give her all the eggs she will eat, and last summer gave her as many as four egg-nogs a day. In the fall she was taken sick, and lumps the size of a small marble came under her chin and on her throat, just below her cheeks. Our doctor treated her and gave me a salve to rub on when those lumps went away. But there are two small ones on her neck just back of and below the ear, that I cannot get rid of with all the salve I have used and medicine she has taken. Some people have told me not to bother, that they would not amount to anything, but I am too much afraid to believe this. If any of the mothers have had trouble of this kind, and have got rid of it, I would be very thankful to hear from them. When we were out West on a trip a few years ago, a little girl there had an operation on her neck for lumps something the same. Our doctor thinks that the treatment he is giving for them will cure them in time, but I am afraid of leaving them too long.

And, now, Jack's Wife, I will tell you what the delegate to our Women's Institute last summer told us about Omelets going flat. She said it was because the fire was too hot. She said to have the pan very hot at first, then cook slowly. When it is nicely risen and lightly browned underneath, stand on upper shelf of the oven to dry off the top; it is done if it does not stick to the finger when touched. Fold and turn out on hot platter. I will send along a recipe for cheese omelet.

Three eggs, ¼ teaspoon salt, 3 tablespoons water, 1 tablespoon butter, a little pepper, 1 tablespoon grated cheese to each egg. Add half the cheese to the mixture, the rest sprinkled over the omelet before folding.

I will close by sending my sympathy to Lankshire Lass, and, if I may, I will come some other time. May come again in the good old summer time.

MERRY.

P. S.—I forgot to say that if any of you go to see a new baby, that no matter how small it may be, never tell the mother it is the smallest one you ever saw.

Regarding the lumps of which you speak, I may say that I am very well acquainted with them personally. When I was little, and until about fourteen years of age, I was tortured with them. Nothing but home remedies was applied, and I did grow out of them; they never come back now. I do think, however, that such lumps should not be so neglected; in my case, they seemed to induce a tendency to chronic sore throat, and probably no one but myself had any idea how I suffered. In this city, I understand, operation is often resorted to, but there may be other methods of removal. At all events, I should think expert medical advice should be followed.

D. D.

A Variety of Subjects.

Dear Dame Durden,—I have for some time been an interested reader of the Ingle Nook, and have received many useful bits from the many Chatterers. It is rather selfish to be always receiving

and never giving, and, though some may question the usefulness of my hints, I shall send them along on trial.

Who has tried the tablespoonful of snow instead of an egg? I want to tell you it is all right, strange as it may seem. I tried it in muffins and found them every bit as nice as when the egg was used. I am going to send the recipe for those muffins, for they always seem to turn out just right.

"Holly" spoke of packing eggs. I have often wondered why people go to such trouble packing their eggs. I have always just packed them in salt, and never had any trouble in them keeping good. I have used six dozen and a half, which were packed last October, and only one was in the least spoiled.

I must not make my first letter too long, so I shall now put in that recipe and close.

Muffins.—¼ cup butter, ¼ cup sugar, ¼ teaspoon salt, 4 teaspoons baking powder, 1 egg, ½ cup milk, 2 cups flour.

"MARION.

Lambton Co., Ont.

Many thanks for above suggestions.

Embroidered Hat.

Dear Dame Durden,—I would be very much pleased if you would kindly let me know, through your valuable paper, if the white embroidery hats are to be worn this summer, and if they are, which would be the nicest, Coronation braid, Wallachian, or the solid? What shapes are they to be, and what trimmings?

X. Y. Z.

Waterloo Co., Ont.



A Modern Dining-room.

Published by permission of House Beautiful.

I have consulted a milliner of this city about your hat query. She says that embroidered hats will be worn as soon as the really hot weather is here, also that eyelet embroidery is the only kind that looks really pretty for hats, the other kinds being too heavy. The sailor, mushroom, or Charlotte Corday shapes, will all be in good style, with brims of plain or pleated embroidery, and flowers will be the favored trimming, especially the small flowers.

Omelet—Marmalade.

Dear Dame Durden,—I want to thank Jack's Wife for her excellent paper on cheese. I didn't know before that salt would curdle the milk in scalloped potatoes. I tried her scalloped potatoes for dinner, and I think they are very fine with the cheese in. I thought I would send Jack's Wife my recipe for omelets, as I always have good success with mine, and they never fail.

Omelet.—2 eggs, ¼ teaspoon salt, 2 tablespoons water, 1 tablespoon butter, a little pepper. Beat the egg-yolks and pepper until thick; add the water and mix well. Beat the whites until stiff, and fold the yolk mixture into it. Melt the butter in a medium-sized hot frying-pan, turn the mixture into it, spread it evenly, and stand on the fire where it will cook

slowly. When nicely risen, stand on the upper shelf of the oven to dry top. It is done if it does not stick to the finger when touched. Fold and turn out on a hot platter. I also make a nice omelet by beating the eggs together and proceed to cook in the same way. Be sure to have the pan very hot at first.

I will also send my recipe for orange marmalade, as this is the season for making it: 3 oranges, 3 lemons, 3 Northern Spy apples, the same size as the oranges. Put all through the meat-grinder, and put 3 pints of water on it, and let stand overnight. Put on stove next morning and let boil for two hours, then put in 6 lbs. sugar, and boil half hour.

POLLY.

Bruce Co., Ont.

Letter from Lankshire Lass.

Dear Dame Durden and Chatterers All,—You will think I am never going to write and thank you all for your recipes sent, and for all your kind letters, but it takes me a week or more to get a letter written to the Nook. I am slow, but sure. Am in bed so much, and it's a great task to write any more, but I dearly love getting nice letters, and here I wish to thank each one of you who have been so kind to write to me. You have no idea how I appreciate kind letters, and those who are well cannot tell how much pleasure one who is always shut in gets from a cheery letter. I hope those who wrote once will try it again. I wish I were able to answer all, so please accept my thanks in this way for your kind remarks, and dear Dame Dur-

den has done so much for me. Oh, you are a dear dame, sure enough.

And dear Hope, your kind letter is a treasure to me. I did not expect one, my dear, and I trust you are gaining now, and you help us all so.

I eagerly look for "The Farmer's Advocate," and how pleasing and bright the letters are in the Nook. Wasn't it good to stir it up a bit at Xmas? Keep right on, all of you. Come again, dear "Grandma"; I always loved the dear old people, with their snowy hair. The verses were lovely, write again. I have so many dear old friends; I love them all.

How soon time flies, we grow old and nearer to our heavenly home, and, oh, how happy our days on earth, if we can feel heaven will be our port, and we know we will be with Jesus safe there. The days here may be full of earth-care and trouble, but they will soon pass, and these afflictions bring us nearer, and to feel more thankful for the rest we know awaits God's children in the sweet bye-and-bye. I find in these lonely times He is nearer and dearer to me. Perhaps you think me old. Well, some think so, but I am not a bit old or gray, and "Exit" got a surprise. Yes, I had a pleasant time with her, but she is not aware I am so slow. Are you? Oh, well, I could work, and did my share at all kinds of

work when younger, only like "Bonny," I felt nervous. How did you manage about making the first shirt and trousers for your better half, Bonnie? Making butter and tending milk is hard for one at first when not used to it, and a lot to sew and work for, and so young; but a faint heart never won, so I got to work and did my very best. I can't do much now, but try and do all I can, and be as little trouble as possible when not able to go about. A writer kindly sent me a recipe for this vomiting, but, my dear, not a mite of it will stay down, nor anything of any kind. Yes, heaven will be sweet to me, just to rest; only I feel anxious to help or cheer others, and there is so little a shut-in can do, only to let our light shine, and I know Jesus understands all our longings.

I am often asked how it is my flowers bloom so, and I just say I am sure Jesus lets them bloom to cheer me, and they are one of my blessings. In summer the bay window is pretty, and it is little care they get. I am not able to go out, not even to the barn, for years, but I try and do what I can, and as it is hard to get a washwoman, I rub out a few little things. I have a new and easy way, I'll tell you about it, perhaps, again, also how I put eggs away, but my letter is so long now, if I keep on writing you will not ever want me to write again.

Before I go I'll tell you I experimented with omelet to make it light. Just add a little baking powder, and it is lovely and light.

Try pleasing your little folks with colored Easter eggs. Put a few onion skins in water, and boil eggs till hard in with them, and they are a nice yellow. Another way: Boil eggs hard, not to spoil clothing if broken, and, while eggs are hot, wrap a piece of dark-red tissue paper, dry, around the egg loosely, and drop a few drops of water here and there on the paper and lay aside to dry. If done right, they are so pretty, and no two alike. Give it a trial. It is quickly done, and pleases the children. So glad yé mothers all should be to have children spared to you. Never think them a trouble. When they grow up, and how soon they do, it is nice to have them come in and cheer the lonely ones. The home is quiet and lonely when they are all gone. Now, I must close, I'm sorry this is so long, but if you were not so kind to me I would not write at all, but I am so grateful, and wish I could help you in return, thanking you again, each of you.

Your grateful shut-in,
LANKSHIRE LASS.

Wellington Co., Ont.

Do not make apologies, friend. You know there is always a corner here for you.

Pork, Celery, Etc.

Dear Dame Durden,—Kindly let me know, through your valuable paper, how to cure pork for summer without putting it in pickle. How to keep celery in winter. The pattern for an ocean-wave quilt, and if hen-feathers are poisonous when used in sofa pillows.

SUBSCRIBER.

Ontario Co., Ont.

To salt pork dry, mix together 4 lbs. good fine salt, 1½ lbs. good brown sugar, and 2 ozs. saltpetre, and apply it to each 100 lbs. meat. Apply this three times for hams and shoulders, and twice for bacon, rubbing well in each time. It will take about three weeks to complete the work. Rub plenty of the mixture about the bones of the larger hams, and be careful to see that all the blood has been washed out, if clotted about them. Smoking helps to keep meat, but some dislike the taste of the smoke.

To keep celery in winter, put a couple of inches of sand in the bottom of a box, moisten it, and pack the celery in, drawing the sand up a little about the roots. Pack tightly and keep in a cool, moist place, if possible. If necessary, moisten the sand again without wetting the stalks, otherwise rust may be caused. Feathers are not poisonous in sofa pillows.

We regret to say that we do not know the ocean-wave quilt pattern. At all events, we do not believe in spending much time on intricate geometrical patterns for quilts. Blocks, made of simple squares, or strips, are much more quickly done, and a pretty white or cretonne spread can always be used for the top of the bed.

Lemon Biscuits.

Dear Dame Durden,—I am sending an excellent recipe for lemon biscuits: 2 cups granulated sugar, 2 cups lard or butter, 2 eggs, 1 pint sweet milk, 5 ct. ammonia (powdered), 5 ct. oil of lemon. Wet ammonia with milk; add flour enough to roll into biscuit. Cut in squares with a knife; place biscuits close together in pan. A SUBSCRIBER.

Grey Co.
Many thanks.

Our Scrap Bag.

When making new bed-comforters first cover the layer of batting with cheese-cloth or mosquito-netting, tying down wherever necessary. Now add the real cover, tying in as few places as possible. Made in this way, the outer cover may be easily removed when laundering is necessary.

To exterminate roaches, make a strong solution of carbolic acid—two tablespoons to a pint of water—and force into all crevices. Keep food closely covered, and do not leave crumbs or garbage around. This is a new way for destroying these pests. Perhaps the Chatterer who asked how to get rid of them may find it useful.

The following, from a prominent "building" magazine, intimates again the abhorrence with which useless and meaningless decoration in house-building is looked upon by the best architects: "In the case of a certain frame farmhouse built about fifty years ago, something had to be done to the outside to do away with the wonderful brackets, rosettes and moldings with which the front was covered. The carpenter removed all these frills, and the result was a plain, substantial-looking house, in good taste, at small cost; these changes, however, disgusted the former owner, who said he had paid as much as three dollars each for the cornice brackets which had been removed; and probably he had, for they were very good workmanship, but oh! the design!"

We cannot, indeed, have impressed upon us too soon the real elegance there is in plainness, in the beauty that is to be had in picturesque and harmonious outline, or the ugliness in small frippery that serves no purpose, and costs much money. . . . The same principle applies to indoor decoration. Try quiet coloring, plain and restful wall-coverings, and curtains, and cushion-covers, and see if you will again go back to over-elaboration of color or design anywhere.

Recipes.

"Proverbs."—1 cup sweet milk, 1 egg, 2 cups flour, 1 teaspoon baking powder, pinch salt. Beat well. Fill gem or patty pans and bake in a hot oven for breakfast or tea.

Steamed Brown Bread.—1 even cup Indian meal, 2 heaping cups rye meal, 1 (level) teaspoon salt, 1 small teaspoon soda, 1 cup molasses. Mix very thoroughly together the meal, salt, and soda. Add 1 pint hot water to the molasses and stir. Pour the molasses and water into the middle of the meal and stir to a smooth batter. Put in a buttered tin, cover tightly, and steam 3 hours, then set in the oven for 10 minutes.

Stale Cake Pudding.—Slice stale cake thin, spread each slice with a little jelly. Lay the pieces in a shallow baking-dish with blanched almonds or other nut-meats mixed in. Make a soft custard of 1 large cup milk, 1 egg, 2 tablespoons sugar, half a teaspoon vanilla. Pour over the cake, and serve.

Jellied Apples.—Cut 7 or 8 tart apples into halves, core, and set in a baking-pan, cored side up. Pour over 1½ cups cold water and 3 cups sugar, cover closely, and let boil gently for half an hour. Remove cover, set in oven, and bake brown.

Salmon Salad.—Remove skin, oil and bones from a half can of salmon; squeeze over it the juice of a small lemon, and set to chill. When ready to serve, add as much coarsely-cut celery as fish, a dozen walnut meats, broken in bits, 3 small cucumber pickles, cut fine. When celery is not in season, leave it out. Pour a little salad-dressing over and mix lightly.

Velvet Cream.—2 pints milk, 3 eggs, one-fourth box gelatine, two-thirds cup sugar, one-fourth teaspoon extract of almond. Soak the gelatine in half a pint

of milk one hour; heat one pint of the milk; beat eggs and sugar together, and add one-half pint cold milk. Pour this mixture into the boiling milk and cook five minutes, then add the gelatine and extract. Strain; pour into moulds; serve cold, with cream and sugar.

Creamed Onions.—Boil onions until nearly done, then add a little salt to the water. When done, drain. In the meantime melt one ounce butter, to which add half a pint of hot milk, cook two minutes, season with white pepper and salt, pour over onions and serve hot.

Send the two of them to us, and if the photos are good and clear, we shall be pleased to send you a prize, also to put the pictures in the paper. If you can't have a picture taken, do not be discouraged, for we will still give prizes for the best descriptions of the gardens.

Yours sincerely,
PUCK.

How We Spent a Pleasant Day.

It was the 10th of July, so I asked some of my girl friends, and some of the best boys, in our school, to join me on the 12th of the same month as is mentioned above.

On that appointed day, they all came in good time. We had proposed spending the day picking raspberries, but afterwards I thought of a new plan.

There was an old shanty back in our bush which the woodcutters had dwelt in many years ago. The shanty contained two downstairs rooms and an upstairs room. It had four windows and one door, and was papered with light-colored paper, which made it look like a real house. In the kitchen, in the center of the room, an old rusty stove stood, but it was of use for all that. All the furniture the room contained was a wood-box, cupboard, and a shelf; an old bench stood against the wall, completing this odd little room.

The adjoining apartment was bare of furniture, except a small shelf on the wall, and a Union-Jack on top of that. Upstairs there was nothing at all except a few boards.

I thought to myself, why not play house, and have our dinner in this little dwelling-place? I told my thought to my companions, and they all agreed it was a fine plan, so, accordingly, we busied ourselves preparing our eatables. We got two large baskets and filled them

Well, next we sat down to dinner and ate a hearty meal. The first meal that had been eaten in the shanty for many years. After dinner the boys went out and the girls washed up the dinner dishes and arranged the house, and put some leaves over the shelves. Then the boys came back, and we decided to have some music, as one of the boys had a mouth-organ. The pieces we sang were, "The Birdies' Ball," "Clover Blossoms," "Blue-bell," and a few others. It was nearly half-past two when we got done our bit of a programme, so we went out to pick berries for two hours. We each got a quart pail full and then we went to the shanty to prepare for tea.

When we got there the fire was out, so we had to light it again. When it was lit, we put on the potatoes and pork to heat, and then we got the supper ready. It was about half an hour before it was ready to eat, and we were very hungry, and tired. When we did sit down our faces were not so bright, because our pleasant day was nearly over.

We had determined that we would make the best of what was left, so we laughed and joked one another until supper was finished. Then we packed the dishes into our baskets unwashed. Afterwards we played hide-and-seek, drop the handkerchief, and pump-pump pull away.

Then it was time to go home, so we started off. When we got about half way home we heard a toot-toot-toot, not far away from us, and, looking around, we saw an owl after a little bird. We could hear its cries far away, as it disappeared in the woods.

LUELLA KILLOUGH (age 11).
Auburn, Ont.

Beaver Circle Notes.

Willie Schram (age 14), Haysville, Ont., would like some boys and girls of his age to correspond with him.

M. N. H. has sent us a story which she composed for the Beaver Circle. It is rather too much of the dime-novel strain for our columns. As a rule, we prefer true stories, or letters about actual places and occurrences. M. N. H. could probably write us something very readable in this line if she chose.

Ettie Baker (age 10), Greensville, Ont., would like some girls of her own age to correspond with her. If Ettie will write us a letter about her goldfish, telling where she keeps them, how she feeds them, etc., we will find a place for it.

Our Junior Beavers.

Dear Puck,—This is my first letter to "The Farmer's Advocate." I live with my uncle, Charlie Forrest, and go to school. I am in the Second Book. I like to go to school. We live five miles from Brussels and two and a half miles from Jamestown. We have two white cats; we call one "Scratch Cat" and the other "Snowdrop." We have a dog; we call him Byran. He knows nearly everything we say to him. I have a sister; her name is Christie. In the summer, Byran and Christie go part way to school with me. I like the summer time best, when there are lots of nice flowers, and the birds are singing so sweetly in the trees.

We used to pick beechnuts last fall, and we had lots of fun watching the squirrels picking beechnuts too.

VIOLA McLEOD (age 8).
Jamestown, Ont.

Dear Puck,—It is a long time since I wrote to the Corner. My dog's name is Laddie. He pulls me on my sleigh. He is a Scotch collie. I like snowshoeing. I snowshoe to school when the snow is deep, but I haven't been out much on them this winter. It is a mile and a half to school. There is a pond right behind our schoolhouse where we skate in winter, and we play on a raft in summer. We have more fun in winter, because we can catch on bobs.

GLEN MORGAN (age 10).
Wales, Ont.

Dear Puck,—This is my first letter to "The Farmer's Advocate." I live on a farm. I have a dog called Carlo; he will pull me on the sleigh. I have also two little brown hens.

I like winter better than summer, because the games are lively and nicer. I have a pair of skates, but I cannot skate

The Beaver Circle.

Dear Girls and Boys,—Just a note this time, and in a few words as possible. In reading Country Life this morning, I came across a little garden article telling how to make an "easy" garden, one sure to give plenty of bloom and color all summer long, if given half a chance. "If I could only have twelve kinds of annual flowers," said the writer, "I should select bachelor's buttons, California poppy, calliopsis, China aster, marigold, nasturtium, Shirley poppy, pansy, portulaca, verbena, zinnia, opium poppy. . . . And if I could have only twelve perennials I should choose moss pink, lily of the valley, bleeding-heart, German iris, peony, larkspur, Japanese bell-flower, phlox, golden glow, gaillardia, Japanese anemone, garden chrysanthemum.

Now, I try to make a rule of passing good things on, and so I thought I would pass this list on to you girls and boys of the Beaver Circle. If you have never tried making a flower-bed of your very own, don't you think you would like to try one this year? It is so interesting to see things growing, and fine to be able



In the Good Old Summer Time.

(Photo by John Scott, Telfer, Ont.)

to cut flowers for the dining-table, or to give to the teacher, or to a friend, whenever you like. And, really, the expense does not amount to much; most of the annuals mentioned sell for five cents a package, and even three or four packages will make a quite good showing.

But if you make a bed, don't put it around at the "company" part of the house—if you have such a foolish thing—where you will never see it unless you go on purpose. Put it outside of the living-room or dining-room window somewhere, or in the back yard where you will pass it every time you go to the pump or the barn. Then you will not forget to give the flowers a drink when they need it.

And let me tell you that, if you take good care of your flower-bed, you will soon find the whole family enjoying it, carrying their chairs out and sitting near it of an evening, or a Sunday afternoon—and that is so much better than staying indoors in the summer.

Now, just one more suggestion. If your flower-bed is to be near a fence, run morning glories or scarlet runners over the fence, or, if there is plenty of sunshine, plant a border of sweet peas. You have no idea what an improvement such a background will make. . . . Last of all, if you have a kodak, or if your big brother or sister has one, have a picture taken of the spot before you begin working at it, and again when it is at its prettiest

with cake, cookies, lemon and apple pie, with various other good things. Then I took my small teapot, and put a teaspoonful of sugar, and an equal lot of coffee in it. Then I put some spoons and knives and forks in.

When all was ready, we started on our errand, with merry thoughts, and beaming faces. Arriving at our destination, we ordered one of the boys to light the fire in the rusty old stove while the rest were to make a table and some benches for us.

Meanwhile the girls bustled about unpacking the baskets and peeling the potatoes.

When the boys arrived with the table and benches, we sent them back to gather some raspberries for dinner. When they got back with the berries it was just about dinner time. I suppose I shall have to describe what we had, and how we set the table.

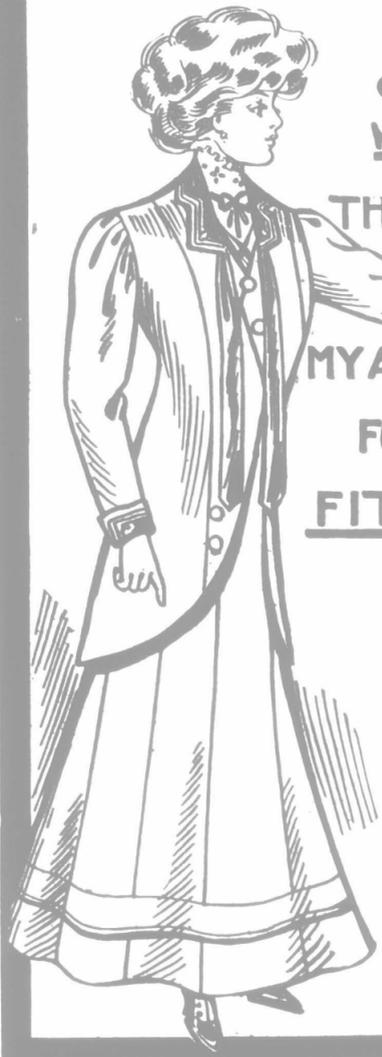
We moved it into the "parlor" and put our tablecloth on, then we put a bouquet of raspberry leaves and different other bush-flowers, then we put the pepper and salt beside them; next we put two plates of butter, a plate of cookies, and then a pie, opposite that the potatoes and meat.

The table was very nearly full of victuals when they were all put on. I should judge I have told more than I should about "the setting of the table," so I will change the subject.

EATON'S CATALOGUE

FOR SPRING AND SUMMER
Select Your Easter Needs

From
This Book.



THIS CATALOGUE
 IS
 MY AUTHORITY
 FOR STYLE
FIT FINISH DURABILITY AND LOW PRICE

THE GOODS GIVE YOU PLEASURE
 THE PRICES GIVE YOU PROFIT.

EVERY member of the family will be interested in our *New Spring Catalogue*. It contains many illustrations of just what is needed at this time of the year. On page 27 the suit illustrated here is described as J-4200. Then turn page after page and note the accurate descriptions, the exact designs and the invitingly low prices. Do as your neighbor does: please yourself by supplying your wants from this catalogue.

WRITE FOR THIS CATALOGUE TO-DAY

THE **T. EATON CO** LIMITED
 TORONTO CANADA

WRITE FOR OUR
 Wall Paper Catalogue

well yet. I do not live very far from town, and sometimes stay there with my auntie. I go to the rink, and think it great fun to see them skating.

HUGHEY COPLAND (age 10).
 Harriston, Ont.

Dear Puck,—I had often thought of writing to the Beaver Circle, but never took the time. My father has taken "The Farmer's Advocate" for about 13 years. I am only nine years old, and enjoy reading the Beaver Circle letters. We have a mile and a quarter to walk to school. I am in the Second Book. We can sleigh-ride down the hills and skate on a pond near the school.

I have five sisters and one brother; his name is Stewart, and he's a great friend of "The Farmer's Advocate." We often call him "The Advocate" boy. Hoping this will escape the scrap-basket, I will close with a riddle.

What has eyes and cannot see? Ans.—A potato.

GLADYS McCALLUM (age 9).
 Iona Station, Ont.

Dear Puck,—I just read the Circle to-night and thought I would write a few lines. This is the first time I have written, and I feel shy, but I will try not to mind it. I live on a farm. I have a pet dog; his name is Rover. I wish it was summer again, so Rover and I could go to the bush to pick the flowers and the little squaw-berries to eat. It always is so nice when you go in the bush in the summer time when the May flowers just get out; they smell so sweet, and to see the squirrels that come chirping, I

think it's a pity to kill the squirrels and birds, and I never will.

Well, I guess I will close, as I might be crowding someone else out.
 WINNIE McNALLY (age 9).
 Blair, Ont.

The Influence of Environment.

A paper read at Humber Bay Women's Institute by Mrs. J. W. Rush.

Mrs. President and Ladies:

Last year you asked me to prepare an essay for this month, and to choose my own subject. This month you have chosen the subject for me, and a difficult one it is, to treat it as it ought to be treated—"The Influence of Environment." I go to the dictionary for the meaning, and find there are many varieties of influence: A flowing in upon—the operation of an invisible power; in physics, the effect produced on material bodies by the secret forces of nature, of light and heat; in morals, the effect of truth on the mind; force acting on the heart or affections; constraining power of love or sympathy; effects produced by individual character; social rank, wealth, spiritual or divine power acting on the heart or life. These are some of the meanings of influence. Environment is whatever encompasses—one's surroundings. All the external circumstances of an organism, as man is the product of his environment. It was his environment that influenced

John Wesley. He saw his fellow men living in sin and ignorance around him. So, in the fear of God and love of his fellow man, he claimed the world for his parish, and went forth to preach and teach. He established schools, distributed literature, formed mothers' meetings, dispensaries, savings banks, temperance societies, and many more things for the uplifting of his fellow creatures, the influence and benefits of which we are enjoying to-day, for it is said of John Wesley he was one hundred years ahead of his time.

Then there is Lincoln. Many of the papers have had articles about that great and good man whose centenary was celebrated last month. He was born in obscurity, in the most abject poverty, and yet he rose to the highest position in the land. He was a staunch teetotaler at a time when drinking, smoking and chewing were worse, if possible, than now. It is recorded that the only advice he ever gave his sons was: "Don't drink. Don't smoke. Don't chew. Don't swear. I never did." Fear God and love your fellow man. Lincoln's influence held his country together at a most critical time. He liberated by his own hand, without a bill passing Congress, millions of slaves. His influence greatly helped to form our own Dominion of Canada, and it had a great influence on the European countries, also.

Coming to our own times, we find another poor boy, born in poverty and degradation. The influence of

his environment filled his soul with longings for better things. With great difficulty he obtained an education, and now he is looked on and spoken of as a Moses, a law-giver, and a deliverer of his people. He is teaching them that up from the workshop, the mine, the farm, the school, must their deliverance come, by their own exertions, and not by any acts of legislature; and in this work, Booker Washington has a noble helpmate in his wife, Abraham Lincoln and Booker Washington prove that there is nobility in man that can rise above hostile conditions of environment, and that manhood is master of adverse surroundings. "No man or woman of the humblest sort can really be strong, gentle, pure and good, without the world being better for it, without somebody being helped and comforted by the very existence of that goodness."

The effect on vegetation is very marked by the influence of environment. For example, take plants from the same seed-bed, plant some where the soil is rich, the situation favorable for sunshine and moisture, and you will soon have perfection; while the other plants, planted on a poor soil, in a cold, shady place, will be stunted, and of very inferior quality, whether flowers or vegetables. I had a very striking illustration of this this winter. My husband and I had business in Guelph, and we found we had an hour or two before train time, so we went up to the College.

EASY TO DYE

WITH

Diamond Dyes.

Some people have never tried changing the colors, and so don't know how simple and easy it is to dye with Diamond Dyes. It's almost as easy as washing, and there is a real fascination about it. You can color curtains, draperies, rugs and carpets; in fact, you can color any fabric, and do it just as well yourself, with Diamond Dyes, as a professional dyer.



Why Not Have a "Diamond Dye Day"?

"My sister, mother, cousin and I have what we call our Diamond Dye day every few weeks. We gather all the old, faded or soiled things we can find and dye them the colors we like. We take turns having our Diamond Dye day, at each other's house, and certainly do have a good time. We save lots of money by making old clothes serviceable again, and also have a splendid social time. We dye all sorts of things: waists, stockings, curtains, carpets, and last time I even dyed a straw hat. It is no trouble whatever, and our results are always perfect."

Mrs. G. W. Siegmann, New York City.

Important Facts About Goods to be Dyed:

Diamond Dyes are the standard of the world, and always give perfect results. You must be sure that you get the *real* Diamond Dyes, and the *kind* of Diamond Dyes adapted to the article you intend to dye.

Beware of imitations of Diamond Dyes. Imitators who make only one kind of dye claim that their imitations will color Wool, Silk or Cotton ("all fabrics") equally well. This claim is false, because no dye that will give the finest results on Wool, Silk or other animal fibres can be used successfully for dyeing Cotton, Linen or other vegetable fibres. For this reason we make two kinds of Diamond Dyes, namely: Diamond Dyes for Wool, and Diamond Dyes for Cotton.

Diamond Dyes for Wool cannot be used for coloring Cotton, Linen or other Mixed Goods, but are especially adapted for Wool, Silk, or other animal fibres, which take up the dye quickly.

Diamond Dyes for Cotton are especially adapted for Cotton, Linen, or other vegetable fibres, which take up the dye slowly.

"Mixed Goods," also known as "Union Goods," are made chiefly of either Cotton, Linen, or other vegetable fibres. For this reason our Diamond Dyes for Cotton are the best dyes made for these goods.

Diamond Dye Annual — Free Send us your name and address (be sure to mention your dealer's name, and tell us whether he sells Diamond Dyes), and we will send you a copy of the famous Diamond Dye Annual, a copy of the Direction Book, and samples of dyed cloth, all FREE.

WELLS & RICHARDSON CO., LTD.,
200 MOUNTAIN ST., MONTREAL, P. Q.

We were shown through the conservatories and greenhouses. I noticed in one of the greenhouses a patch of beans. The first rows, near the middle of the house, were strong, well-grown plants, just ready to burst into bloom; but, as we got to the end of the bench, they were less and less advanced, until the last row was only just coming through the soil. "Are they different varieties of beans?" I asked, "or were they planted at different times?" "They are the same variety, and were planted on the same day, but the end of the bench is colder, and that makes the difference," was the answer.

Once upon a time a little boy took sick. He had a very miserable, dirty home. A little friend took him a flower—a pot-plant. They thought it must be put in the window to get light. Then they thought if the pane it stood against were washed, it would let more light in. When it was washed, it made the other panes look so dirty that they washed all the windows. Then, other things looked so dirty when the light shone in that one thing after another was cleaned, till at last, through the influence of that little flower, what was once a dirty home became clean and comfortable.

There was another little boy whose parents were sick, and he had to go from home for a time, to friends, to be cared for. He was a good boy, and soon acquired the rules of the household. He was neat, kept his things in order and in their place, and after the first day never had to be told to wash and brush his hair before going to the table for meals, and he took his bath regularly. The time came for him to go home. After being away for a few days, he returned for some of his things. He was very dirty, and looked as if water had not touched face or hands since he left. "Have you washed this morning?" he was asked. He made no reply, but a guilty look spread over his face. "Go and wash," was said; and without a word, he went and washed. This is a case of the influence of environment. In one place provision was made for washing, and he was expected to wash, and he did so. In the other place he was not expected to wash, and he went dirty.

I was working in my garden one summer day, when a lady called. We walked around the garden. She admired the flowers, and said, "When you have a garden like this, it gives a cheer to the passer-by." This was a new thought for me, and "I pass it on." Remember, when we are arranging and caring for our gardens, we are not only benefiting and making our own homes pretty, but also giving "a cheer to the passer-by."

It is very pleasant to meet every month, and get new ideas for our work, and enjoy a social hour together; but is this all we can do, ought to do? Is there not something we, as members of the Women's Institute, can do for the improvement of our surroundings this coming summer? We, no doubt, are considered, and are, good housekeepers and homekeepers. Yet, I know there is a yearning to help those we see need helping. The Christlike desire towards our friends is not that we may get something from them, that they may be of use to us, but that in some way we may be a blessing to them, and do them good. Yet, how can we do it? How can we get in touch with our neighbors? It is a very delicate matter, and requires tact, for many would resent the least interference with their management or mode of living. There was a woman that had three or four little children. On one side of the house was a nice grass plot, but from the kitchen window all sorts of rubbish was thrown—paper that meat had been wrapped in, those little wooden dishes that lard and butter are sent out in, fruit baskets, and other things, that would have made eyes and cooked a light meal, if they had been put into a box or basket and kept for

that purpose, and so saved an untidy litter, and given her children a clean bit of grass to have played on. But she could not, or would not, take any hint or suggestions to improve her home. I have thought that each member of this Institute might influence someone to make the village more beautiful and sanitary this summer. To do so, I do not think you need neglect one duty or pleasure, either, but as you pass by in an afternoon or evening walk. Often you can gain an influence by accepting a favor. Remember, our great Teacher did many of His great works as He passed by, and a great reformation was the result of His asking for a drink of water at a wayside well. In passing along, if you see anyone trying to make a garden and grow a few things, ask what varieties of potatoes or onions they are growing; anyone is pleased to have notice taken of their work. And if you have them, you might offer a few plants or seeds of flowers or vegetables. There is a saying, that, "If each before his own door swept, the village would be clean," but if they will not do this, we have good laws that must be enforced for the public good. There is a law that prohibits throwing filth or rubbish in a street, lane, or public place. So, if you see anything of this, notify your police trustees to have it removed. Penalty, one dollar, and two dollars for every week he neglects to remove the same.

Let me conclude with the words of that good man, Dean Farrar: "Remember, that, if the opportunities for great deeds should never come to you, the opportunity for good deeds is renewed for you day by day."

"There's never a rose in all the world
But makes some green spray sweeter;
There's never a wind in all the sky
But makes some bird wing fleetier;
There's never a star but brings to heaven
Some silver radiance tender;
And never a rosy cloud but helps
To crown the sunset splendor:
No robin but may thrill some heart,
His dawnlight gladness voicing,
God gives us all some small, sweet way
To set the world rejoicing."

With the Flowers.

Garden Notes.

Sow sweet peas as soon as the frost is out of the ground.

Order shrubs, trees, etc., in good time. When they are received, heel them in, that is, put them in a trench close together, cover all the roots with soil and water. This will keep them in good condition until planted out.

Vegetables may be had much earlier than people usually have them, if started in the house, or in a hotbed. Lettuce, beets, parsnips, egg-plant, parsley, celery, melons, cabbage, cauliflower, tomatoes, etc., may be started in this way. For extra-early plants, start the seeds in eggshells, small cotton bags, or cans from which the bottoms have been burned. Pack tightly in a box for convenience, and when the plants are to be set out in the open, simply remove shells, bags, cans, etc., without disturbing the soil.

In many places dandelions are cultivated for early spring "greens." They should be used while very young, before the flowers form. When blanched, the leaves are used for salad.

An Ottawa correspondent to Garden Magazine says that even in that cold latitude he has great success with roses, among which he mentions the following: Hybrid perpetuals—Captain Hayward, Mrs. John Laing, Chas. Lefebvre, Ulrich Brunner, Margaret Dickson, and Baroness Rothschild. Hybrid tea roses—Killarney, Caroline Testout, La France, Kaiserin, Souvenir du Pres. Carnot, Prairie Queen, Magna Charta, Paul Neyron and Gen. Jacqueminot. He finds it necessary to give the teas and hybrid teas a sheltered position, and thorough protection in winter, but otherwise has little trouble with them.

Insects on Plants.

My house plants are being destroyed by green insects. I have tried washing with soap and water, but this has failed to help them. The leaves first become spotted, then brown. Any information will be gladly received.

CONSTANT READER.

Try dipping your plants (inverted so that stems and foliage only are submerged) in tobacco water, made strong enough to be about the color of tea. Let the plants remain in the liquid about five minutes. Ivory-soap solution is also good. To make it, shave ¼ lb. Ivory soap into thin pieces. Pour a little water over, and dissolve on stove, then add five gallons water. Dip plants in it as above, or spray well, so that every part of the plant is wet with the solution.

Only a Smile.

By George Macdonald.

Only a smile that was given me
On the crowded street one day,
But it pierced the gloom of my saddened heart,
Like a sudden sunbeam ray.
The shadow of doubt hung over me,
And the burden of pain I bore,
And the voice of hope I could not hear,
Tho' I listened o'er and o'er.
But there came a rift in the crowd about
And a face that I knew passed by,
And the smile I caught was brighter to me
Than the blue of a summer sky;
For it gave me back the sunshine,
And it scattered each sombre thought,
And my heart rejoiced in the kindly warmth
Which that kindly smile had brought.

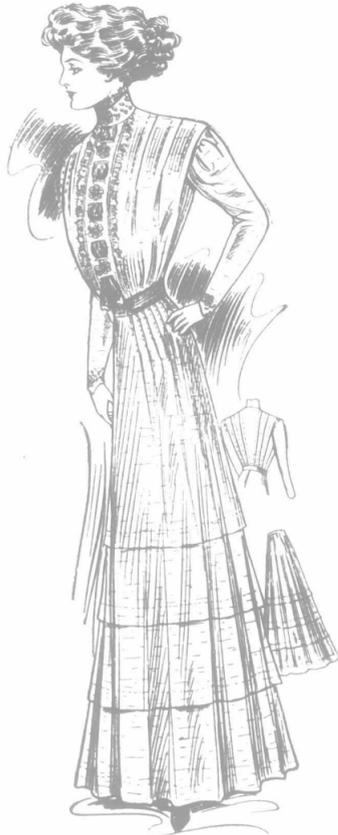
"The Farmer's Advocate" Fashions.



DESIGN BY MAY MANTON.
6289 Semi-Fitted Coat.
6272 Seven Gored Skirt.

Typical Spring Suit, Coat No. 6289, sizes 34 to 42 inches bust; and skirt No. 6272, sizes 22 to 32 inches waist. This suit may be made of wool Ottoman suiting, serge, or chiffon broadcloth, trimmed with soutache braid, or of pongee or linen for summer wear. Also the coat may be rounded or square, as preferred, and the skirt either Empire style or cut off and finished with a belt at the waist. Coat 6289, requires 5½ yards material 27, 3 yards 44, or 2½ yards 52 inches wide. Skirt No. 6272 requires 7 yards 27, 3½ yards 44, or 3¼ yards 52 inches

wide, for material which has no up and down; but if gores all require to be cut in one way, 10 yards 27, 5½ yards 44, or 4¼ yards 52 inches wide, will be necessary.



DESIGN BY MAY MANTON.
6285 Tucked Blouse.
5945 Sectional Tucked Skirt.

Blouse No. 6285, sizes 32 to 42 inches bust; skirt No. 5945, sizes 22 to 30 inches waist. To be made of silk and cotton combinations, pongee, linen, etc. Blouse requires 3½ yards of material 24, 2½ yards 32, or 2 yards 44 inches wide, with 3 yards edging. For the skirt 8½ yards 24, 7½ yards 32, or 5 yards 41 inches wide, will be needed.

Please order above patterns by number, giving bust or waist measure, as the case may be. Ten cents will be required for each number. Address, "The Farmer's Advocate," Fashion Dept., London, Ont.

A Modern Petition.

A petition which might be incorporated, and with all reverence, into the prayers of the most of us, might very well be: Deliver us from narrowness of heart or mind. Deliver us from thinking that our opinions are, in all cases, right, and those of others wrong. Give us the disposition to inquire into all sides of a question before pronouncing upon it irrevocably, and the faculty of placing ourselves in others' shoes before judging as to their actions or motives. Teach us to hold ourselves ever in an attitude of being ready to seek further light. Let us be ready to change our opinions, if good reasons for changing them appear. Help us to realize that mere stubbornness is no attribute of the truly great, and that "giving way" is often a sign of greater strength than holding to one's own way, however others may be inconvenienced by one's so doing. Deliver us from suspicion. Help us to look on all men as friends until they have proved themselves enemies. Give us the faculty of loving rather than hating. Help us to be cheerfully willing to do others a good turn, and let us never be impressed by our own benevolence. Help us, in a word, to be honest, honorable, sincere, generous, open-minded, kindly, not puffed up, remembering ever the golden rule, that we should do unto others as we would have them do unto us.



All flour is made from wheat. But there are different kinds of wheat and several ways of milling.

Royal Household Flour

is made of the best hard wheat in its finest and purest form. It always produces uniformly light, wholesome bread or pastry because its quality never varies. If your grocer does not carry Royal Household Flour, he will get it for you.

Ogilvie Flour Mills Co., Limited, Montreal. 11

CHURCH'S COLD WATER

Alabastine

MAKES ARTISTIC WALLS

The best decorators discourage the use of "old fashioned" wall paper, and recommend Alabastine. Because, with the use of the dainty Alabastine tints much more beautiful and artistic effects can be obtained. You can be your own decorator, too. By following the simple directions we send, anyone can use Alabastine with complete success.

A handsome book, called "Homes, Healthful and Beautiful," showing many stylish schemes for using Church's Cold Water Alabastine, will be mailed free to you on request. Let us hear from you by next mail.

Your hardware dealer will sell you 5 lb. package of Alabastine for 50c. Remember Alabastine is the *only* wall finish made of Gypsum rock cement. None genuine without a little church on every package.

It Won't Rub Off

The Alabastine Co., Limited 31 Willow Street, Paris, Ontario

The Golden Dog

(Le Chien D'Or.)

A Canadian Historical Romance.

Copyright, 1897, by L. C. Page & Co. (Inc.)

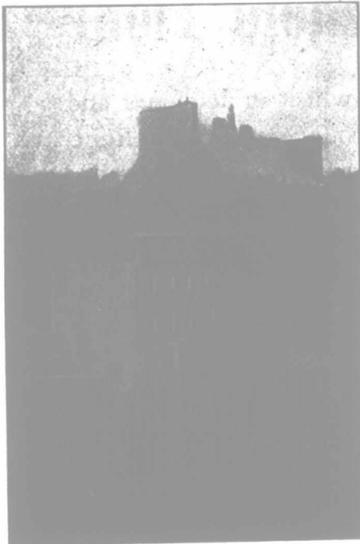
[Serial Rights Secured by the Wm. Weld Co., Ltd., London, Ont.]

CHAPTER XIII.

The Chien D'Or.

On the Rue Buade, a street commemorative of the gallant Frontenac, stood the large, imposing edifice newly built by the Bourgeois Philibert, as the people of the Colony fondly called Nicholas Jaquin Philibert, the great and wealthy merchant of Quebec, and their champion against the odious monopolies of the Grand Company favored by the Intendant.

The edifice was of stone, spacious and lofty, but in style solid, plain and severe. It was a wonder of architecture in New France, and the talk and admiration of the Colony from Tadousac to Ville Marie. It comprised the city residence of the Bourgeois, as well as suites of offices and warerooms connected with his immense business.



The House of the Golden Dog.

The house was bare of architectural adornments; but on its facade, blazing in the sun, was the gilded sculpture that so much piqued the curiosity of both citizens and strangers, and was the talk of every seignior in the land. The tablet of the Chien D'or—the Golden Dog—with its enigmatical inscription, looked down defiantly upon the busy street beneath, where it is still to be seen, perplexing the beholder to guess its meaning, and exciting our deepest sympathies over the tragedy of which it remains the sole sad memorial.

Above and beneath the figure of a couchant dog gnawing the thigh bone of a man is graven the weird inscription, cut deeply in the stone, as if for all future generations to read and ponder over its meaning:

"Je suis un chien qui ronge l'os,
En le rongeant je prends mon repos.
Un temps viendra qui n'est pas venu
Que je mordrai qui m'aura mordu."
Or, in English:

"I am a dog that gnaws his bone,
I couch and gnaw it all alone—
A time will come, which is not yet,
When I'll bite him by whom I'm bit."

The magazines of the Bourgeois Philibert, presented not only an epitome, but a substantial portion of the commerce of New France. Bales of furs, which had been brought down in fleets of canoes from the wild, almost unknown regions of the Northwest, lay piled up to the beams—skins of the smooth beaver, the delicate otter, black and silver fox, so

rich to the eye and silky to the touch that the proudest beauties longed for their possession; seal-skins to trim the gowns of portly burgomasters, and ermine to adorn the robes of nobles and kings. The spoils of the wolf, bear and buffalo, worked to the softness of cloth by the hands of Indian women, were stored for winter wear, and to fill the sledges with warmth and comfort when the north-west wind freezes the snow to fine dust, and the aurora borealis moves in stately possession, like an army of spearmen, across the northern sky. The harvests of the colonists, the corn, the wool, the flax; the timber, enough to build whole navies, and mighty pines fit to mast the tallest admiral, were stored upon the wharves and in the warehouses of the Bourgeois upon the banks of the St. Lawrence, with iron from the royal forges of the Three Rivers, and heaps of ginseng from the forests, a product worth its weight in gold, and eagerly exchanged by the Chinese for their teas, silks and sycee silver.

The stately mansion of Belmont, overlooking the picturesque valley of the St. Charles, was the residence proper of the Bourgeois Philibert, but the shadow that in time falls over every hearth had fallen upon his when the last of his children, his beloved son Pierre, left home to pursue his military studies in France. During Pierre's absence, the home at Belmont, although kept up with the same strict attention which the Bourgeois paid to everything under his rule, was not occupied by him. He preferred his city mansion, as more convenient for his affairs, and resided therein. His partner of many years of happy wedded life had been long dead; she left no void in his heart that another could fill, but he kept up a large household for friendship's sake, and was lavish in his hospitality. In secret, he was a grave, solitary man, caring for the present only for the sake of the thousands dependent on him—living much with the memory of the dear dead, and much with the hope of the future in his son Pierre.

The Bourgeois was a man worth looking at, and, at a glance, one to trust to, whether you sought the strong hand to help, the wise head to counsel, or the feeling heart to sympathize with you. He was tall and strongly knit, with features of a high patrician cast, a noble head, covered thick with grizzly hair—one of those heads so tenacious of life that they never grow bald, but carry to the grave the snows of a hundred years. His quick gray eyes caught your meaning ere it was half spoken. A nose and chin, moulded with beauty and precision, accentuated his handsome face. His lips were grave even in their smile, for gaiety was rarely a guest in the heart of the Bourgeois—a man keenly susceptible to kindness, but strong in resentments, and not to be placated with the fullest atonement.

The Bourgeois sat by the table in his spacious, well-furnished drawing-room, which overlooked the Rue Buade and gave him a glimpse of the tall, new Cathedral and the trees and gardens of the Seminary. He was engaged in reading letters and papers just arrived from France by the frigate, rapidly extracting their contents, and pencilling on their margins memos, for further reference to his clerks.

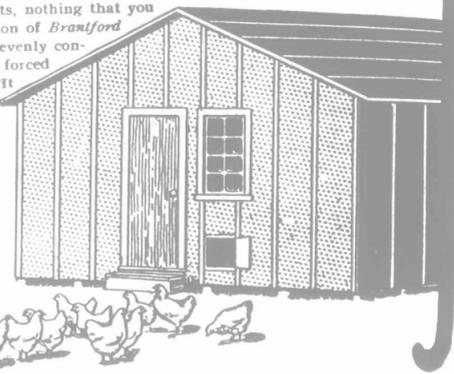
The only other occupant of the room was a very elderly lady, in a black gown of rigid Huguenot fashion. A close white cap, tied under her chin, set off to the worst advantage her sharp, yet kindly, features. Not an end of ribbon or edge of lace could be seen to point to one hair-breadth of indulgence in the vanities of the world by this strict old Puritan, who, under this unpromising exterior, possessed the kindest heart in Christendom. Her dress, if of rigid severity, was of saintly purity, and almost pained the eye with its precision and neatness. So fond are we of some freedom from over-much care as from over-much right-

HOW THE VERY LIFE IS EATEN OUT OF MOST ROOFING.

Not two Roofings in a hundred can withstand the slow, secret, dangerous attacks of acid—a deadly enemy to most Roofing.

Because few Roofing makers care to spend the extra money necessary to make such Roofing. Acids are caused by green or damp hay, or the cattle in your sheds. These cattle sweat, producing vapor which contains acids and gases destructive to most Roofing. These enemies attack the underside—which is weak in most Roofing—and does its ruinous work where you cannot see it, till too late. The first you know that it is not what the fellow claimed is the startling sight of a million "pin-holes" all over. Examine the Roofing of your barn now—you'll likely find this defect. This is caused by weak insides, which should be the strongest part, but the portion hopelessly slighted by most makers because you won't test it. Nearly all Roofing, except Brantford, has as a foundation wood pulp, jute, cotton cloth, etc., which cannot absorb sufficiently. It possesses nothing to hold it together, and is coated with cheapest covering obtainable: animal fats, greases, oils, tar, or some other refuse. These dangerous coatings are so weak that they are readily at the mercy of the acids. And the foundation! It has no barrier! It has already wilted. No amount of supposedly preventatives can save this Roofing. It is bound to go to pieces sooner or later and just when you least expect. Most Roofing makers will try to avoid the issue if asked to show insides of their Roofing. But we encourage tests of Brantford Asphalt Roofing. There are no secrets, nothing that you shouldn't know. The foundation of Brantford Asphalt Roofing is long-fibred, evenly condensed pure wool. Asphalt is forced into wool, soaking every fibre. It is heavily coated with special waterproof coating into which Silicia Sand is rolled under pressure. Brantford Asphalt Roofing is wear resisting, fire, water, weather, acid and smoke-proof. Rain or snow can't freeze or crack it; heat of sun cannot melt it. Its pliability prevents cracking or opening at seams. There are many other Brantford specialties. Our Big Roofing Book with Brantford samples is free. Write us or your dealer now.

Brantford Roofing



Brantford Roofing Co., Limited,
Brantford, Canada.

PAQUET Guaranteed CLOTHES

A REVOLUTION IN
METHODS OF MAKING AND
SELLING MEN'S CLOTHES



PAQUET Guaranteed CLOTHES represent the latest advance in Clothes Making. They are not "Ready Made," nor yet "Custom Made." They have the advantage of the old-fashioned Ready-made Clothes because they can be made to fit BEFORE they are made up. All Ready-made Clothes are made up and finished to fit AVERAGE types, not REAL men. When you buy the old-fashioned Ready-made Clothes you may be quite sure that they will not fit you, because no two men are exactly alike, and once a suit or garment is finished, it can't be altered properly without being all ripped apart and recut.

PAQUET Guaranteed CLOTHES are NOT Ready Made. That's why we can guarantee them to fit you PERFECTLY. ||

They have the advantage of Custom-made Clothes because they can be made for HALF the price of Custom-made Clothes of equal quality and style.

PAQUET Guaranteed CLOTHES are made after the very latest New York models, by the most highly-trained experts. They are sold direct to you at Wholesale Prices, and are GUARANTEED to be the best value in Canada to-day at from \$10.00 to \$13.75—worth \$13.50 to \$18.00.

Write for FREE Style Book, showing samples of the very latest patterns from the English looms. Don't put it off until another time—a postcard will do—you'll get the Style Book by return mail. It'll surprise you.

THE
PAQUET
COMPANY
LIMITED.
QUEBEC CANADA.

WHEN WRITING ADVERTISERS, PLEASE MENTION "THE ADVOCATE."

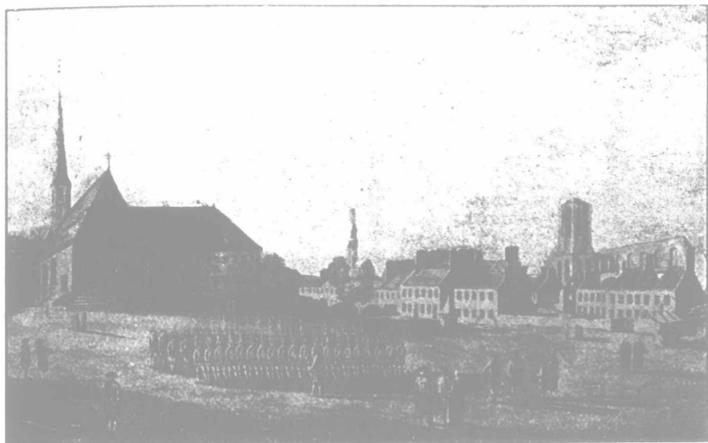
eousness, that a stray tress, a loose ribbon, a little rent, even, will relieve the eye and hold it with a subtle charm. Under the snow-white hair of Dame Rochelle—for she it was, the worthy old housekeeper and ancient governess of the House of Philibert—you saw a kind, intelligent face. Her dark eyes betrayed her Southern origin, confirmed by her speech, which, although refined by culture, still retained the soft intonation and melody of her native Languedoc.

Dame Rochelle, the daughter of an ardent Calvinist minister, was born in the fatal year of the revocation of the Edict of Nantes, when Louis XIV. undid the glorious work of

ligion and the practical duties of life. The light that illumined her, though flowing through the narrow window of a narrow creed, was still light of divine origin. It satisfied her faith, and filled her with resignation, hope and comfort.

Her three studies were the Bible, the hymns of Marot, and the sermons of the famous Jurieu. She had listened to the prophecies of Grande Marie, and had even herself been breathed upon on the top of Mount Peira by the Huguenot prophet, De Serre.

Good Dame Rochelle was not without a feeling that at times the spiritual gift she had received when a girl made itself manifest by intu-



View of the Cathedral and Jesuits' College, Quebec, 1761.

Henri IV., and covered France with persecution and civil war, filling foreign countries with the elect of her population, her industry, and her wealth, exiled in the name of religion.

Dame Rochelle's childhood had passed in the trying scenes of the great persecution, and in the succeeding civil war of the Cevennes she lost all that was nearest and dearest to her—her father, her brothers, her kindred nearly all, and lastly, a gallant gentleman of Dauphiny to whom she was betrothed. She knelt beside him at his place of execution—or martyrdom, for he died for his faith—and holding his hands in hers, pledged her eternal fidelity to his memory, and faithfully kept it all her life.

The Count de Philibert, elder brother of the Bourgeois, was an of-



The Basilica, Quebec.

ficer of the King; he witnessed this sad scene, took pity upon the hapless girl, and gave her a home and protection with his family in the Chateau of Philibert, where she spent the rest of her life, until the Bourgeois succeeded to his childless brother. In the ruin of his house, she would not consent to leave them, but followed their fortunes to New France. She had been the faithful friend and companion of the wife of the Bourgeois, and the educator of his children, and was now, in her old age, the trusted friend and manager of his household. Her days were divided between the exercises of re-

tions of the future, which were, after all, perhaps only emanations of her natural good sense and clear intellect—the foresight of a pure mind.

The wasting persecutions of the Calvinists in the mountains of the Cevennes drove men and women wild with desperate fanaticism. De Serre had an immense following. He assumed to impart the Holy Spirit and the gift of tongues by breathing upon the believers. The refugees carried his doctrines to England, and handed down their singular ideas to modern times; and a sect may still be found which believes in the gift of tongues and practices the power of prophesying, as taught originally in the Cevennes.

The good dame was not reading this morning, although the volume before her lay open. Her glasses lay upon the page, and she sat musing by the open window, seldom looking out, however, for her thoughts were chiefly inward. The return of Pierre Philibert, her foster child, had filled her with joy and thankfulness, and she was pondering in her mind the details of a festival which the Bourgeois intended to give in honor of the return of his only son.

The Bourgeois had finished the reading of his packet of letters, and sat musing in silence. He, too, was intently thinking of his son. His face was filled with the satisfaction of old Simeon when he cried, out of the fullness of his heart, "Domine! nunc dimittis!"

"Dame Rochelle," said he. She turned promptly to the voice of her master, as she ever insisted on calling him. "Were I superstitious, I should fear that my great joy at Pierre's return might be the prelude to some great sorrow."

"God's blessing on Pierre!" said she, "he can only bring joy to this house. Thank the Lord for what He gives and what He takes! He took Pierre, a stripling from his home, and returns him a great man, fit to ride at the King's right hand and to be over his host like Benaiah, the son of Jehoiada, over the host of Solomon."

"Grand merci for the comparison, dame!" said the Bourgeois, smiling, as he leaned back in his chair. "But Pierre is a Frenchman, and would prefer commanding a brigade in the army of the Marshal de Saxe to being

The Flute



It is Music that amuses

Both words come from the same root. Music is one form of amusement, and amusement is one result of music. You get both music and amusement with

The EDISON PHONOGRAPH

Mr. Edison's favorite invention, the ideal but inexpensive entertainer for the home.

Edison Amberol Records

are the new Records that play twice as long as the old ones and a great deal better, making more kinds of music and other entertainment now available for the Phonograph.

See your dealer today and hear the Edison Phonograph and the Amberol Records.

Edison Phonographs are sold everywhere at the same price. They are sold by many dealers on the easy-payment plan.

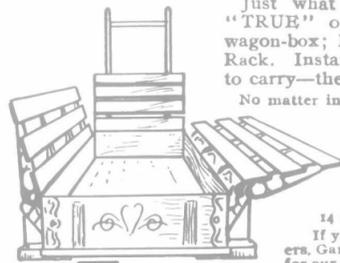
FREE. Ask your dealer or write to us for illustrated catalogue of Edison Phonographs, also catalogue containing complete lists of Edison Records, old and new.

We Want Good Live Dealers to sell Edison Phonographs in every town where we are not now well represented. Dealers having established stores should write at once to



National Phonograph Company, 112 Lakeside Avenue, Orange, N. J., U.S.A.

"TRUE" COMBINATION WAGON BOX AND RACK



Just what every farmer needs. With the "TRUE" on his wagon he has a first-class wagon-box; Hay, Stock, Corn, Wood or Poultry Rack. Instantly adjusted for any load you want to carry—the only tools you need are your hands.

No matter in what position you put the wings, it is impossible for them to get out of that position, but it would take you but an instant to change them.

We guarantee this article to be made of nothing but the best of material—Yellow Pine, Hardwood and Malleable Iron—and to carry two tons in any position. Made in 14 and 16-ft. lengths and 38, 40 and 42-inch widths. If you need anything in the line of Planters, Seeders, Garden Drills and Cultivators, Sprayers, etc., write for our catalogue. We have dealers in your town.

THE EUREKA PLANTER CO., Limited - Woodstock, Ont.

over the host of King Solomon. But," continued he, gravely, "I am strangely happy to-day, Deborah"—he was wont to call her Deborah—"and I will not anticipate any mischief to mar my happiness. Pshaw! It is only the

reaction of overexcited feelings. I am weak in the strength of my joy." "The still, small voice speaks to us in that way, master, to remind us to place our trust in Heaven, not on earth, where all is transitory and uncertain; for if a man live many

years, and rejoice in them all, let him remember the days of darkness, for they are many! We are no strangers to the vanity and shadows of human life, master! Pierre's return is like sunshine breaking through the clouds. God is pleased if we bask in the sunshine when he sends it."

"Right, dame! and so we will! The old walls of Belmont shall ring with rejoicing over the return of their heir and future owner."

The dame looked up delightedly at the remark of the Bourgeois. She knew he had destined Belmont as a residence for Pierre; but the thought suggested in her mind was, perhaps, the same which the Bourgeois had mused upon when he gave expression to a certain anxiety.

"Master," said she, "does Pierre know that the Chevalier Bigot was concerned in the false accusations against you, and that it was he, prompted by the Cardinal and the Princess de Carignan, who enforced the unjust decree of the Court?"

"I think not, Deborah. I never told Pierre that Bigot was ever more than the avocat du Roi in my persecution. It is what troubles me amidst my joy. If Pierre knew that the Intendant had been my false accuser on the part of the Cardinal, his sword would not rest a day in its scabbard without calling Bigot to a bloody account. Indeed, it is all I myself can do to refrain. When I met him for the first time here, in the Palace gate, I knew him again and looked him full in the eyes, and he knew me. He is a bold hound, and glared back at me without shrinking. Had he smiled, I should have struck him; but we passed in silence, with a salute as mortal as enemies ever gave each other. It is well, perhaps, I wore not my sword that day, for I felt my passion rising—a thing I abhor. Pierre's young blood would not remain still if he knew the Intendant as I know him. But I dare not tell him! There would be bloodshed at once, Deborah!"

"I fear so, master! I trembled at Bigot in the old land! I tremble at him here, where he is more powerful than before. I saw him passing one day. He stopped to read the inscription of the Golden Dog. His face was the face of a fiend, as he rode hastily away. He knew well how to interpret it."

"Ha! you did not tell me that before, Deborah!" The Bourgeois rose, excitedly. "Bigot read it all, did he? I hope every letter of it was branded on his soul as with red-hot iron!"

"Dear master, that is an unchristian saying, and nothing good can come of it. 'Vengeance is mine, saith the Lord!' Our worst enemies are best left in His hands."

The dame was proceeding in a still more moralizing strain, when a noise arose in the street from a crowd of persons, habitans for the most part, congregated round the house. The noise increased to such a degree that they stopped their conversation, and both the dame and the Bourgeois looked out of the window at the increasing multitude that had gathered in the street.

The crowd had come to the Rue Buade to see the famous tablet of the Golden Dog, which was talked of in every seigniory in New France; still more, perhaps, to see the Bourgeois Philibert himself—the great merchant who contended for the rights of the habitans, and who would not yield an inch to the Friponne.

The Bourgeois looked down at the ever-increasing throng—country people for the most part, with their wives, with not a few citizens, whom he could easily distinguish by their dress and manner. The Bourgeois stood rather withdrawn from the front, so as not to be recognized, for he hated intensely anything like a demonstration, still less an ovation. He could hear many loud voices, however, in the crowd, and caught up the chief topics they discussed with each other.

His eyes rested several times on a



Baby fights for Baby's Own Soap

He feels so good after the bath that he smiles in anticipation and laughs in real enjoyment. 6 09

Baby's Own Soap

"Best for Baby—best for You."

ALBERT SOAPS LTD. MFRS. MONTREAL

THE REMOVAL OF SUPERFLUOUS HAIR

Moles, warts, ruptured veins, etc., by our reliable method of antiseptic Electrolysis is safe, certain and practically painless. We assure satisfaction in each case. Come at Easter for treatment. All skin, scalp hair and complexional troubles cured. Consult us free at office or by mail. Get Booklet "F."

HISCOTT
DERMATOLOGICAL INSTITUTE
61 College St., Toronto.
Tel. M. 831. Estab. 1892.

SEED OATS BLACK JOANETTE.
Produced 500 bushels
from 10 bushels seed last
year. Extra well cleaned. Send for sample and price.
J. S. HENDERSON, ROCKTON, ONTARIO.

Weedy Clover Seed, Weedy Timothy Seed,

IS DEAR AT ANY PRICE.

PURE SEED

We grant is hard to get, but we want you to know that we have it. No mustard. No false flax. No ragweed. No buckhorn. No daisy. No catchfly.

SEND FOR SAMPLES AND SEE FOR YOURSELVES.

Present price F. O. B. Toronto.

"Sun" Brand Red Clover, \$ 7.75 bus.

"Gold" " Alfalfa 12.50 "

"Ocean" " Alsike 10.50 "

"Diamond" Brand Timothy, \$3.25 "

A CHANGE IN OATS

Is a Good Thing.

Select any of the following varieties: Good clean samples, 75c. per bushel F. O. B. Toronto. Jute bags, 10c. each; cotton bags 25c. each. Allow 3 bags for 10 bushels.

Twentieth Century, Sensation, Irish White, Derby, Waverley.

Joanette Black, - 90c. per bushel.

Black Tartarian, - 80c. per bushel.

Send for catalogue.

Geo. Keith & Sons,

Established 1866.

124 King St. East, Toronto.

Reliable Farm Help

FOR 1909

can be secured from the

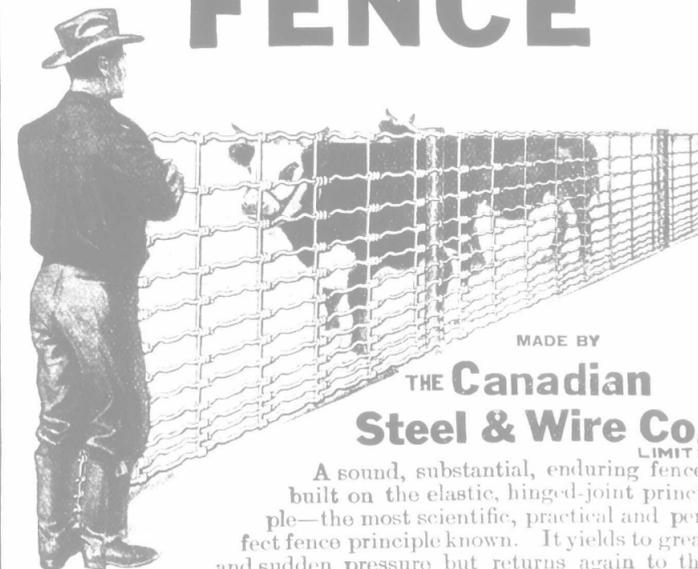
S. A.
COLONIZATION AGENCY.

Send for information and application forms to:

LIEUT. COLONEL HOWELL, TORONTO.
22 Albert Street.

Mention Farmer's Advocate.

AMERICAN FENCE



MADE BY

THE Canadian
Steel & Wire Co.
LIMITED

A sound, substantial, enduring fence, built on the elastic, hinged-joint principle—the most scientific, practical and perfect fence principle known. It yields to great and sudden pressure but returns again to the original shape.

Thoroughly galvanized and protected against weather.

FOR SALE BY

Reliable dealers everywhere. If unable to locate our agent, write us at Hamilton, Ontario.

wiry, jerking little fellow, whom he recognized as Jean La Marche, the fiddler, a censitaire of the Manor of Tilly. He was a well-known character, and had drawn a large circle of the crowd around himself.

"I want to see the Bourgeois Philibert!" exclaimed Jean La Marche. "He is the bravest merchant in New France—the people's friend. Bless the Golden Dog, and curse the Friponne!"

"Hurrah for the Golden Dog, and curse the Friponne!" exclaimed a score of voices; won't you sing, Jean?"

"Not now; I have a new ballad ready on the Golden Dog, which I shall sing to-night—that is, if you will care to listen to me." Jean said this with a very demure air of mock modesty, knowing well that the reception of a new ballad from him would equal the furor for a new aria from the prima dona of the opera at Paris.

"We will all come to hear it, Jean!" cried they; "but, take care of your fiddle or you will get it crushed in the crowd."

"As if I did not know how to take care of my darling baby!" said Jean, holding his violin high above his head. "It is my only child; it will laugh or cry, and love and scold as I bid it, and make everybody else do the same when I touch its heart-strings." Jean had brought his violin under his arm, in place of a spade, to help build up the walls of the city. He had never heard of Amphion, with his lyre, building up the walls of Thebes; but Jean knew that in his violin lay a power of work by other hands, if he played while they labored. "It lightened toil, and made work go merrily as the bells of Tilly at a wedding," said he.

(To be continued.)

TRADE TOPICS.

FOSTER HOMES FOR CHILDREN.—An interesting fact, emphasized in Mr. J. J. Keslo's Report on Neglected and Dependent Children, is that homes in the country are preferable to city homes for homeless children. Will those interested in this subject kindly write to Mr. J. J. Keslo, Parliament Buildings, Toronto, for all further information.

Regarding quality of materials handled and satisfaction to customers, the Chicago House-wrecking Co. receive many testimonials. The following was sent recently by Frank Goback, of Seneca, Kan.: "We have our lumber used up and have been trying to get up another carload, as we have been so well pleased with this one, which is a great inducement for others. Mr. —, who is here now looking over our lumber, is very well pleased with it. Your lumber will stand looking at, and you can use my name if you wish to."

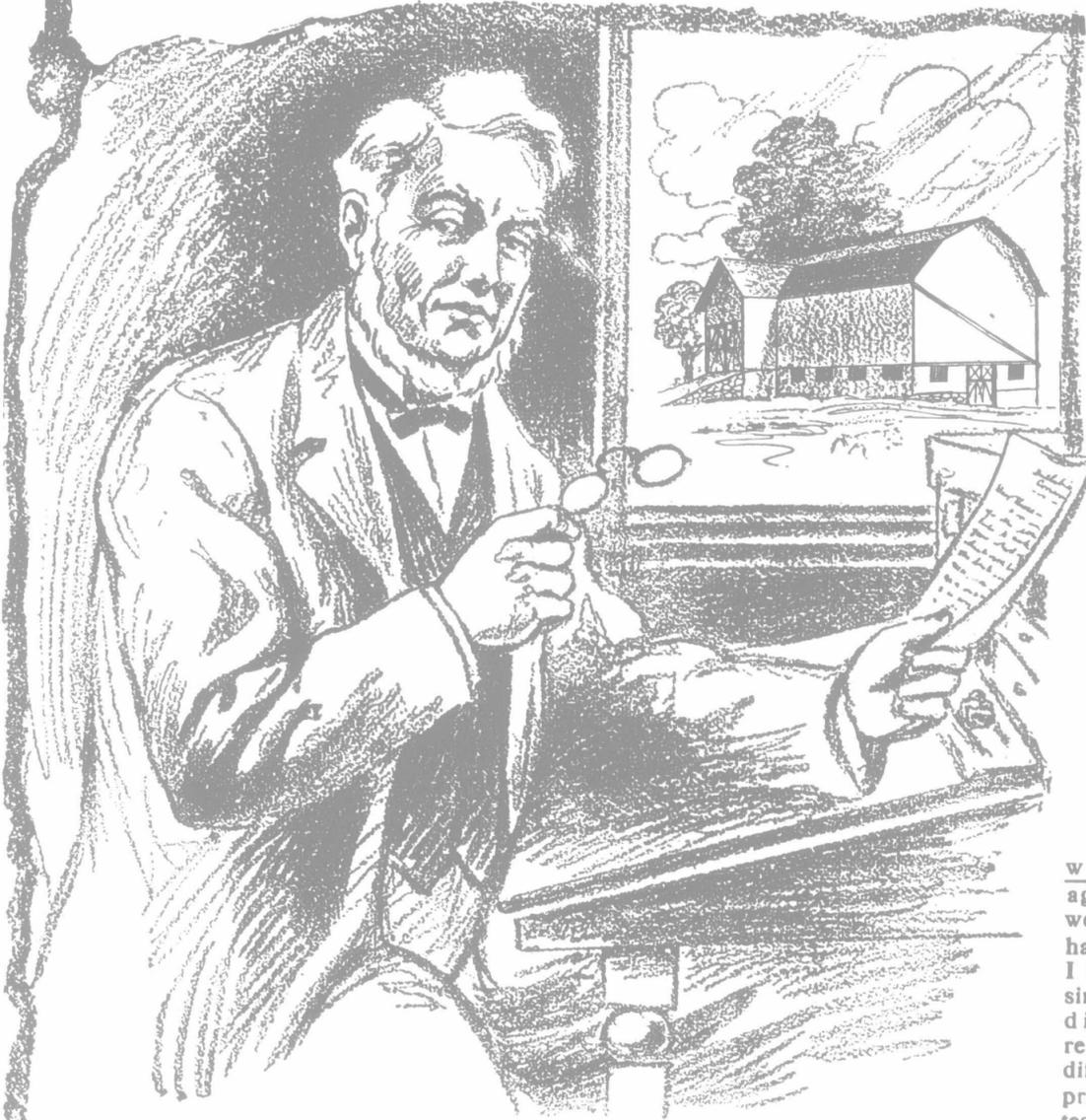
As usual, the Salvation Army will be in a position to introduce farm help to farmers throughout the country during the coming spring. All indications point to a revival in trade, and there is a probability that farm help will be scarce. The Army authorities are constantly in communication with newcomers and others in the country, who are desirous of locating on farms from time to time, and will be glad to introduce these people to farmers needing help. It is not the purpose of the Army, however, to encourage the immigration of farm help to Canada during the coming season, unless the conditions warrant such a policy. Therefore, farmers who are likely to require help, are advised to communicate promptly with Lieut.-Colonel Thomas Howell, James and Albert streets, Toronto, Ontario. Application forms and all other information will be supplied freely on application to the above address.

PERFECT IRELAND.

A large Leicester ewe, the property of Mr. Geo. Wilson, Emyvale, County Monaghan, gave birth last month to six lambs. Three of the lambs died, but the other three and the mother are alive and healthy.

The Philosopher

of Metal Town



"Now, I'm not a professional builder or a contractor or a carpenter, but it seems to me I have had some building problem or other on my hands for many years — first, my own, then my boys', then my nephews', and my grand-boys'.

"Twenty-five years ago I became a pioneer user of metallic building materials.

"It was only a barn, and not much of a barn at that which I first covered with metallic shingles — the first product of the Metallic Roofing Co.

"And, mind you, that was twenty-five years ago, and the roof is weather-proof now. It has never needed repairs. I have built many barns since then, but I have never discovered any sane reason for roofing them differently. You can't improve on a straight 25-year test.

"Then besides, I always believe in dealing with the biggest people in any manufacturing business. You share in the merit of their goods which have made them the biggest in their line. That's why I stick to the Metallic Roofing Co.—they're the largest architectural sheet metal firm in Canada, with an output larger than all others combined.

"But it is not of barns alone I would speak. You note, perhaps, that they call me the 'philosopher of Metal Town'. That's because I'm a public character in a way.

"I have been chairman of many building committees—church, school, library, et cetera, and I always find the metallic man has been my most useful assistant. Outside or inside, front or back, ceiling or sides, I find they all need the metallic man's aid.

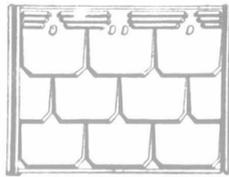
"I will tell you more about our 'metal town' when we're better acquainted. I can quote some comparative figures

which will interest you. To-day I'm emphasizing shingles.

"You can get them either galvanized or painted. They are always reliable. They are more economically durable and quicker to apply than any others, fitting accurately, and therefore most easily laid. They have been thoroughly tested in all kinds of climates, invariably proving fire, lightning, rust and weather proof.

"If you're building, make sure of satisfaction by ordering Eastlake's for the roof. Full-est information if you write."

THE
EASTLAKE
STEEL
SHINGLES



THE METALLIC ROOFING CO., LIMITED, TORONTO and WINNIPEG
MANUFACTURERS FOR METAL TOWNS



Ending Poultry Troubles

Every man who keeps hens and aims to handle them as a business proposition is more or less troubled with a whole row of dull-eyed worthless drones, squatted on the roosts at midday with heads pulled down between their shoulders, just waiting for the next meal. It's the hen that's off the roost at daybreak and hustles all day long that fills your egg basket.

Dr. HESS Poultry PAN-A-CE-A

puts the hen to work, invigorates and tones up every organ, makes hens lay and cures gapes, cholera, roup and other poultry diseases. Dr. Hess Poultry Pan-a-ce-a is not a poultry feed—it's a tonic. To raise your own feed and give Poultry Pan-a-ce-a to help digest it is "The Dr. Hess Idea." His knowledge of medicine and years of experimenting is responsible for this preparation. Besides, it is sold on a written guarantee. Feed Poultry Pan-a-ce-a to your hens and they'll lay in zero weather.

1½ lbs. 35c; 5 lbs. 85c; 12 lbs. \$1.75; 25 lb. pail \$3.50. Duty paid.
DR. HESS & CLARK, Ashland, Ohio, U. S. A.
 Send 2c for Dr. Hess 48 page poultry book, free.



DR. HESS STOCK FOOD points the way to profitable stock keeping. It has always been a serious problem with feeders, how to prevent digestive disorders and loss of appetite in heavily fed animals. Dr. Hess Stock Food, the prescription of Dr. Hess (M. D., D. V. S.) contains the bitter tonics recognized in medicine for improving digestion; iron, everywhere known as a blood builder, and nitrates for cleansing the system of waste material, and laxatives which regulate the bowels. Increasing the stockmen's profit by giving tonics, etc., that improve digestion, is known as "The Dr. Hess Idea." Not feed but increased digestion is what Dr. Hess Stock Food supplies. It pays by increasing digestion; by making stock thrifter and healthier; by saving the loss liable by disease; besides, the stock like it; it seasons their ration, provides a relish that also aids digestion. 100 lbs. \$7.00; 25 lb. pail \$2.00. Duty paid. Sold on a written guarantee. Feed in a small dose.
 Send 2c for Dr. Hess Stock Book, free.

INSTANT LOUSE KILLER KILLS LICE

POULTRY AND EGGS

Condensed advertisements will be inserted under this heading at two cents per word each insertion. Each initial counts for one word, and figures for two words. Names and addresses are counted. Cash must always accompany the order for any advertisement under this heading. Parties having good pure-bred poultry and eggs for sale will find plenty of customers by using our advertising columns. No advertisement inserted for less than 30 cents.

A GRAND Single-comb White Leghorn strain. Eggs, hundred, four dollars. Dollar setting. Central Ontario Poultry Yards, Colborne, Ontario.

ABSOLUTELY reliable Brown and Buff Leghorn. Eggs \$2.00 per forty. H. O. Heintz, Esq., Hanover.

BARGAINS—The late Mr. Robson's entire stock of high-class poultry is now on the market and must be sold at once: R.-C. B. Leghorn cocks, \$1.00 to \$5.00 each; hens, \$1.00 to \$1.00 each. S.-C. B. Leghorn cocks, \$1.00 to \$5.00 each; hens, \$1.00 to \$1.50 each; Buff Leghorns, pair, \$5.00; Buff Wyandottes, trio, \$5.00; Golden-faced Wyandottes, cock and 3 hens, \$7.00. The following hens at \$1.00 each: 1 Andalusian, 2 Black Javas, 1 Mottled Java, 1 Houdan, 4 Buff Orpingtons, 2 White Rocks; also 1 pair of Toulouse Geese, a snap at \$6.00. Mrs. Thos. Robson, Woodstock, Ont.

BUY 95% FERTILE EGGS That will produce winter layers. Ancona eggs, \$1.50 per fifteen; Single-comb White Leghorn eggs, \$1 per fifteen; \$4.50 for one hundred. Free circulars for stamp. Edward C. Apps, Box 224, Brantford, Ont.

BARRED Rock eggs, six packed in Morgan baskets. One dollar per fifteen. C. H. Chalmers, Smith's Falls, Ont.

BARRED Rock, Buff Orpington Fertile eggs from best laying strains. \$4 per 100; \$1 per 13. Wilbur Bennett, Box 298, Peterboro, Ont.

BUFF Orpingtons, Barred Rocks, White Wyandottes. All high-class stock, carefully bred. Selected winter-laying strains. Farm raised. Combining size and quality. Eggs, one dollar setting. "Ingleside Farm," Hamilton, Ont.

BUFF Orpington pure-bred eggs for hatching; 9 chicks guaranteed. Illustrated catalogue, free, tells all about them. Hugh A. Scott, Caledonia, Ont.

BARRED ROCK eggs for hatching from best laying strain in Canada, \$2 per fifteen. Brien E. Post, Colton's Bay, Ontario.

BARRED ROCK eggs from heavy-laying, prize-winning stock, dollar for fifteen; two dollars for thirty six. Chas. Hilliker, Norwich, Ont.

CLARKS BUFF ORPINGTONS—Oldest and largest breeder in Canada. 12 years special-zing. Exhibition and egg production combined. Greatest winter layers in America. 11 breeding pens. Eggs from 1st 4 pens, \$5 per 15, infertile replaced free. Eggs from pens 6, 7, 8, 9, 10, 11, from \$1 to \$3 per 15. 50 eggs, \$3; 100 eggs, \$5.50. Crates free. Illustrated catalogue free. J. W. Clark, Cainsville, Ont.

COLUMBIAN WYANDOTTES—Dawson-Arnold strain, \$2 per fifteen. Clark & Mitchell, Box 15, Caledonia, Ont.

EGGs for hatching. White Wyandottes, Good laying strain. \$1 per setting. L. Turnbull, Pt. Colborne, Ont.

EGGs for hatching. Don't fail to send a card for our free mating list of prize-winning Black Minorcas, Brown Leghorns, and Barred Rocks, a few cockerels. Mrs. C. Day, Highgate, Ont.

EGGs from grand laying Indian Runner ducks. \$1.00 each. Single-comb Brown Leghorns, \$1 per 15. Frank Bairard, Glanworth, Ont.

EGGs, EGGS—From Collingwood winners. Buff Orpingtons, Barred Rocks, Columbia Wyandottes, and Light Brahmas; \$1 for 15. S. L. Anderson, Crossland, Ont.

EGGs FOR HATCHING—Barred and White Rocks, White and Silver Wyandottes, Black and Buff Orpingtons, Brown and White Leghorns, Black and Spangled Hamburgs, Houdans, Black Javas, Do-kings, Single and Rose Combed R. I. Reds. These birds won over 300 1st prizes at nine shows. \$2 per fifteen eggs. F. W. Krouse, Guelph, Ont.

FOR SALE—Pure-bred S.-C. White Leghorn eggs. \$1.00 per 15; \$1.25. R. Hughes, Collingwood, Ont.

HIGH-CLASS White Wyandotte eggs for hatching from prizewinning stock. \$1.50 per 15; \$2.50 per 30. Brown Bros., Colville, Ont.

INCUBATORS FOR SALE—Two Model, latest make, one Willis, and one Chatham. Roberts, Danforth Post Office, Ontario.

KLAGER'S Rhode Island Reds—both combs. 8 breeding pens. Enclose 5c for catalogue. Klager's Poultry Yards, Heppner, Ont.

LOOK—1 doz. Buff Orpington May pullets 75 cts. each. 1 extra cockerel \$1; 1 doz. Single-comb Brown Leghorn yearling hens 60 cts. each. This ad. app. runs only once. H. W. Parry, Princeton, Ont.

LUCHABAR Poultry Yards offers eggs from choice stock of the following varieties: M. B. turkeys \$2.50 per 9; Pekin and Rouen ducks, \$1.00 per 12; barred Rocks, Partridge and White Wyandottes, \$1.00 per 15. D. A. Graham & Son, Waukegan, Ontario.

QUALITY White Wyandottes—Grand layers. Eggs dollar per fifteen. W. D. Monkman, Wood Head, Ontario.

RHODE ISLAND REDS—Single comb. More popular every year. Eggs from our prize-winners, two dollars for thirteen. One fine cockerel for sale, five dollars. Woodley & Son, Knowlton, Que.

RHODE ISLAND REDS—The best winter laying fowl; \$1.00 per setting. J. I. Bracken, Melkand, Ont.

ROSE-COMB Rhode Island Reds. Eggs one dollar for fifteen. Best winter layers. Marshall Zille, Zurich, Ont.

RHODE ISLAND REDS—Rose-comb. Bred ten years from carefully selected heavy winter layers of large brown eggs. Eggs, dollar half per fifteen. Satisfaction guaranteed. Jno. Luscombe, Merton, Ont.

ROSE-COMB RHODE ISLAND RED—Eggs one and one fifty per fifteen. C. Cuthbert, Alton, Ont.

WHITE Rock eggs for sale, also a few cockerels. Apply to Howard Smith, Winona, Ont.

WHITE WYANDOTTES—Candee, Elliotts, Beans and Duston's egg strains. Farm-raised vigorous birds. Eggs \$1 for 15. \$2 for 40. \$4.50 per hundred. Cockerels \$1.50. R. J. Gibb, Galt, Ont.

WHITE Wyandotte eggs from choice matings. \$1.50 per 30 in Morgan crates. W. A. Bryant, Cairnmore, Ont.

WHITE WYANDOTTES—Splendid layers. Grand birds. Free range. Eggs, one dollar per fifteen; five dollars per hundred. Satisfaction guaranteed. Chas. F. Rogers, Dorchester, Ont.

eed Barley—A quantity of the famous No. 21 barley, which is the best at O. A. C., and also most popular throughout the Province since first distribution in 1906.

JOHN ELDER, Hensall, Ont.



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

ENGLISHMAN wants situation in nursery or market gardens. Apply stating wages. G. Wakeford, Trowbridge P. O., Ontario.

FARM laborer and wife would like employment on farm; both experienced, 2 1/2 years. Apply to F. Divall, Brodhage, Ont.

SINGLE man wanted, to engage for year. Must be experienced in farm work, and fitting Shorthorn cattle. A. J. Watson, Castlegar, Ont.

WANTED—Single, experienced man to work on grain and fruit farm. Apply: Leslie Kerns, Freeman, Ont.

WANTED—Experienced married man for general farm work; must be reliable and take an interest in work. Continuous employment, the right man. Duncan MacVannell, St. Mary, Ont.

WANTED—Persons to grow mushroom for us at home. Waste space in cellar, garden or farm can be made to yield \$15 to \$25 per week. Send for illustrated booklet and full particulars. Montreal Supply Co., Montreal.

WANTED—A good reliable farm hand; must be good horseman and plowman. Apply W. D. Breckon, Mgr. (Lake View Stock Farm), Bronte, Ont.

WANTED—Situation as gardener, or groom and gardener; age 29 married, no family. Address Richard Trowhill, Box 22, West Toronto, Ont.

WANTED—First-class man for general work on farm. Good wages. Good locality. Apply to R. Almond, Meaford, Ont.

WANTED—Reliable single man, good with horses and farm machinery. Good wages to right man. References required. Eaton's Farm, Irlington, Ontario.

Married Man Wanted to engage by the day and stock feeding; must be experienced along these lines. One having some experience in handling show Shorthorns and Clydesdales preferred. Comfortable house on the farm supplied.

GEO. D. FLETCHER, Wellington Co. Binkham P. O., Ont.

Farm for Sale

75 ACRES, machine worked fields, pasture 10 cows, orchard pear, apple, plum, peach and cherry; 2 story, 12-room residence; 2 barns, henhouse, workshop and carriage house; for list of crops and live stock included by aged owner for quick sale at \$16000.00. Call see page 6 "Strout's March Bulletin," copy free. Dept. 2415 E. A. Strout Co., University Bldg., Syracuse, N. Y.

For Sale:

Farm overlooking Beautiful Lake. 50 acres, fine 15-r. on 2 story residence, barn 28x50 and out buildings, see page 6 Feb. Bulletin for picture of buildings and big shade trees on lawn. To close immediately. \$1500 takes it. Write today. Tomorrow may be too late. Dept. 2415, E. A. Strout Co., University Bldg., Syracuse, N. Y.

GOSSIP.

Yearling sheep, in prime condition, sold at Union Stock-yards, Chicago, last week, as high as \$8.20 per cwt.

A man advertised recently in a London paper to forward, on receipt of postage stamps, "sound, practical advice, that would be applicable at any time and to all persons and conditions of life."

On receipt of the stamps he sent his numerous victims the following: "Never give a boy a penny to hold your shadow while you climb a tree to look into the middle of next week."

HORSE-BUYERS AT PAISLEY.

A recent issue of the Mildmay Gazette says: "During the last three months Paisley horse-buyers have been doing an active and extensive business among the farmers of that locality, having shipped 14 carloads of 18 head each, besides occasional smaller consignments. These animals averaged \$175 a head, which represents over \$44,000, distributed among the breeders of the equine. These farmers have been for several years breeding first-class animals, which are always in demand."

At the International Horse Show, to be held in Olympia, London, England, this year, June 5th to 15th, prizes to the amount of £12,000 (\$60,000) are listed, and there will be 854 prizes. Entries close May 3rd, or with double fees, May 8th. For prize-list, forms, and rules of entry, and other information, address Frank F. Euren, the International Horse Show, 12 Hanover Square, London, W. Telegrams and cables, "Exposed, London." The outlay on the show will be about \$240,000. It will undoubtedly be the greatest show of harness and saddle horses and ponies ever organized in any country.

AUCTION SALES ADVERTISED.

Readers are reminded of the following auction sales advertised:

April 1st.—Dispersion of the Holstein herd of R. S. Stevenson & Son, Ancaster, Ont. Hamilton and Brantford electric cars stop half mile from farm.

April 7th.—Dispersion of Shorthorn herd and Shropshire sheep of Henry L. Stead, Wilton Grove, Ont., six miles from London, one mile from Westminster station, on P. M. Railway, between London and St. Thomas. Morning trains met at station.

April 9th.—Annual sale, Clydesdales, Shorthorns and Yorkshires, at Myrtle, Ont. G.T.R. and C.P.R. single-fare rates.

ENGLISH THOROUGHBREDS.

At the 25th annual show of Thoroughbreds and Hunters, held in London, March 9th to 11th, there were 322 entries, no fewer than 100 mature Thoroughbred stallions figuring in the lists. There were 48 Hunter sires and colts, 65 mares and fillies, and 109 geldings. The quality of the Thoroughbreds is reported as the best ever seen at the London Show. The premiums for Thoroughbred stallions covered twelve districts, each district competing separately. There were no championship competitions in this class, the winner in each class being nominally the champion of his district. In the Hunter division there were 18 classes, with three cash prizes in each, besides a reserve and commendations, and a championship prize of £20 for the best mare or gelding, which went to Mr. J. S. H. Fullerton's gelding, Signal. The winning Thoroughbred stallions, photographs of some of which will be reproduced in "The Farmer's Advocate" in the near future, are handsome in conformation, and show indications of substance, and a strong constitution.

Canada's Champion Barred Rocks.

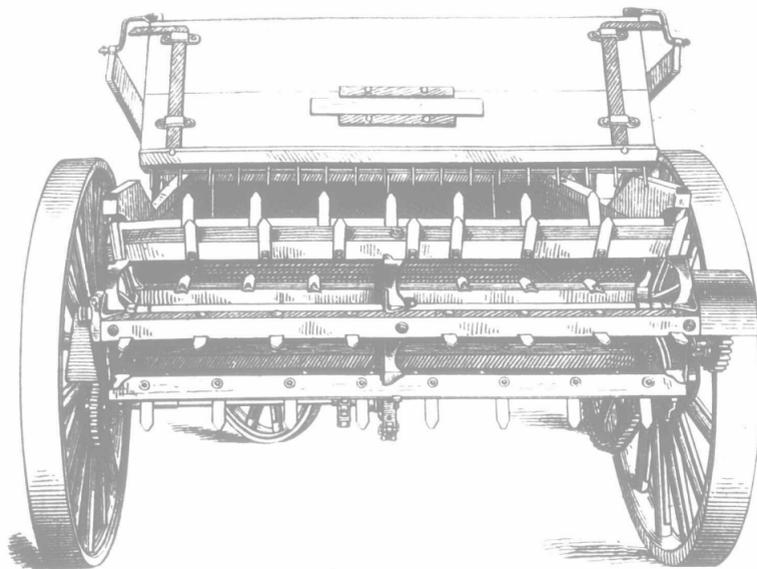
After 1st April \$7 cockerels reduced to \$5 each, \$5 ones to \$4 each. After 15th April \$7 ones to \$4 each, and \$5 ones to \$3 each. Orders booked now and filled in rotation.

John Pringle, London, Ont.

Write for Our Free Catalogue

Eggs for hatching from the following breeds: Buff Orpingtons, R. I. Reds (either comb), S.-C. White Leghorns, S.-C. B. Minorcas from Canada's best. Eggs, \$1.50 per 15; \$2.50 per 30.

The R. Roy Poultry Farm, Elmira, Ont. R. R. Ruppel, Proprietor.



The 1909 Kemp Manure Spreader

Equipped with the Reversible, Self-sharpening, Graded Flat-tooth Cylinder. The latest improvements of J. S. Kemp, the inventor of the first Manure Spreader. The result of 34 years in the use and manufacturing of Manure Spreaders. Send for our catalogues, fully describing this machine, and also our Imperial Horse-lift Drill. The only drill equipped with a horse-lift.

W. I. KEMP CO., LTD., STRATFORD, ONTARIO.



MODEL Incubators and Brooders

AWARDED HIGHEST HONORS AT Toronto Industrial, Ottawa and Winnipeg Exhibitions.

Twelve Reasons Why YOU Should Use Model Goods:

- 1st. Because there are no other goods on the market just as good as the Model Goods.
- 2nd. Because we give about double the value for money that other manufacturers do.
- 3rd. Because you have no trouble in hatching good, strong, healthy chicks with the Model Incubators.
- 4th. Because the Model Regulators are as near perfect as it is possible to make them. We claim we have the best regulator on earth.
- 5th. Because you will find the Model the most simple machine to handle; no cut-offs or other devices. Model Incubators regulate themselves; once set will run a whole season without change.
- 6th. Because you can go to your rest at night perfectly satisfied that the lamp and regulator will take care of the machine without the least anxiety or care on your part.
- 7th. Because all our machines are manufactured of the best hardwood (chestnut) with double walls, and packed with wool.
- 8th. Because the Model Goods are built for business, and to last a lifetime.
- 9th. Because we do not attempt to compete with a lot of the poor trash there is on the market.
- 10th. Because we want you to try us just once. We know if you do we have made a life-long customer.
- 11th. Because the Model Brooders take care of the chicks when hatched and rear them.
- 12th. Because we could fill a book with reasons why you should purchase Model Goods, but don't know one reason why you should not send us along your order and give us a trial.

Our 1909 catalogue is out, and it's free for the asking. Address:

The Model Incubator Co., Ltd., River St., Toronto.



Sherlock-Manning ORGANS

Contain Extra Wide Tongue Reeds

Which produce a **rounder, fuller and better** quality of tone. Also a **greater carrying power** than the tone of the usual narrow-tongue reeds. Thus the Sherlock-Manning is particularly adapted to church work, as well as best for the home.

Sherlock-Manning Organ Co., London, Ont.

QUESTIONS AND ANSWERS. Miscellaneous.

AREA OF CIRCLE.

In order that I may be enabled to ascertain the capacity of round siloes, kindly give me the number of square feet in circles of the following diameters: 10 feet, 12 feet, 14 feet, 16 feet. J. T.

Ans.—The number of square feet in a circle is found by squaring the radius (one-half the diameter) and multiplying by 3 1-7. The areas would be 78.57 square feet, 113.14 square feet, 154 square feet, and 201.14 square feet.

DANDRUFF IN HORSE'S TAIL.

I have two horses with scabby tails. One is a five-year-old mare, in foal, and the other a ten-year-old horse. They are in good condition. There are some short, stubby, wiry hairs in their tails. When these scabs come off, they take the hair with them. A. W.

Ans.—Wash with warm soapsuds, and follow with a weak solution of creolin, 1 part, to 200 parts water, or corrosive sublimate, 25 grains to a quart of water, rubbed in with a cloth twice a day. Place a sack or other cloth under the tail when applying, to protect the anus.

AN ERRONEOUS PRESCRIPTION FOR WORMS.

In March 4th issue of "The Farmer's Advocate" there are two recipes for worms, both the same as follows: 3 ounces each of sulphate of iron, sulphate of copper, calomel and tartar emetic. Mix and make into 24 powders and give a powder night and morning. In the following week's issue is the same recipe, but only 1 1/2 drams each of the different drugs, made into 12 powders. Which recipe is right, or are they both right; and, if so, why so much difference in amount of drugs used? J. J.

Ans.—Our correspondent has laid us under obligation by drawing attention to the inadvertent substitution of the word drams for ounces. The two prescriptions given in the March 4th issue are correct.

REBUILDING LINE FENCE.

What can I do about the line fence between my neighbor and myself, my half being good and his half being no good. My stock running in the fields can get from my place to his, and his to mine, which leaves me that I have to stable mine to keep same on my own premises, which I cannot afford to do. He does not seem willing to put up his share, or half. What means can I take to make him do so, and to be at no loss myself for his part. G. P. Ontario.

Ans.—Request him again to attend to the matter, and then, if he persists in neglecting it, notify him that unless it is properly attended to within a reasonable time (stating a date certain), you will call in the fence-viewers of the locality, and, if necessary, proceed accordingly under "The Line Fences Act," Revised Statutes of Ontario, 1897, Chapter 284.

TOP GRAFTING ON STUNTED TREES.

In the spring of 1904, I found I had room in my young orchard for about 20 more apple trees, and I set out Wealthy and Gano. These were sadly neglected, and what little growth they made was in sod—and they are still in sod. I find now I have Wealthy enough, and Gano I do not want. But I want more McIntosh Red, as they produce most excellent fruit on my land. If I were to have the sod broken up in the spring around these poor, stunted trees, and cultivate, would they answer to top-graft with McIntosh Red, or any other good kind, or had I better cut them out and set out McIntosh Red trees? J. W. G.

Ans.—Grafting always gives better results on healthy trees than on those that have suffered from lack of attention. Perhaps your best plan would be to break the sod, apply manure, and give thorough cultivation this season. Top-graft only a few choice limbs on each tree this spring. Next spring, no doubt, the trees will be more thrifty, and you can top-graft rather heavily, perhaps leaving a few limbs to be grafted the following spring. It should not be necessary to uproot the trees and replant.



Let the children drink all they want. Healthful, nutritious, delightful.

Absolutely pure. That rich chocolate flavor. Very economical.

The Cowan Co. Limited, Toronto.

GRAND TRUNK RAILWAY SYSTEM

Easter Excursions.

Return tickets at Single Fare between all stations in Canada, also to Detroit and Port Huron, Mich., Buffalo and Niagara Falls, N. Y. Good going April 8, 9, 10, 11 and 12. Return limit April 13, 1909.

Homeseekers' Excursions.

Winnipeg and return \$32.00
Edmonton and return 42.50

Tickets good for 60 days.

Proportionate rates to other points in Western Canada,

First excursion April 8, via Chicago.

Full information and tickets from:

Grand Trunk Agents.

TRADE TOPICS.

NEW POSTAL REGULATIONS.

Owing to a recent ruling of the Canadian Government, enforcing duty on all printed matter mailed direct from the United States, the J. Stevens Arms & Tool Company, of Chicopee Falls, Mass., now mail from Montreal all their booklets, catalogues, copies of "Guns and Gunning," etc., going to Canadian addresses. This, of course, causes some delay. The company will, in every instance, forward any literature requested just as promptly as possible. It will be necessary, however, to allow an extra day or two for it to arrive.

The Chinaman's tendency to imitate is well brought out by an extract from Mrs. S. Percy Westaway, who, with her husband, is now located in West China, as follows: "The West China Educational Union was holding meetings in the city; one session met in this house. We, in Chentu, follow the English custom, and serve tea and cake at 4 o'clock. Mrs. Carson was going to serve tea to the members and we wished to help. I was still in bed, so told the cook to make a cake. Our cook is a pretty old fellow, about 30 or 35 years of age, and has worked 'for the foreigner' for a long time. He can make a good cake when he so desires, and this day he made a layer cake, icing it with white, with red trimmings. He delights to get a new recipe or find some new way of decoration. Our Canadian paper, after we have finished with it, frequently finds its way to the kitchen, and as a proof that the cook 'reads it,' we give this: About three o'clock Percy went into the kitchen to see how things were getting along. The cake was there, iced with white, and decorated with red, forming three rows across the cake, and this is what Percy saw and read:

DODD'S KIDNEY PILLS.

"On the table beside the cake was that well-known advertisement—the circular box, with this inscription: He, poor fellow, had taken it for a well-made cake, and decorated his like it."

Save and Make Money
With This Portable American
Saw Mill
6-H.P. Cuts 2,500
Feet Per
Day



Make the lumber you need and saw for others at a big profit. Haul the mill from place to place. Also stationary mills. All sizes. All guaranteed. Variable Friction Feed—Quick Recorder—Most and best work with least power. Get Free Catalog and Prices. See our complete line of wood working machinery.

American Saw Mill Machinery Co.
113 Hope St., Hackettstown, N. J.
1864 Terminal Building, New York

THE REBE BUREKA PORTABLE SAW MILL



Mounted on wheels, for sawing logs 36 in. x 36 ft. and under. This mill is as easily moved as a portable thrasher. Write for Circulars.

Mfg. by Salm Iron Works, Weston-Salem, N. C., U. S. A.
International Harvester Co. of America, Agents.

SEED BARLEY (Mandscheuri)

In 1908 field competition won by 9½ points over county, and 2 points over Province. Very clean, heavy yielder, strong-strawed. \$1.00 per bushel.

J. & D. J. CAMPBELL,
FAIRVIEW FARM, WOODVILLE, ONT.

DAHLIAS 16 KINDS (my selection) \$1.
Send for beautiful illustrated catalogue of new dahlias.

H. P. VAN WAGNER, STONY CREEK, ONT.

SEA GREEN & PURPLE SLATE ROOFS NEVER WEAR OUT

SEA GREEN AND PURPLE SLATE
is nature's own product—not man made. Quarried from solid rock—split into convenient form for laying, and then in its natural state ready for the roof.
SOLID ROCK CAN NOT WEAR OUT It can't burn, rust, warp, crack, tear, or decay. That's why Sea Green or Purple Slate Roofs never wear out and never require painting and repairing like all other roofing.
Sea Green & Purple Slate Roofs are suitable for any building, new or old. Give perfect protection. Reduce insurance rates because spark and fire-proof. Afford clean cistern water. Not affected by heat or cold. First cost—only a trifle more than short lived roofing. Settle your roof question for all time. Don't spend more money for poor roofing. Write to us for our free book "BOOFS"—it will save you money. Give name of your local roofer. Write today.

AMERICAN SEA GREEN SLATE CO., Box 3 Granville, N. Y.

Right on Time for the Needs of the Season.



THE NATIONAL CREAM SEPARATORS

are made by intelligent, resourceful mechanics, capable of inventing and making improvements. No changes, no improvements and no intelligence are close companions. The National leads in up-to-date and beautiful design; for simplicity, durability and close skimming; easy to operate and clean. Just what is needed. A free trial to your home in competition with any other named separator. If you want the best, get the NATIONAL. Send for prices and catalogue.

THE T. C. ROGERS, COMPANY
GUELPH, ONTARIO.

Wholesale Agents for the Maple Leaf Sewing Machines, Gilson Gasoline Engines, Perfection Seed and Grain Separators, Aspinwall Potato Machinery.

If you are interested in any of these machines, write for information. Agents wanted. Our terms are reasonable.

WHEN WRITING ADVERTISERS, PLEASE MENTION THIS PAPER.

MANHOOD RESTORED

A REMEDY, SAFE AND SURE!

"Your Electric Belt has made a man of me. It has overcome my weakness and improved my general health and strength 100 per cent.," writes one of my patients, after two months' use of my appliance. I hear this expression so often. "Your Belt has made a man of me." I am accumulating such volumes of this evidence that I intend to pound away until I get the truth regarding electricity in the hands of every suffering man and woman.

What's the use in carrying your tale of woe to one doctor and another? They've all got different theories about your ailments. What's the use experimenting? Haven't you had enough of it? Do you really think drugging of any description will help you? No doubt your doctor has done all he can for you, but if it's fresh vitality, new energy that your system requires, your doctor can't put this into you by dosing your stomach. Talk Electricity to him, he'll give you that possibly, but not in the right form; not in the right way. You can't get true invigoration, permanent help, from a doctor's battery or machine.

Use my Belt, that's the right method, the up-to-date system of applying this great curative, vitalizing power to your body. My Belt has wrought such wondrous results, this remedy cures such a vast amount of weaknesses and diseases of the human race, we find our field broad enough without taking any chances with incurable cases, and so I ask you to frankly submit your case to me and you can depend that I will be equally frank with you in telling you whether I can help you or not.

I know my limit and stick to it. I know that if you are a Weak Man or a Weak Woman Electricity is the remedy for you; a remedy without equal. Study your own case. Be honest with yourself, be honest with me, and you can depend upon a "square deal." Watch out for the danger signals! If you feel that your body is weakening, your vital strength is not up to the demands that you are making upon it, act to-day! Those sleepless nights, the loss of appetite, headaches, despondency, the trembling hands, backache, tired feeling, pains and aches in any part of the body, are the means that Nature adopts of warning you of your danger.

Electricity is making strong, lusty men, and vigorous, happy women out of physical wrecks every day. Electricity, and Electricity alone, properly applied, gives back the strength, the vital power that has been lost, no matter from what cause.

My Belt restores the vital powers to men and women. It makes strong, healthy men and women out of mental and physical wrecks. It is a positive and lasting cure for Indigestion (Dyspepsia), Constipation, Headache, Drowsiness, Rheumatism, Neuralgia, Lumbago, Sciatica, Weakness of the Back, Weakness of the Nervous System, Sleeplessness (Insomnia). It overcomes the terrible results of early indiscretions. It restores the vitality that is lost. It corrects every sign of mental impairment and physical breakdown. Here we give you a few samples of the kind of letters I receive every day by the score from people who have found Health, Strength and Happiness through the use of my Belt.

Dear Sir,—Your Belt has helped me wonderfully, for I am feeling fine at present. I have gained in weight from 175 to 206 pounds, and I credit your Belt for this. I am a lot stronger than I ever was in my life. I sleep good; eat good; and feel fine; so it must be that your Belt did it. I am not sorry I bought it.

J. F. BRENNAN, Box No. 186, Cobalt, Ont.

To those who are tired of paying without results, and to those who doubt if anything will help them, I make this offer: If you will secure me my

PAY WHEN YOU ARE CURED.

Call at my office and let me explain my Belt to you. If you can't do this, cut out the coupon, send me your name and address to-day, and I'll mail you, closely sealed, my elegantly-illustrated 80-page book, which is FREE. My FREE BOOK for women is now ready. All men and women who are interested in recovering their health, should read these books, for they point the way to health and happiness.

Office Hours—9 a. m. to 6 p. m. Wednesdays and Saturdays until 8.30 p. m.

Dear Sir,—I take pleasure in saying that my aches and pains have completely left me, and I am well pleased with your Belt, as it is good value for the money. I have worn it for two months, and I got good value for it the first two weeks. I am twice as strong as before, and better in all ways. I would advise all suffering people to get one and be convinced for themselves. I cannot say too much in favor of your Belt.

WM. S. CARTER, Box No. 14, Mapleton, Ont.

DR. M. S. McLAUGHLIN,
112 Yonge St., Toronto, Can.

Please send me your book, free.

NAME _____

ADDRESS _____



QUESTIONS AND ANSWERS.

Miscellaneous.

SCRATCHES.

1. Could you give us a good prescription for horses, to prevent their legs swelling and itching?

2. How would sulphur and saltpetre, equal parts, and ground gentian root do?

J. T.

Ans.—1. Treatment for grease and scratches has been given several times in these columns in the last few weeks.

2. The mixture named should answer the purpose fairly well.

SEEDING ORCHARD GRASS.

I am this spring going to sow a large acreage for mixed pasture. The mixture will consist of clovers; alfalfa, timothy and orchard grass. The clovers and timothy I can sow with the seed attachment of the seed drill. Would it be all right to mix the orchard-grass seed with the grain in the drill and sow it with the grain? The grain will be oats and barley. To what depth would it be safe to sow orchard-grass seed? The soil is clay and clay loam.

F. J. P.

Ans.—If the soil is warm, and of a sandy or sandy-loam character, and if the season is favorable, orchard grass is likely to give fairly satisfactory results when mixed with grain and sown with the drill. In the farm proper at the College, orchard grass was thus mixed with oats in each of two years, in one of which the results were satisfactory, and in the other the results were very poor. In the three years during which the orchard grass has been sown broadcast, the growth has been satisfactory. I believe, in most instances, it is advisable to sow the orchard grass broadcast in front of the grain drill, immediately after the land has been cultivated, and just before the grain is sown. The land should then be harrowed. This would place the orchard-grass seed between the rows of grain, and to an average depth of from a quarter to a half an inch, which seems to be a satisfactory depth for the seed of the orchard grass.

C. A. ZAVITZ.

BUCKWHEAT—HOG PASTURE IN ORCHARD.

1. Am thinking of sowing buckwheat the last of June, after thorough cultivation, with the object of ridding land of quack grass. Field is very fertile. Have heard that barley, mixed with buckwheat, does well. Have you, or any of the readers of "The Farmer's Advocate," tried this mixture?

2. I understand that Rye buckwheat yields better than Japanese or Silver Hull. Could you tell me if the grain is as large as the above varieties, and if there are any objectionable features in this variety? Also, could I secure the seed from Agricultural College?

3. Am thinking of plowing my orchard (at present in sod) about last of May, top-dressing it with manure, and sowing with a mixture of rape, crimson clover, and Amber sugar-cane, to be used as a hog pasture. Would you recommend this mixture for that purpose?

T. K.

Ans.—1. Buckwheat is a good crop with which to smother weeds. For this purpose, however, I think I would sow the buckwheat fairly thick, and without mixing with barley. For killing out weeds, I would prefer sowing buckwheat alone, and for a large yield of grain I would prefer a mixture of barley and oats instead of barley and buckwheat.

2. In the average of four years in the experimental plots at Guelph, the Rye buckwheat has given an annual yield of 32.7 bushels, and the Silver Hull variety 23.5 bushels of grain per acre. The Rye buckwheat may be a little more uneven in maturity, and I understand produces a flower which has a yellowish cast. We have no Rye buckwheat for sale at the College, but are sending out this variety along with the Silver Hull, in small lots, for experimental purposes for the coming year.

3. The mixture of rape, crimson clover, and Amber sugar-cane, should make a very good mixture as a hog pasture. If crimson clover could not be obtained easily, the common red variety should give good results, and if the seed of Early Amber sugar-cane should be unavailable, that of the Hairy Vetch would take its place admirably.

O. A. C.

C. A. ZAVITZ.



FREE FREE

Second Magnet Cream Separator Prize Contest for Neat Letter Writing.
Fifty Prizes for Girls and Boys
Under 15 Years of Age, Who Live on Farms in Canada.

Contest closes May 15th. Prizes awarded June 1st, 1909. We want information you can easily give us. Cut out the coupon. Fill in your name and address. Mail to us. A blank form will be sent you to fill up, and also the rules of contest. Any child that can write may succeed.

Fifty Beautiful \$1.00 Pearl-handled Pocket Knives of the very best quality to be given to the writers of the fifty neatest and best-arranged letters about neighbors who keep cows and have no cream separator. **Twenty prizes**, but so many good letters were received that **forty-seven** were distributed.

CUT OUT THIS COUPON HERE.

MAGNET Coupon in Second GREAT PRIZE CONTEST.
THE PETRIE MFG. CO., LIMITED, HAMILTON, ONT.

Please mail me a blank form and terms of the contest.

Name.....
 P. O.....
 Township.....

Contest closes May 15th. Prizes awarded by Mr. A. B. Petrie, June 1st, 1909.

THE PETRIE MFG. CO., LIMITED.

Hamilton, Winnipeg, St. John, N.B. Regina, Vancouver, B.C. Calgary, Alta.

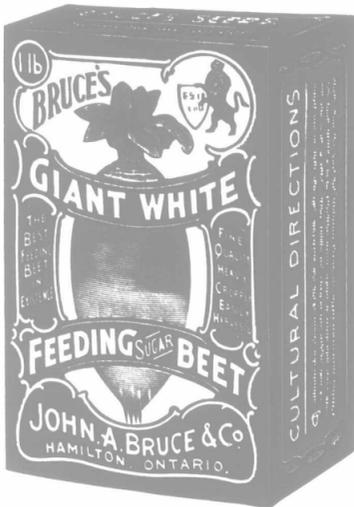
RENNIE'S

BUMPER KING
Big Crop White Oat

Early. Immense heads. Thin hulls. Strong, stiff straw. Bushel, price \$1.75 in Toronto. Ask your dealer.

WM. RENNIE CO., Limited Toronto,
Montreal, Winnipeg, Vancouver.

SEEDS



Bruce's Giant White Feeding Beet.

Leaders at all tests at the Ontario Agricultural College, Guelph, since their introduction. These grand Feeding Beets introduced by us in 1900, combine the fine rich qualities of the sugar beet with the long keeping, large size and heavy cropping qualities of the mangel. The roots are clean and tops small, white flesh, solid, tender and very sweet, and on account of the bigger part of length growing out of the ground they are easily harvested. They will outyield all the other kinds of sugar beets, and most uniform and cleanest of all sugar beets, and this, combined with their great richness and easy harvesting quality makes them the "beau ideal" of a root for the farm. To show what a grand article we offer, and how these roots are growing in favor, we give our sales: 1900, 43 lbs.; 1902, 1,954 lbs.; 1905, 4,327 lbs.; 1907, 9,800 lbs.; 1908, 15,122 lbs. We offer in two colors, white and rose, each 1/4 lb. 10c., 1/2 lb. 15c., 1 lb. 25c., 4 lbs. 90c. Postage extra, 5c. lb. to Canada, and 16c. lb. to Newfoundland and United States. FREE.—Our illustrated 100-page Catalogue of Vegetable, Farm and Flower Seeds, Bulbs, Plants, Implements, Poultry Supplies, etc. Send for it.

"Bruce's Seeds are Cheapest, Because They are the Best."

John A. Bruce & Co., Seed Merchants Hamilton, Ont.
 Established 1850

Subscribe for The Farmer's Advocate

QUESTIONS AND ANSWERS. Miscellaneous.

CROOKED DITCHING.

Can I compel a contractor to go in a straight line with a municipal drain through my place? It has been surveyed as it was dug years ago, in a crooked manner, to avoid trees, etc. The ground is quite level now. Must I allow them to follow the old, crooked ditch, which will require a bridge to cross, and make two fields very inconvenient to work, whereas, it can be run straight, making no inconvenience?

A SUBSCRIBER.

Ontario.

Ans.—You should attend to the matter through the Municipal Council and Engineer. Lay the matter before them fairly and fully, and then, if they will not do what is reasonably satisfactory, having regard to all the circumstances, instruct a solicitor to attend to the case. We think you ought to be able, in one way or the other, to bring about a suitable arrangement.

LUMP JAW—ALFALFA SEEDING.

1. I have a two-year-old Jersey heifer on which has started a lump on the lower jaw. It is about half the size of a man's fist, is sore and a little feverish. Can it be cured? The heifer is coming due to calve next month. Will the milk be fit for use before the lump is cured?

2. Have a piece of fall wheat that I would like to seed down with alfalfa. Would a stroke with a light harrow cover the seed sufficiently for a catch?

P. S. W.

Ans.—1. This is, evidently, lump jaw (actinomycosis). If taken in the early stages of the disease, it is often curable by the potassium treatment. Give one dram iodide of potassium as a drench in half a pint of cold water three times daily. Gradually increase the dose by say ten grains, until the appetite, or the desire for water fails, tears run from the eyes and saliva from the mouth. When any of these symptoms appear, discontinue the drug for two weeks; then repeat, if necessary. The milk is not affected by the disease, but the disease is infectious from the discharge falling upon grass or other food taken by cattle.

2. It might, though alfalfa is not very often successfully seeded with fall wheat. Let us hear from readers who have tried it.

GREASE—SWITCHING—CONDIMENT.

1. We have two mares that have wet heels that seem to keep running. They bite them by night and stamp their feet. Could you give me any treatment for this? Would Gillett's Lye be good, or would it take off the hair?

2. Do you know of any cure for a switching mare? Would docking her be of any use?

3. Could you give me any good recipe for powders to fit draft horses up for spring work, that have a lot of hauling to do on the road?

G. M.

Ans.—If the mares are not in foal, purge them with a ball consisting of 8 drams of aloes and two drams ginger each. If in foal, purge with one pint of raw linseed oil. After purgation ceases, give 1 1/4 ounces Fowler's Solution of Arsenic twice daily for a week. Poultice the heels with linseed meal, with a little powdered charcoal added, changing the poultice every six or seven hours for two days and nights, then apply three times daily a lotion made of one ounce each of sulphate of zinc and acetate of lead, and two drams carbolic acid to a pint of water. We have had no experience with the lye for that purpose and would not use it without professional advice.

2. We have seen an iron crupper, covered with leather, successfully used for the purpose. It is possible that docking might cure the habit, but we have not known a case so treated.

3. A good condiment for the purpose is the following: Two ounces each of ferric sulphate, pulverized gentian, pulverized nux vomica, and nitrate of soda. Mix, and give a teaspoonful night and morning, in ground oats or bran. Also give two or three times a week a feed of boiled oats, and to the regular grain ration add a little oil cake meal, which is laxative and aids the digestion.

Don't Throw It Away

USE MENDETS

They mend all leaks in all utensils—tin, brass, copper, granite, hot water bags, etc. No solder, cement or rivet. Any one can use them; fit any surface; two million in use. Send for sample pkg. 10c. Complete pkg. assorted sizes, 75c. postpaid. Agents: Ward & Collette Mfg. Co., Dept. K, Collingwood, Ont.

Horses and Spring Work.

Just here Herbageum is at its best. Horses that have been getting it in their feed all winter are well prepared for the strain of spring work. Those that have not been getting it should have it regularly now. It is simply a condimental spice that assists in the digestion of food, and thus ensures pure blood. A horse with pure blood does not get sore shoulders. In this way Herbageum prevents sore shoulders. One 50c. package is enough for a pair of horses for two months, and it is certainly a great help to the horses. Test it.

Ring-Bone

There is no case so old or bad that we will not guarantee

Fleming's Spavin and Ringbone Paste

to remove the lameness and make the horse go sound. Money refunded if it ever fails. Easy to use and one to three 45-minute applications cure. Works just as well on Sidebone and Bone Spavin. Before ordering or buying any kind of a remedy for any kind of a blemish, write for a free copy of

Fleming's Vest-Pocket Veterinary Adviser

Ninety-six pages of veterinary information, with special attention to the treatment of blemishes. Durable bound, indexed and illustrated. Make a right beginning by sending for this book.

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

THE CLEANEST THE LIGHTEST THE MOST COMFORTABLE

POMMEL SLICKER

and cheapest in the end because it wears longest

EVERY GROOMER GUARANTEED WATERPROOF

Toronto Canadian Co. and Toronto Ont.

Angle LAMP

The new principle of coal oil lighting employed in The Angle Lamp is fast displacing gas and electricity. Partly due to the quality of light; best in the world. Soft, mellow, restful to the eyes.

Light Without Any Shadow.
 You light and extinguish like gas, you can fill without extinguishing. The only lamp of its kind—the light for country homes. Equals the best light of the city man at a fraction of the cost. You can't know all about it until you use it.

Sold On 30 Days Trial.
 Send for catalogue "61" and full information.
THE 1900 WASHER CO.,
 355 1/2 Yonge St., Toronto, Ont.

PLEASE MENTION THIS PAPER.

Our 1909 Model

Wear STEEL SHOES!

Absolute Protection Against Colds, Rheumatism, Stiffness, Discomfort No More Blistered, Aching Feet

GOOD-BYE to CORNS and BUNIONS!

Three to Six Times More Wear Than the Best Leather Shoes You Can Buy!

Pat. Dec. 4, 1908. Others pending.

These wonderful shoes actually save at least \$5 to \$10 of your shoe money every year. They're the strongest work shoes in existence. If you wear Steel Shoes you will never suffer from sore, blistered, aching, feverish feet. Nor will you catch cold or get rheumatism or stiff joints. For these comfortable, steel-bottomed shoes with waterproof leather uppers keep your feet so warm and dry that you can work in the worst kind of weather without danger of "catching cold." You can work, dry shod, in soft mud or wade in water, for they are as waterproof as rubber boots. But, unlike rubber boots, Steel Shoes don't heat or sweat the feet. Nor do they get water-soaked, warped and twisted, for light, thin steel soles compel the uppers to keep their shape.

FREE
Write for book, "The Sole of Steel" or order a pair of Steel Shoes on blank below.

STEEL SHOES are Health and Money Savers!

They are Lighter Than any Ordinary Leather Work Shoes.

No Colds! No Corns! No Repairs! No Leaks! No Slipping! Just SOLID COMFORT!

Throw away your old rubber boots—your rough, hard, twisted, shapeless leather shoes—and wear Steels instead. Then you will not be troubled with sweaty, blistered, tired, aching feet or tortured by corns and bunions.

How Our 1909 Model Steel Shoes are Made

The soles and an inch above, all around the shoes, are stamped out of one piece of special fine, thin, seamless steel. This sole is as light as a leather sole and so much stronger that there is simply no comparison.

It gives the best foot protection of any shoe on earth. It is studded with Adjustable Steel Rivets, which give you a sure footing and save all wear on the sole. When Rivets become worn, you can replace them instantly with new steel rivets. 50 Extra Steel Rivets cost but 30 cents and will keep your shoes in repair for at least two years.

The uppers are made of the best quality of soft, pliable, waterproof leather that money can buy. They are double thick where riveted to the steel bottoms and reinforced at the seams.

Comfortable Hair Cushions

The thick, springy, Hair Cushions or Insoles inside the shoe absorb all the perspiration and odors. You can easily take out, clean and dry the Hair Cushions each night. These Cushions prevent the jars of walking and keep corns and callouses from forming.

Not only will Steel Shoes give greater foot comfort than you have ever known before, but they will pay for themselves over and over again in the saving of medicine and doctors' bills.

STEEL SHOE CO., Dept. 83, TORONTO, CANADA.

U. S. of A. RACINE, WIS.

They Take the Place of Rubber Boots

A man who wears Steel Shoes doesn't have to own three different styles of working shoes. No arctic or felt boots necessary. Rubber boots keep the feet hot and sweaty and make them very tender. They are positively injurious to health. Steel Shoes, with waterproof leather uppers, give you the same protection as rubber boots, without sweating your feet. One pair of Steel Shoes will outwear at least three pairs of rubber boots.

See How Much Cheaper Than Leather Shoes!

Made in Sizes 5 to 12—6-in., 9-in., 12-in. and 16-in. High

Our \$2.50 Steel Shoes, 6 inches high, are better than the best \$3.50 all-leather shoes.

Our \$3.00 Steel Shoes, 6 inches high, of extra fine leather, are better than the best \$4.50 all-leather shoes.

Our \$3.50 Steel Shoes, 9 inches high, are better than any \$5.00 all-leather shoe made.

Our \$5.00 Steel Shoes, 12 inches high, are better than all-leather shoes that sell for \$6.00.

Our \$6.00 Steel Shoes, 16 inches high, are worth more than the best all-leather shoes you can buy at any price.

One pair of Steel Shoes will outwear from three to six pairs of all-leather shoes.

"Steels" are the Workingman's Favorite

These shoes (either the \$3.50 or the \$3.00 pair) give the best possible service for general use. We cannot recommend them too highly.

Order a Pair—Sizes 5 to 12

Send us \$3.00 for 6-in., or \$3.50 for 9-in. pair of Steel Shoes, state size shoe you wear, and we will send you, by express, the best and most comfortable work shoes you ever slipped on your feet.

You are perfectly safe in sending to us for a pair of Steel Shoes, as we agree to refund your money promptly and freely if the shoes are not found exactly as represented. The editor of this paper will tell you we are thoroughly reliable. Money cannot buy better working shoes than either the \$3.00 or \$3.50 style. You get more foot comfort and health protection, longer wear and greater satisfaction in a pair of Steel Shoes than money can buy elsewhere. So why not send for a pair today?

Order Blank for Steel Shoes

Steel Shoe Co., Dept. 83, Toronto, Can.

Gentlemen:

I enclose _____ for \$_____

in payment for _____ pair Steel Shoes, size _____

Name _____

Town _____ State _____

County _____ R. F. D. _____

Dealer's Name _____

THE All-purpose Flour, and superior for every purpose. Highest grade in the world. Purity label guarantees success, or your money back.

"More bread and better bread."

WESTERN CANADA FLOUR MILLS CO., Limited
Mills at WINNIPEG, GODERICH, BRANDON.

PURITY FLOUR

When Writing Please Mention this Paper.

QUESTIONS AND ANSWERS. Veterinary.

COW POX.

We have been bothered with little boils on cows' udders. It seems to be contagious, and is easily conveyed from one cow to another by the milkers' hands.

G. R. C.

Ans.—This is cow pox. Isolate all affected, and let them be milked by a person who does not milk the healthy cows. Make an ointment of 2 drams boracic acid, 20 drops carbolic acid, and 1 oz. vaseline. Dress three times daily with this. The trouble is caused by a virus, and is very contagious. V.

Miscellaneous.

WEIGHT OF LAMBS AT BIRTH.

1. Is 16 pounds an extra weight for a Shropshire lamb at birth?

2. What is considered a good weight for a pair of twins? SHEPHERD.

Ans.—1. Yes; an extra weight for any breed.

2. Sixteen pounds would be a good weight for a pair of any breed. There is no advantage in being born big in any class of stock. Medium-sized youngsters are generally more active and able to find for themselves, and develop a more smooth and evenly-balanced conformation.

LESS BUTTER FROM CREAM.

Have five fresh cows since first of January. They are well fed with hay, pulped turnips, and meal. We get four or five pounds less butter from the same amount of cream than we have had in winter season for years. Our separator is set the same as in previous seasons. The cream is thin. It is properly ripened and handled. What is the cause?

J. J. S.

Ans.—So far as I can see from the letter, there is no reason why the cream should be thinner this year than last year. I would advise changing the cream-separator screw so as to give cream of the desired thickness. From 100 pounds, or 10 gallons of milk, I should advise taking not more than 10 to 12 pounds, or from 1 to 1½ gallons of cream. This will then be about the right degree of richness, or percentage of fat, for good results in churning.

I do not think the kind of feed which is fed to cows would make any difference in the amount of butter produced per cwt. of milk. It is possible that the cream is coming from the separator thin, or with too low a percentage of fat, and this, when churned, gives an excessively high loss of fat in the buttermilk, which would account for the low yield of butter. I am assuming that the cows are in good condition, and that all other points are normal. H. H. DEAN.

TRADE TOPICS.

The new Marlin trap gun is a model of easy-handling and good shooting. It is handsome, and yet free from expensive ornamentalations. Single-barrel guns are popular because they can be swung on precisely on the target. Trap shooters prefer to carry and care for only one barrel. An extra superior gun, with smokeless steel barrel, is offered at a moderate price. Read the Marlin Firearms Co. advertisement in this issue, and write them for particulars.

The continued success of the artificial impregnation process should have the attention of every stallion or jack owner. The use of this means of impregnation on the stock farm means more live colts than is possible by natural means, as animals impossible to impregnate in the natural way are successfully got in foal by this process. It is claimed that it quadruples the money value of stallion or jack, while lessening his work, giving practically the use of four horses for the cost and keep of one. Anyone can use it, and it will last a lifetime. Get one before the stallion season opens. Write to Crittenden & Co., Department 38, Cleveland, Ohio, for catalogue describing their impregnators and other horse breeders' supplies.

FREE Lightning Insurance Policy With Every Roof Covered With SAFE LOCK SHINGLES

EVERY Canadian farmer who expects to build or re-roof his house or barn should write us to-day for details of our Free Lightning Insurance Policy in connection with Safe Lock Metal Shingles.

We give it to you without any conditions whatsoever, except that you roof with Safe Lock Shingles.

Such an offer is unprecedented, but we can afford to make it because we know absolutely that Safe Lock Shingles will insure safety from lightning.

It is absolutely free. You do not have to pay one cent for this protection, either directly or indirectly.

Insurance records show that nearly one-half the fire losses on barns in Canada result from lightning. This loss, running into the hundreds of thousands of dollars, can be entirely prevented if Safe Lock Shingles are used.

We know this, and we back up our statement with a Free Insurance Policy payable under its terms in cash.

Safe Lock Shingles are sold at the same price as shingles known to be inferior in quality of steel, galvanizing and construction.

We have been manufacturing Safe Lock Shingles for over ten years, and roofs laid when we started in business are still "as good as new," to quote from hundreds of letters we have on file in our office from our pleased and satisfied customers.

In all this time these roofs have not cost one cent for repairs of any sort.

In all these years no building covered with Safe Lock Roofing has ever been destroyed by lightning.

Do you know that Safe Lock Shingles fully meet the rigid requirements of the British Government for Admiralty and other public service. Think what that means. Let us illustrate.

Every farmer knows from experience that ordinary galvanized fencing seldom lasts longer than two or three years without showing signs of rust. On the other hand, galvanized wire for Government use gives years and years of service, owing to the splendid galvanizing insisted upon.

Safe Lock Shingles are galvanized the same as Government wire, and therefore may be depended upon to give long service. We really do not know how long they will last. Safe

Lock Shingles in use for more than ten years show no signs of wear.

To-day we are using better material in their construction than ever, the steel is of higher grade, and the galvanizing is heavier. We have also made several improvements in manufacturing. For instance, every shingle is cut accurately to size before it is galvanized, thus protecting the edges of the shingles instead of leaving them raw and exposed to the decaying action of moisture.

We want you to remember the

thus causing a leaky roof.

Safe Lock Shingles cannot be blown off, nor can they be pulled apart by warping of the sheeting, or any other cause.

Study the small illustrations on this page, and you will be convinced of the truth of this statement.



FIG. 1

In Fig. 1 the solid black line shows the top lock, the shaded line the bottom lock. Notice that a

contraction due to heat and cold. They cannot unlock.

Illustrations 3, 4 and 5 show the construction of other metal shingles.



FIG. 3

No. 3 is the old-fashioned cleat shingle now almost entirely driven from the market by the Safe Lock. These do not always shed water, and it is almost impossible to keep them from leaking after they have been on for a season or two.



FIG. 4

Note in No. 4 that the nail is only about half way driven into the sheeting, leaving a large surface exposed to the weather. This makes a very insecure fastening for a roof, and this is still further weakened by the springiness of the steel, which has a tendency to pull out the nails, causing a loose, leaky, rattling roof.



FIG. 5

No. 5 is a side slip pattern, similar to many now on the market. The one shingle slips into the other, but does not lock. Shingles constructed in this way pull apart easily and must not be confused with the positive lock in our Safe Lock Shingles, as shown in Fig. 2.

Safe Lock Shingles are absolutely uniform. We have spent time and money to perfect their construction, which is fully protected by patent. They are now easier than ever to lay, and a Safe Lock roof cannot leak, if the shingles are laid in accordance with our printed instructions.

SAFE LOCK SHINGLES are the only shingles that—

1. Give you a positive guaranty against Lightning, backed up by a policy signed and guaranteed by the manufacturers.
2. Meet fully the rigid requirements of the British Government for Public work.
3. Lock on four sides, and cannot be pulled apart.
4. Have three (3) thicknesses of metal along upper edge at point of greatest strain.
5. Completely protect nails from weather.
6. Have edges galvanized after being cut to exact size.

name Safe Lock. No other shingle has that name.

No other shingle is a Safe Lock Shingle.

Safe Lock Shingles lock positively on all four sides. Other shingles grip only on two sides. This is not enough for a permanent, durable roof. We know of many instances of buildings covered with these shingles being entirely unroofed in a stiff breeze. Another objection is that these shingles are apt to spread apart owing to the warping of the sheeting to which they are nailed,

double fold forms the top lock instead of a single fold, thus giving twice the strength at the point where the greatest strain comes.

With Safe Lock Shingles the nails are driven full length into the sheeting, and are protected by the peculiar lock construction from any possibility of water backing up and starting rust.



FIG. 2

Fig. 2 shows the side locks. Note the deep firm grip which allows ample room for expansion and

The Metal Shingle and Siding Co.

Limited
Roofers to the Farmers of Canada
Queen St. Factory
Preston, Ont.
Branch Factory
Montreal

THE METAL SHINGLE AND SIDING COMPANY Limited
Queen Street Factory
PRESTON, ONTARIO

CUT OFF THIS COUPON AND MAIL TO US

Please send me your booklet "The Truth about Roofing," with full particulars of your Free Safe Lock Lightning Insurance Policy.

I expect to build a..... Kind of Building.....
State when you propose to build.....
Size of Roof..... If interested in any other Metal Building Goods, please state such fact here.....
Name.....
P. O..... Province.....

QUESTIONS AND ANSWERS. Veterinary.

SIDEBONES.

Horse has been lame from sidebones for two years. Sometimes she is so lame she can hardly get along. I have blistered her several times, but she is as bad as ever.

G. H. H.

Ans.—Lameness caused by sidebones is very hard and sometimes impossible to cure. It is seldom such severe lameness as you describe is noticed. All that can be done is to have her fired and blistered.

V.

NERVOUS MARE.

Mare goes all right in the buggy, but when hitched to the cutter becomes frightened at the snow flying off her fore feet; gets clean rattled, and tries to run away.

B. M.

Ans.—It is highly probable you will have no further trouble with her this spring, as it is not probable you will use a cutter any more. If she acts the same next winter, all that you can do is to drive her with a bit by which you can control her, and by being careful with her, she will probably become accustomed to the snow like other horses. There is

no special treatment for this case. Kindness and decision will, no doubt, be successful, as the trouble is simply nervousness. If, during sleighing, she is driven every day by a good horseman, she will soon become as indifferent to snow as the average horse.

V.

LICE.

I am informed that the tincture of larkspur is good to kill lice on horses or cattle. If so, how should it be applied?

A. E. M.

Ans.—We have no knowledge of the drug mentioned for the purpose suggested, but no doubt it should be applied directly to

the skin. If it is irritant, it should be diluted with water or alcohol. We usually recommend the use of some of the commercial sheep dips used as directed.

V.

INDURATED TEAT.

Cow apparently got stung on one teat and gave lumpy milk afterwards. She will soon be due to calve, and the teat seems to be getting larger and harder.

E. B.

Ans.—Get an ointment made of 2 drams each of iodine and iodide of potassium, mixed with 2 ozs. vaseline. Rub the teat well with this once daily.

V.

Binder Twine

8,000 FARMER SHAREHOLDERS.

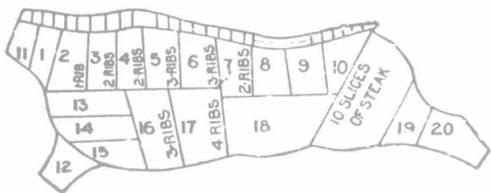


Chart for 20-share Beef Ring.

We want farmer agents from the Atlantic to the Pacific Ocean. Write instantly.

"My home in Canada—the wheat basket of the world."



We certainly take a lot of comfort in using the binder twine furnished by the Farmers Binder Twine Co., Limited, Brantford. It never misses a sheaf. It comes to us from an organization consisting of eight thousand Farmer Shareholders. They must be up against all kinds of opposition as we have had twine furnished us several times for theirs that was not their make. We are particular now to see that every ball and bale is marked. Joseph Stratford, General Manager.

BRANTFORD, ONTARIO.

All binder twines are going to you at about cost this season. Who is entitled to the credit? It's the duty of every Grange and Farmers' Association to stand by this Co-operative Manufacturing Company, or their power will be greatly diminished.

This Company's brands:

- Samson's 650.
- Red Star 550.
- Samson's 600.
- Special Manilla 500.

Please Mention this Paper.

QUESTIONS AND ANSWERS. Miscellaneous.

WORMS IN PIGS.

Would like to know what will cure pigs of round worms, six to eight inches long? Have been feeding barley meal and bran, with swill.

Ans.—After fasting twelve hours, give each one tablespoonful of spirits of turpentine in sweet milk; repeat in three days. A mixture of salt, wood ashes, and charcoal, kept in a low box in the pen, to be taken by the pigs at will, is a preventive, and may effect a cure.

TRANSPLANTING STRAWBER-RIES.

I have a strawberry patch which was set out last spring (April), and as I am going to another farm, would it do to take up all the plants, both mother plants and runners, and transplant them? Would it be best to transplant the whole plant, or transplant the mother plant separately, and make a new bed of the runners which grew last year? Would this transplanting stop them fruiting this year?

Ans.—Strawberry-growers never count on a crop the first season after setting out the plants. As a rule, strong plants formed from the previous season's runners, are selected and transplanted. These sometimes bloom, but successful growers nip off the buds and induce the development of runners, so that numerous plants may be established on which to have a crop the following year. If you exercise great care, and weather conditions should be favorable, it is just possible that you would have some fruit.

OVERDUE NOTES—A RENT CLAIM.

1. Several promissory notes given by A, were due a little more than six years ago. Are those notes outlawed, A having lived in the United States for the last five years?

2. A is now living in Canada again. Can those notes be collected?

3. A rents a farm from B for one year for \$150, and gives B a written statement that B is to hold the crop for the amount of his rent, the proceeds above that amount to be turned over to A. Can any of A's creditors, whether holding notes or otherwise, seize the crop, or any part of it, before B gets his pay?

FARMER.

New Brunswick.

Ans.—1. No; not according to the New Brunswick law.

2. Yes.

3. Not effectively, provided, of course, that in the event of any such steps as suggested being taken by other creditors, B promptly asserts his claim, and takes the appropriate proceedings for its enforcement.

BARK LOUSE—BOG SPAVIN.

1. Is there any special days on which to spray for bark louse? I sprayed last spring and in the fall with lime and sulphur, according to directions, and trees are still bad.

2. Have a mare, rising three years, with a small swelling on joint, which we call a bog. Is it wise to touch it, and what will I use? I want to breed her. She is a Clydesdale, about 1,300 pounds.

W. S. D.

Ans.—1. No doubt you refer to oyster-shell bark-louse. Approved treatment for this insect includes thorough spraying with lime wash or lime-sulphur wash in the fall or winter, while the trees are dormant. Some make use of lime wash made from 1½ pounds lime in a gallon of water. The lime-sulphur standard is 20 pounds lime to 15 pounds sulphur in 40 gallons of water, thoroughly boiled for about an hour, until a deep amber color is found; application is made while the solution is warm. If an excess of lime is used, and the spraying properly done, you should have little difficulty in combating the pest. Of course, there is no special day or days when the spraying must be done.

2. For bog spavin get blister as follows: Two drams biniodide of mercury, two drams cantharides, and two ounces vaseline. Clip off the hair and tie the mare so that she cannot bite the part. Rub well with the blister daily for two days. On the third day wash and apply sweet oil. Turn her into a box stall and apply oil every day. Feed lightly, and when the scab comes off, tie up and blister again. If necessary, repeat the treatment after a month.

ECZEMA CURABLE? PROVEN!

Attorney at Moline, Ill., Convinced by Oil of Wintergreen Compound.

There is nothing that will convince a lawyer except evidence.

Now, here is some rather startling evidence of a simple home cure for eczema which convinced one lawyer, F. C. En-triken, attorney at Moline, Ill. He tells how oil of wintergreen compound, mixed with thymol and glycerine, as in D. D. D. Prescription, cured him in thirty days after thirty-two years of suffering.

"For 32 years," writes Attorney En-triken, "I was troubled with eczema, scabs all over my face, body and head. I could run a hair brush over my body and the floor would be covered with scales enough to fill a basket. I tried everything—salves, internal medicine, X-Ray—all without result.

"Just a month ago I was induced to try D. D. D. Prescription. The itch was relieved instantly; so I continued. It is just a month now, and I am completely cured. I have not a particle of itch, and the scales have dropped off.

"I can only say again, CURE DISCOVERED. I am now starting all eczema sufferers on the right track."

For free sample bottle write to The D. D. D. Laboratory, Department A, 23 Jordan St., Toronto. For sale by all druggists.

No Lamé Horses

If You Will Use

Tuttles Elixir



Don't neglect the lame or blemished leg. Or don't give up because other things have failed. When you stop to think that there are hundreds of thousands of horses that have been made sound and are kept sound, kept at their hard work day in and day out—thanks to Tuttle's Elixir—then you will realize that it's time you tried it too. Let us prove to you that it cures.

Curb, Splints, Spavin Lameness, Ring-Bone, Knotted Cords, Cockle Joints, Sprains, Bony Growths, Swellings, Shoe Bells and Founder, Distemper and Colic

It never fails to locate lameness, and the thot-the finest leg and body wash they ever used. Send for the proofs. We want you to know also of the remarkable curative powers of Tuttle's Worm Powders, Tuttle's Condition Powders and Tuttle's Hoof Ointment. Ask your dealer for Tuttle's Elixir and other remedies. If not there we will ship to you by express. Don't experiment. Get Tuttle's and be sure.

FREE "Veterinary Experience," a 100-page book of most valuable information to every horse owner. It will enable you to be your own veterinary. Write for it today.

TUTTLE'S ELIXIR CO.

66 Beverly St., Boston, Mass.
32 Gabriel St., Montreal, Can.

BICKMORE'S GALL CURE

The standard reliable remedy for Galls, Sore-shoes, Cracks, Wire Cuts and all similar sores on animals. Sold by dealers everywhere. Money refunded if it fails. Sample and Bickmore's new horse book mailed for 6 cents. Write today. WINGATE CHEMICAL CO., LTD., Canadian Distributors, 545 NOTRE DAME ST., W. MONTREAL, CANADA

I Cured My Rupture

I Will Show You How to Cure Yours FREE!

I was helpless and bed-ridden for years from a double rupture. I wore many different kinds of trusses. Some were tortures, some positively dangerous, and none would hold the rupture. The doctors told me I could not cure it without a surgical operation. But I fooled them all, and cured myself by a simple method which I discovered. Anyone can use it, and I will send the cure free by mail, postpaid, to anyone who writes for it. Fill out the coupon below and mail it to me to-day.

Free Rupture - Cure Coupon.

CAPT. W. A. COLLINGS, Box 555, Watertown, N. Y.

Dear Sir,—I wish you would send me your New Discovery for the Cure of Rupture.

Name.....
Address.....

GOSSIP.

A good lambing season is reported from the Duke of Richmond's noted Southdown flock, about 900 ewes out of the flock of 1,000 having lambed up to March 15th, with the loss of only one ewe.

Mr. Thos. Mercer, Markdale, Ont., writes under date March 22nd: My new importation of Clydesdales and Hackneys have just landed to-day; nine Clydes, from two to five years old, and two Hackneys, three and five years old. The above horses have nearly all been prize-winners in the leading shows of Scotland. This is without doubt the best lot, combining breeding and quality. I have ever imported, and parties wanting spring show winners are sure to secure them here. If you are disappointed when you see the lot, I will cheerfully pay all expenses. Come and be convinced. Long-distance 'phone.

Messrs. John Gardhouse & Sons, Highfield, Ont., report the following recent sales: To G. T. Fuller, Watford, Ont., the young Shorthorn bull, Royal Archer, by Imp. Prince of Archers, dam Mary 15th (imp.); to W. H. Gainer & Sons, Welland, Ont., Cecelia Prince, by the same sire, dam the good breeding cow Cecelia Lass, by British Statesmen (imp.); to Thomas Thomson, Headford, Ont., the Cruickshank Lovely bull, Scottish Heather, by the same sire, dam Lovely Lass, by the Toronto senior champion, Scottish Prince (imp.); to James White, Sullivan's Corners, Ont., Diamond Prince, by the same sire, dam Belle 2nd (imp.); also the young bull, Highland Prince, by the same sire, dam Apricot 2nd, by Scottish Prince (imp.); to Peter S. Sipp, Ridgeway, Ont., the Shire filly, Black Gem; to Geo. A. Symes, Minudie, Nova Scotia, 2 Lincoln ewes, 2 shearling ewes, 2 ewe lambs, and 2 rams. We still have a number of good things for sale at right prices, among them the imported Roan Lady bull, Deeside King, coming 4 years old in April, a grand sire and a splendid worker; a Cruickshank Cecelia bull, by Prince of Archers (imp.), dam Cecelia Lady, by the senior champion, Scottish Prince (imp.); a Campbell Claret bull, by Prince of Archers (imp.), dam Clarissa's Fancy 2nd, by Golden Crown (imp.). These young bulls have lots of Shorthorn character, and are put up on show-yard lines. We have also a few other good young bulls for sale, as well as a choice lot of heifers of different ages, by imported sires; also something good in Shire horses and Lincoln sheep.

LAST CALL FOR THE MYRTLE SALE

Relative to the imported and Canadian-bred Clydesdale stallions, mares and fillies, Shorthorn bulls and heifers, and Yorkshire boars and sows, to be sold at Myrtle, Ont., on April 9th, a few notes were given in last week's issue, mainly as to the character and breeding of the Clydesdales and Yorkshires. Following is a synopsis of the breeding of a few of the Shorthorns, remarks which apply to the entire offering, consigned by leading breeders of the great Shorthorn County of Ontario, and all possessing individual merit and breeding of a high order. On blood lines they represent the Crimson Flower, Wedding Gift, Marr Stamford, Duchess of Gloster, and other excellent families, many of them having imported sires and dams. Among the bulls to be sold are some extra-choice herd-headers, thick-fleshed and mellow-handling. One is a richly-bred Crimson Flower, sired by the Clara-bred bull, Imp. Spicy Count. Another is sired by the Campbell Rosebud-bred bull, Rosebud Champion, and out of the great milking cow, Imp. Cherry. One of the heifers to be sold is also out of this same cow, and sired by the \$900-bull, Village Secret. The above choice breeding is illustrative of the breeding of the entire offering. The record price of store hogs at the present time is a stimulus to farmers to get back to hog-raising. This sale will offer the opportunity of the year for procuring breeding animals of a high-class type, and the reduced railway fares make it easy for visitors from a distance to attend. Myrtle is easy of access from north, south, east and west. Both the C. P. R. and G. T. R. have stations at Myrtle.

Send Now For Free Book and Sample

"For more than five years I have been experimenting with our experts to find the BEST culvert for all-round uses. We sought the markets of the world for one that was just right; and we didn't find it. If we had, we'd have bought the patent rights for Canada. Finally, last spring we struck the idea. Then we put in some expensive months in making that idea better, —and NOW we've got a culvert that is so far ahead of any other there's no comparison."

"You'll read something about it here; but to KNOW how 'way-ahead it really is, you'll want to see the sample (sent free) and read the booklet (free, ditto). With that before you, you will soon see why every Reeve, or Warden, or Town Councillor, or anybody who has any use for culverts at all,—will find it pays to get in touch with me right NOW. I am asking you to lay aside your notions of what makes a good culvert, and a cheap culvert, and find out about this NEW culvert. I don't expect you to buy a foot of it until it PROVES to you that Pedlar Culverts are in a class by themselves, and that you can't afford to overlook them. Let us start that proof toward you soon—address nearest Pedlar place."

G. A. Pedlar

Frost-Proof, Rust-Proof, and Wear-Proof

This triple-rib flange-lock principle, found only in Pedlar Culverts, not only adds greatly to the strength of the piping and makes a perfect joint—practically as good as if welded—but it also allows for expansion and contraction under cold or heat. Though a Pedlar Culvert, of any length, be frozen solid full of ice, it will not split nor spring a leak.

Send for Free Sample and Booklet 20—Address

State your probable needs and we will quote prices and discounts —



Scott Bros., Highgate, Ont., report sales of Shorthorns the last month as follows: To Alex. Kelley, Aldboro, Ont., Royal Victor, a very choice roan bull calf. To Robert McAlister, St. Augustine, Ont., the choicely-bred bull calf, Free Trade. To John A. Campbell, St. Thomas, Ont., Broadhooks Chancellor, a nine-months-old calf of great promise; will make a show bull. We are now sold out of bulls, but have a few choice heifers on hand for sale at reasonable prices.

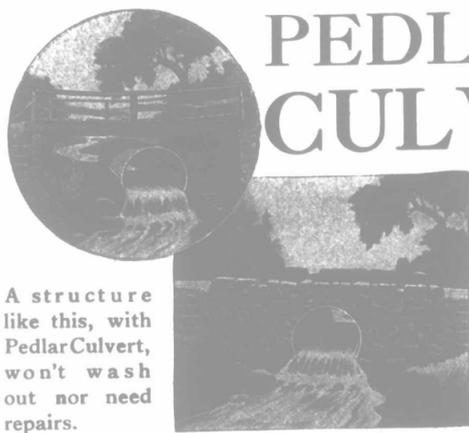
Mr. George G. Stewart, Howick, Que., reports the following recent sales of imported Clydesdales and Shetland ponies: To Mr. Malcolm Smith, Lachute, Que., Lady Lindores (20847); she has been a great prizewinner in Scotland. To Mr. John Morrow, Darlingford, Manitoba, Lord Fauntleroy (imp.) [8245]. (10370); it is needless to say what a prizetaker he has been; also Valdema (imp.) (7144), (13234), General Blucher (imp.) (8653).

(13497), Lady Dawson (imp.) (18720). Also two Shetland ponies (imported). Mr. Morrow is to be congratulated on securing such a fine selection of prize-winning horses, and they should prove a great success in the county where they are going to.

The single eyeglass is worn by the dude. The theory is that he can see more with one eye than he can comprehend.

Learn about the strongest, most practical, most durable and easiest-laid culvert ever made—that's

PEDLAR Perfect Corrugated Galvanized CULVERT



A structure like this, with PedlarCulvert, won't wash out nor need repairs.

A few hours' work and a few dollars will put a modern and permanent culvert in place of a ramshackle bridge. Easily laid by anybody.

Made of Special Billet Iron, Extra Heavy

In every size of Pedlar Culvert, which comes in all standard diameters from 8 inches to 6 feet, we use nothing but the best grade of Billet Iron, specially made for us, of extra-heavy gauge (14 to 20 gauge, according to the diameter). This Billet Iron is curved into semi-cylinders—curved COLD, so there will never be any variation from exact dimensions; and it is then deeply and smoothly corrugated on a special press that puts a pressure of SIXTY TONS on every square inch of the metal. The corrugations, therefore, are uniform and very deep.

Galvanized After Being Pressed Up

When the corrugating process is done, the sections are galvanized by our exclusive process that covers the entire surface with a thick coating of zinc spelter. Every edge, every crevice, is heavily coated with this rust-proof, corrosion-proof galvanizing, not a spot is left unprotected. This is the only culvert galvanized after being shaped. Is absolutely Rust-proof.

Will Stand Incredible Strains

The heavy-gauge Pedlar Billet Iron sections, deeply corrugated and locked together without bolts or rivets by our compression triple-rib (this rib is flat—not corrugated), make a culvert that will stand enormous crushing strains and neither give nor spring. A thin cushion of soil on top is all the protection such a culvert needs against traffic; and no special precautions need be observed in laying it,—it will stand what no other culvert can.

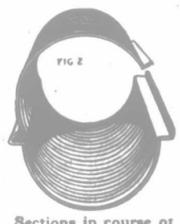
Compact—Portable Easily Laid



Half-sections nested for shipment

Pedlar Culverts are shipped in half-sections, nested—see Fig. 1. Saving freight charges and making carriage easy in roughest country. Quickly and easily transported anywhere.

Note that the ribs are flat, and the curved part of the cylinder deeply corrugated. These ribs add vastly to the culverts' strength.



Sections in course of assembling

Unskilled labor, with a single tool, quickly clamps the flanges together, making a triple-fold joint that is tighter and better than any riveted or bolted joint can be.



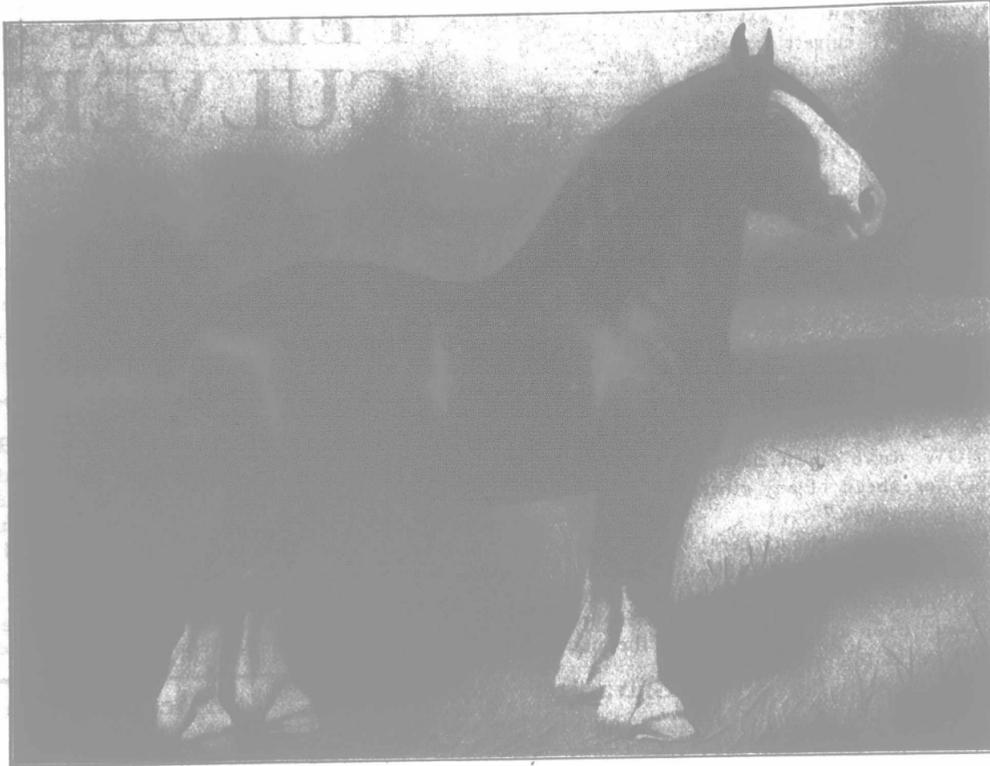
Clinching the flange lock—no bolts, no rivets, no makeshifts

BRANCH WAREHOUSES

- MONTREAL, 321-3 Craig St. W.
- OTTAWA - - - 423 Sussex St.
- TORONTO - - - 11 Colborne St.
- LONDON - - - 86 King St.
- CHATHAM - 200 King St. W.

Canada's Leading Horse Importers

CLYDESDALES and HACKNEYS.



THE ABOVE IS TYPICAL OF WHAT YOU WILL FIND AT CAIRNBROGIE.

Our Clydesdales excel in weight, finish and bone; our Hackneys for high action, style and breeding, for the past ten years outranking all others at the leading shows of America; showing conclusively that the best stallions from the British Isles are to be found in our stable, and frequent importations guarantee at all times a large selection and a satisfactory choice. Safest guarantee. Reasonable prices. Remember that whether you want mare or stallion, colt or mature animals, Cairnbrogie is today, and always has been, headquarters for the best.

Graham Bros.,
"Gairnbrogie," Claremont, Ont.

Claremont Station, C. P. R.
Long distance phone in house.

GOSSIP.

The imported Clydesdale stallion, Balladoyle (13967), whose picture appears in this issue, is a dark brown four-year-old, bred by Mr. John Kerr, Red Hall, Wighton, imported and owned by Mr. T. J. Berry, of Hensall, Ont. The photo was taken soon after landing, when the horse was somewhat gaunted, and, consequently, does him less than justice, as he is really a short-legged, wide, and deep-bodied horse, with handsome head and well-crested neck, excellent ends, and a middle to match; large for his age, and weighing close to a ton, while his quality of bone, pasterns and feet is faultless, and his action free and true, in short he is a model draft horse in his individual make-up, while his breeding is first-class, being sired by Specialty, by Balmedie May King, by Prince of Carruchan, by Prince of Wales (673). Dam by Gartsherrie, by Darnley (222), thus combining the blood of the two most noted and successful sires of the Clydesdale breed. Mr. Berry, though a modest man, is known as one of the best judges of draft horses in Canada, and has in his time imported and sold over one hundred, which have given entire satisfaction, not one having been returned to him as unsure, or for any other cause.

ANNUAL MEETING OF QUEBEC HOLSTEIN ASSOCIATION.

The annual meeting of the Holstein Breeders' Association of the Province of Quebec was held at Montreal, Thursday, March 18th, the President, J. E. K. Herrick, in the chair. The election of officers resulted as follows: President, J. E. K. Herrick, Abbotsford; First Vice-President, Dr. L. de L. Harwood, Vaudreuil; Second Vice-President, Ogden Sweet, North Sutton; Third Vice-President, Neil Sangster, Ormstown; Fourth Vice-President, Jas. Ferland, Sorel. Directors—P. Sally, Lachine Rapids; Dr. Godreux, St. Sebastien; Felix Ashby, Marieville; R. A. Gillespie, Abbotsford; J. Woodworth, Lacolle; J. C. Pettus, West Bromo; F. E. Came, Sault au Recollet. A. W. Deland, St. John's, Que., Secretary and Treasurer; Major J. J. Rielly, Jr., Montreal, Assistant Secretary and Treasurer.

THE MOST COMPLETE LINE OF

IRON STABLE FITTINGS

IN CANADA. ALSO A COMPLETE LINE OF

Stewart Horse-clipping and Sheep-shearing Machines.



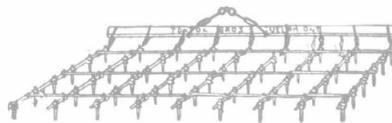
Knives Sharpened and Returned Promptly.
Before fitting up your stable write us for information and prices.

Our knowledge, gained by years of experience, is at your disposal.

**THE TISDALE
IRON STABLE FITTINGS CO., LTD.**
19 TEMPERANCE ST., TORONTO, ONT.
Send for Stable Fitting Catalogue.

TOLTON'S HARROWS

HIGH-GRADE STEEL



Section and Flexible All-Steel Harrows with an unequalled record.

A large variety suitable for the requirements of any country, made in different widths to suit purchasers. Pre-eminently the most efficient, strongest, and longest-wearing Harrows ever manufactured, is our unqualified guarantee. A Harrow bargain it will pay you to know more about. Free descriptive circular furnishes the facts.

Write for it to-day. Address Dept. H.

OUR MOTTO:—"Not How Cheap, but How Good."

Tolton Bros., Ltd., Guelph, Ont.

We also manufacture the most up-to-date unloading outfits for hay and grain, comprising rod, wood or steel tracks.

Subscribe for "The Farmer's Advocate and Home Magazine." \$1.50 per Year in Advance.

THE DON JERSEY HERD.

A representative of this paper recently paid a flying visit to the well-arranged dairy farm of Messrs. D. Duncan & Son, Don P. O., Ont., near Toronto, and, as usual, found their splendid herd of eighty high-class Jerseys in prime condition, with coats like silk, and giving every evidence of good care and attention, their large, well-balanced and well-filled udders showing a profitable responsiveness to liberal rations of ensilage and meals. The invariable show-ring record of this great herd is too well known to need repetition here, containing as it does very many winners at the leading Canadian exhibitions, from championships down, for many years. Being familiar with the complexion of the herd, we feel safe in saying that the perfect dairy type, the quality and producing appearance of the herd was never so high as it is just now, headed by what he has proven himself to be, one of the very best bulls in Canada, both as a show bull and as a sire of show things, Fountaine's Boyle, a son of the greatest Jersey sire America ever saw (Golden Fern's Lad). His success as a sire indicates that he is likely to be the equal of his illustrious sire as a getter of high-class animals. Last fall, as a two-year-old, in the strongest kind of company, he won first prize at Toronto, London and Ottawa. 1908 marks an epoch for the inquiry, demand and sale of Jerseys as the greatest in Mr. Duncan's many years' experience in breeding this most popular dairy breed. From one end of the country to the other, representatives of this herd are now to be found. There are still on hand for sale a number of young heifers, and a limited number of young bulls, only one of which is left fit for service, so great has been the demand for herd-headers sired by the great stock bull, and out of 30 to 35 lbs. a day heifers to 50 lbs. a day developed cows. No more desirable young things, either bulls or heifers, can be found, and certainly no more choice a lot.

THE 1900 WASHER

CAN I DO BETTER

than let you prove for yourself without one cent of payment that I have got the best Washer ever made? I will send any responsible woman a "1900 Gravity" Washer absolutely free of all cost for 30 days. Try it for 4 washings and you will wonder how you ever got along without it. Write to-day, F.A.R. Bach, Manager.

THE 1900 WASHER CO., 357 Yonge St., Toronto, Can. 1462



The Tie That Binds

Examine our lock—"The Tie That Binds." Notice how it locks smooth on both sides of the line wire. Being an oval loop, it permits a long bend in the line wire. This does away with short kinks, which cause so many breaks in the fence.

This lock can't slip and adds strength and wear to the whole fence. The "Standard" may cost a little more than small, soft wire fences—but it's worth more to every farmer and stockman who wants the best. Write direct to the factory for catalogue and sample lock.

The Standard Wire Fence Co. of Woodstock Ltd., Woodstock, Ont.

Standard Woven Wire Fence

Clip Your Horses in the Spring

It Pays—Clipped horses look better, feel better and do better work—Clip With the Stewart Ball Bearing Clipping Machine



The only ball bearing clipping machine made. Do not buy a frail, cheaply constructed clipping machine that will last you only a season or two, and give trouble all the time, when you can get this splendidly made, enclosed gear ball bearing machine for less than \$2.00 more. Every gear in this machine is cut from solid steel bar and made file hard. They all run in an oil bath, so friction and wear are practically done away with. It turns easier, clips faster, and lasts longer than any other clipping machine made.

WE GUARANTEE IT FOR TWENTY-FIVE YEARS. Price all complete, at your dealers, only \$9.75. Write for our big free catalogue. Try this machine out side by side with any other machine on the market, at any price. If this is not worth three times as much, send it back at our expense both ways, we will refund every cent you paid. Send today.

CHICAGO FLEXIBLE SHAFT COMPANY, 110 La Salle Ave., Chicago

Carriages and Harness at First Cost

Why not DEAL DIRECT WITH THE MAKER and save two profits.



By our system you can purchase a buggy, phaeton, or other high-grade carriage or harness, at one-third less than from your local dealer.

If not thoroughly satisfied you can return the goods, and we will pay freight both ways. Our complete illustrated catalogue, showing many styles of vehicles and harness, with description and price of each, mailed free. Write to-day. 3

INTERNATIONAL CARRIAGE COMPANY, BRIGHTON, ONTARIO.

CLYDESDALES AND SHORTHORNS.—Both Imported and Canadian-bred, at Columbus, Ont., the Home of the Winners.

Our last importation landed in August. They include the pick of Scotland, from such renowned sires as Baron's Pride, Everlasting, Baron o' Bucklyvie, Hiawatha, Marsells, Sir Everest, and Prince Thomas. We have on hand over 30 head to choose from, from the above noted sires, from 1 to 6 years old, and including stallions and mares. Correspondence solicited. Call and see them at our barns, Columbus, Ont., before purchasing elsewhere. Our prices are right. Long-distance phone in houses. Phone office, Myrtle station. Myrtle station, C.P.R.; Brooklin station, G.T.R.; Oshawa station, G.T.R. **Smith & Richardson & Sons, Columbus, Ont.**

IMP. CLYDESDALE STALLIONS AND FILLIES.

Our new importation of stallions and fillies are the best we could select in Scotland, particularly well bred, with the size, smoothness and quality that Canadians admire. Show-ring stuff. Come and see them. Will sell on terms to suit. **JOHN A. BOAG & SON, Queensville P. O. Ont.; Newmarket Sta., G. T. R.** Telegraph and telephone one-half mile from farm. Metropolitan Street Ry. from Toronto crosses the farm.

IMPORTED CLYDESDALES

My new importation of Clydesdale stallions and fillies, landed a short time ago, are an exceptionally choice lot, full of flashy quality, style and character, and right royally bred. I will sell them at very close prices, and on terms to suit. **C. W. BARBER, Gatinou Point, Quebec.** "Close to Ottawa."

IMPORTED SHIRES

At their St. Thomas stables, the John Chambers & Sons Co., of England have for sale stallions and fillies from their noted Shire stud, high-class representatives of the breed. Correspondence solicited. Address **DR. C. K. GEARY, St. Thomas, Ont.**

Clydesdales and Hackneys

We have for sale a few choice Clydesdale mares, imported and Canadian-bred; also some Canadian-bred Clydesdale stallions. Hackney stallions and mares for sale always. **HODGKINSON & TISDALE, BEAVERTON, ONTARIO.** G. T. R. and C. N. R. Long-distance phone.

Imported Clydesdales

In my new importation I have the best lot I ever imported. 7 stallions, including the great sire, Baron Hood. All have great size, smoothness, quality, on the best of bottoms, and royally bred. **WM. COLQUHOUN, MITCHELL, ONT.**

QUESTIONS AND ANSWERS. Veterinary.

WARTS, ETC.

1. Cow has warts on ends of two teats. It is necessary to use a tube to milk.

2. Is it better to force a cow to eat large quantities of salt? **W. J. C.**

Ans.—1. The warts should be carefully cut off with a shears, or knife, and the raw surfaces dressed three times daily with 1 part carbolic acid and 30 parts sweet oil, and a teat syphon used until the wounds are healed.

2. Cows should be allowed all the salt they will take, but should not be forced to eat it. **V.**

COW QUIDS HER CUD.

Cow chews her cud, apparently sucks the juice out of it, and then spits it out of her mouth in lumps the size of apples. I gave her one pound Epsom salts and she got better, but the milk became thick. **J. W. H.**

Ans.—I cannot see how the purgative had a good effect on this habit. It certainly did not cause the alteration in the quality of the milk. This was caused by inflammation of the udder, which, no doubt, has subsided before this. It is probable there is something wrong with either the teeth or the tongue which causes the quidding, or it may be simply a habit. Have her mouth examined, and, if necessary, the teeth dressed. If it be a habit, it is probable it will cease when she gets on grass. **V.**

CONTRACTED FEET.

Mare's feet are contracted and dry, and the lower parts are cracked in different places. At times she goes quite lame. **G. D. R.**

Ans.—The contraction is not a disease, but the result of disease existing within the hoof. It is very probable she has navicular disease, and a permanent cure cannot be effected. The symptoms can be lessened by repeated blistering. Get a blister of 2 drams each of biniodide of mercury and cantharides, mixed with 2 ozs. vaseline. Clip the hair off for two inches high all around the hoofs. Tie her so that she cannot bite the parts. Rub well with the blister once daily for two days. On the third day apply sweet oil. Turn in loose box now, and oil every day. As soon as the scale comes off, tie up and blister again, and after this blister every four weeks as long as you can allow her to rest. When you want to work her, get her shod with bar shoes, and keep the feet soft by poulticing or standing in a tub of water for a few hours daily. **V.**

MISCELLANEOUS.

1. Mare injured her leg between hock and fetlock by striking against the stall. It swelled, and I bathed it with hot water, which reduced it some. I then drove her, and now the leg is swollen again.

2. Which should hay or oats be fed first after watering?

3. How can a lock of mane that refuses to stay on proper side of neck be made do so?

4. How should a high stepper be shod so as to prevent him paddling?

5. Can a horse's neck that is too low be caused to fill out by attaching a rope to the mane, running it through a pulley and attaching a weight on the other side? **J. H. B.**

Ans.—1. Bathe frequently with hot water until inflammation is allayed, then rub a little of the following lotion well in once daily, viz.: Iodine and iodide of potassium, of each 4 drams; alcohol and glycerine, of each 4 ounces. Feed lightly and give regular exercise.

2. Hay, theoretically, oats should be the last eaten.

3. Plait the mane, and tie a little lead to end of plait.

4. This is a question that horsemen and horseshoers have been experimenting on without satisfactory results for many years. No device has yet been invented that will prevent a paddler from paddling.

5. We do not think so, but I suppose the only means of ascertaining is to experiment. **V.**

Warranted to Give Satisfaction.

Gombault's Caustic Balsam



Has Imitators But No Competitors.

A Safe, Speedy and Positive Cure for Curb, Splint, Sweeney, Capped Hock, Strained Tendons, Founder, Wind Puffs, and all lameness from Spavin, Ringbone and other bony tumors. Cures all skin diseases or Parasites, Thrush, Diphtheria. Removes all Bunches from Horses or Cattle.

As a Human Remedy for Rheumatism, Sprains, Sore Throat, etc., it is invaluable. Every bottle of Caustic Balsam sold is warranted to give pain action. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars, testimonials, etc. Address **The Lawrence-Williams Co., Toronto, Ont.**

Lump Jaw



The first remedy to cure Lump Jaw was Fleming's Lump Jaw Cure and it remains today the standard treatment, with years of success back of it, known to be a cure and guaranteed to cure. Don't experiment with substitutes or imitations. Use it, no matter how old or bad the case or what else you may have tried—your money back if Fleming's Lump Jaw Cure ever fails. Our fair plan of selling, together with exhaustive information on Lump Jaw and its treatment, is given in Fleming's Vest-Pocket Veterinary Adviser. Most complete veterinary book ever printed to be given away. Durable bound, indexed and illustrated. Write us for a free copy. **FLEMING BROS., Chemists, 75 Church St., Toronto, Ontario**

Seldom See

a big knee like this, but your horse may have a bunch or bruise on his Ankle, Hock, Stifle, Knee or Throat.

ABSORBINE

will clean them off without laying the horse up. No blister, no hair gone. \$2.00 per bottle, delivered. Book 50¢ free. **ABSORBINE, J.E.T., for mankind, \$1. Removes Painful Swellings, Enlarged Glands, Goitre, Wens, Bruises, Varicose Veins, Varicocelae, Old Sores, Ailays Pain. Book free. W. F. YOUNG, P.O.F., 73 Monument St., Springfield, Mass. LYMAN, BONS & CO., Montreal, Canadian Agents.**

Imported Clydesdale Stallion FOR SALE OR HIRE.

CREMORNE (7903) (12927), 5 years old, weighing 1,950 lbs., with 7 ft. 5 ins. heart-girth; black, with white stripe; good-tempered, with abundance of snap; best of feet, legs and action; won 3rd at Sherbrooke, 4th at Ottawa, 1908. Foaled 60% in 1908. Terms to hire, \$200 cash in advance. **HENRY M. DOUGLAS, MEAFORD, ONT.**

Ormsby Grange Stock Farm, ORMSTOWN, P. Q.

DUNCAN McEACHRAN, F.R.C.V.S., D.V.S., Proprietor.

Importer and breeder of **CLYDESDALES**, high-class pure-bred Farmers or ranchmen starting breeding Clydes, pure or grade, specially invited to correspond.

Clydesdale Stallions FOR SALE:

Baron's Model (imp.), rising 4 years; sire Baron's Pride; dam by Prince Robert. This is a coming champion, and 80 per cent. getter. Also the imported All Gold, rising 3 years old, and a Canadian-bred rising 5 years. Address: **A. ROSSITER, CRAMPTON, ONT.**

FOR SALE: Three Registered Clydesdale Stallions, rising four years old, also one registered brood mare, in foal to imported sire, four years old. One of these stallions is imported, others Canadian-bred. All three good heavy ones, with lots of quality. Apply to: **R. T. Brownlee, Hemmingford, Que.**

IMP. CLYDESDALE STALLION

For sale. High class, pure bred, white points, sound, quiet, good size. Proved sire of good stock, and a rare chance. For particulars and price address: **F. D. McAuley, Railton, Ont.**

Dr. Bell's Veterinary Medical Wender

cures inflammation of lungs, bowels and kidneys. The 20th-century wonder. Agents wanted in every county. Write for terms. **DR. BELL, V. S. Kingston, Ont.**

A \$5,000 DAN PATCH STALLION FREE

This New Picture of DAN PATCH 1:55 in Six Brilliant Colors
MAILED FREE



DAN PATCH 1:55

This new picture of Dan Patch 1:55, is the finest I have ever gotten out for framing. It is printed in six brilliant colors and is free of advertising. It gives his age and a list of all the fast miles paced by Dan. Being made from a "Speed Photograph" it shows Dan as lifelike as if you stood on the track and saw him in one of his marvelous and thrilling speed exhibitions. You ought to have a fine picture of the King of all Harness Horse Creation and the Fastest Harness Horse the world has ever seen. I will mail you one of these Large, Beautiful, Colored Pictures of Dan Patch 1:55 free With Postage Prepaid and full particulars concerning my plan of Giving Away a \$5,000.00 Dan Patch stallion if you will simply write me.

A \$5,000 DAN PATCH STALLION FREE

An Absolutely Free Hair Counting Contest Without Money or Purchase Consideration And Open To Any Farmer, Stockman or Poultry Breeder. Can you count the number of hairs drawn in a picture of "Forest Patch," sired by Dan Patch, dam by Monaco by Belmont. Write for one of the Above Dan Patch Pictures. I will also mail you a photo engraving of "Forest Patch," the fine Registered Stallion to be given away and ALSO Drawing showing hairs to be counted and also stating easy conditions. Every stock owner will want to count the hairs on this Splendid \$5,000.00 Dan Patch Stallion because it means a small fortune free for someone. We paid \$50,000 for Dan Patch and have been offered \$100,000. We would have lost money if we had sold Dan for One Million Dollars. "Forest Patch" might make you a fortune of \$25,000 to \$50,000 as a great stock horse for any community because he will make a 1900lb. stallion with great style and beautiful conformation.

E. B. SAVAGE, Toronto, Canada.

International Stock Food Co.
E. B. SAVAGE, Toronto, Can.

Mail this Free Coupon To-Day to E. B. SAVAGE, Toronto, Can.

YOU MUST FILL IN THE THREE BLANK LINES IN THIS FREE COUPON

OUT OFF HERE

E. B. Savage, International Stock Food Co., Toronto. Will you please mail me Postage Paid one of the Beautiful Six Color Pictures of Dan Patch 1:55, the World's Champion Harness Horse, described above, and also full particulars of your plan of Giving Away a \$5,000.00 Dan Patch Stallion. I have filled out the coupon, giving the number of live stock I own, and my name and address.

I own..... Cattle..... Hogs..... Horses..... Sheep
Name.....
Post Office..... Province.....

SAVE THE HORSE'S SPAVIN CURE.



FIREMEN'S FUND INSURANCE CO.,
D. W. KILPATRICK, Resident Agent,
Cripple Creek, Colo., Nov. 25, 1908.

Troy Chemical Co., Binghamton, N. Y.
I enclosed \$15, for which please send me by express as soon as possible 3 bottles of "Save-the-Horse". Since I used it on my own horse for a case of thoroughpin the people come to me now to get it for them.
D. W. KILPATRICK.

Oakland City, Ind.
I have had some experience with "Save-the-Horse" in a case of bog spavin of long standing on which my man used a great many cures. Finally a friend of mine induced me to try "Save-the-Horse." We had blistered and rubbed and finally succeeded in curing the mare, but after commencing the use of "Save-the-Horse" she was not lame any more, and worked her all the time. It disappeared entirely and has been gone for at least six months. Cannot speak too highly of "Save-the-Horse." Yours,
J. W. MCGOWAN.

Collingswood, N. J.—The "Save-the-Horse" I bought completely cured the bone spavin and splint. I was greatly pleased with the result as I was very much discouraged before trying your treatment.
JOHN LINGO.

\$5.00 for copy booklet and letters from business men and trainers on every kind of case. Foramsely cures Spavin, Thoroughpin, Ringbone(except low), Curb, Splint, Capped Hock, Windpuff, Shoe Ball, Injured Tendons and all Lamenesses No scar or loss of hair. Horse works as usual. Dealers or Express Paid. Troy Chemical Co., Binghamton, N. Y. and 145 Van Horn St., Toronto, Ontario.

ARTIFICIAL MARE IMPREGNATORS

For getting from 1 to 6 mares in foal from one service of a stallion, \$3.50 to \$6.00. Safety Impregnating Quads for barren and irregular breeders, \$7.50. Servicing Hobbles, Stallion Briddles, Shields, Supports, Service Books, etc. prepaid and guaranteed. Stallion Goods Catalog FREE. CRITTENDEN & CO., Dept. 38 Cleveland, Ohio, U.S.A.

For Sale: Imported Clydesdale Stallion ADONIS (10953), sired by the noted Baron's Pride (9122). Bay in color. He has travelled six successful seasons in this vicinity. Five and a half miles from Mt. Forest station, G. T. R., or three and a half miles from Holstein station, G. T. R.
John McDougall, Jr., Mt. Forest, Ont.
P. O. Box 234.

VETERINARY INSTRUMENTS (Trocars, Hobbles, Impregnators) for Horses, Cattle, Swine, Poultry, etc. Received only award World's Fairs, Chicago, St. Louis. Write for illustrated catalogue. Haussmann & Dunn Co., 392 So. Clark St., Chicago.

The Sunny Side Herefords. The herd that has the best of breeding and individual merit. For sale: Bargains in 2-year-old, yearling and bull calves. Some cows and heifers to spare. Write for prices. Long-distance phone.
M. H. O'Neil, Southgate, Ont.

Aberdeen-Angus Cattle. For Sale: Cows, Heifers, Bulls. Good strains at reasonable prices. Apply to: Andrew Dinsmore, Manager, "Grape Grange" Farm, Clarksburg, Ont.

Aberdeen-Angus. For sale: The right sort, some of them by Klondyke, imp. Drumbo station.
WALTER HALL, Washington, Ontario.



UNION STOCK-YARDS Horse Exchange

WEST TORONTO, CANADA.
The Greatest Wholesale and Retail Horse Commission Market.
Auction sales of Horses, Carriages, Harness, etc., every Monday and Wednesday. Horses and harness on hand for private sale every day.
The largest, best equipped and most sanitary stables in Canada. Half-mile of railway loading chutes at stable door. Quarter-mile open track for showing horses. Northwest trade a specialty. HERBERT SMITH, Manager. (Late Grand's Repository).

NEW CLYDESDALE IMPORTATION.

My new importation of 24 Clydesdale stallions is now in my stables. I invite inspection and comparison. I think I have the best lot for size, style, character, quality and action ever imported. 27 Clyde stallions and 8 Hackney stallions to select from. Prices right, and terms to suit.

T. H. HASSARD, MARKHAM, ONT.
POST OFFICE, PHONE AND STATION.

MY NEW IMPORTATION OF 23 Clydesdale Stallions

Which arrived in December, 1908, are all for sale. This lot include gets of the most famous sires. Four are by the renowned Everlasting, two are by Hi-watha. Please come and see them, or write to me. I am only two miles from the end of street car line. I also have two home-bred Hackney stallions for sale at a low price.
O. SORBY, GUELPH, ONT.

Clydesdale Stallions and Mares!

A fresh lot has just arrived, including many prizewinners. Some extra big ones. Prices right. Inspection invited.
DALGETY BROS., LONDON, ONTARIO.
Stables Fraser House. Address correspondence to Dalgety Bros., Glencoe, Ont.

NEW IMPORTATION OF CLYDESDALES.

My new importation of Clydesdales are now in my stables: 14 stallions, 2 fillies. Visitors will find them as choice a lot as ever seen in Canada. Big, full of style and quality, and bred right royally.
T. D. ELLIOTT, Bolton, Ontario, P. O. and Station

COMPLETELY SOLD OUT! EXPECT TO LAND MY NEW IMPORTATION OF CLYDESDALES AND HACKNEYS about March 10th. My motto is: Quality, not quantity.
THOS. L. MERCER, MARKDALE, ONT., P. O. AND STA.

Koyama. [8029]. Champion three-year-old Canadian-bred Clydesdale stallion at Ottawa Horse Show, in January, 1909, for sale. Reasonable terms.
Robt. Hunter & Sons, Maxville, Ont.

IMPORTED CLYDESDALES. My new importation for 1908 has now arrived—stallions and fillies—personally selected. Richest in breeding; highest in quality; with abundance of size and character. Sold on terms to suit. GEO. G. STEWART, HOWICK, QUE.

QUESTIONS AND ANSWERS. Veterinary.

HERNIA.

Colt was staked in abdomen last fall. The wound has healed, but a rupture the size of a saucer remains. Can it be safely operated on without any danger of losing the colt?
E. R.

Ans.—There is a danger of unfavorable results and sometimes death following the most simple operation. There is comparatively little danger from the operation necessary in this case, except from tetanus, and it is not possible to avoid the possibility of tetanus, except by rendering the colt immune by injecting with antitetanic serum before operating. I may say that operations for ventral hernia often fail to effect a cure, but when the opening through the abdominal walls is small, say less than two inches in diameter, the prospects of a successful operation are fair.
V.

MISCELLANEOUS.

1. Is it good practice to give horses saltpetre regularly?
2. How much should be given, and is it as good given in oats as in water?
3. Should a horse be allowed all the salt he will eat?
4. Are worms very injurious to horses? May your treatment given in a recent number be given to pregnant mares?
5. Recommend a tonic for horses not doing well.
H. G. A.

Ans.—1. No. Horses should not be given drugs unless they are diseased.
2. ½ to 1 oz. is the dose. It acts just as well when given in food.
3. Yes, but should not be forced to eat it.
4. It depends upon the number present. The treatment referred to can be safely given to pregnant mares if the purgative is omitted. Two ounces of oil of turpentine in a pint of raw linseed oil, given after a fast of eight to ten hours, is probably safer treatment for mares in foal.
5. Take equal parts sulphate of iron, gentian, ginger, and nux vomica. Mix, and give a tablespoonful three times daily.
V.

WEAK LEGS—DISTERPER.

1. Yearling has one weak hind leg. It turns out at the hock joint like a very young colt.
2. Horse took distemper. I worked him and he must have taken cold. He became worse, would lie down, tumble around, get up, press his head violently against the wall, try to climb up the wall, etc. He died in three days. My brother had a similar case, but his swelled in all his legs.
H. E. B.

Ans.—1. It is probable the leg will become stronger as he grows older. This is a congenital weakness. Keep him as quiet as possible, and put a blister on the joint. Details for blistering are frequently given in these columns.
2. The horse had irregular strangles (in which case abscesses are liable to form in any place). No doubt an abscess formed on the brain and caused death. Nothing could have been done. It is not uncommon for the legs of horses suffering distemper to swell.
V.

OPHTHALMIA—FATALITY IN COLT.

1. Heifer's eyes are sore and running water. She seems to be in distress and shakes her head.
2. Four-year-old colt got sick in the morning. His legs got stiff and his eyelids become swollen. He would lie down and moan; get up, lie down again, etc., and he was dead at noon.
P. A. B.

Ans.—1. Keep her in a partially-darkened stall, excluded from drafts and sunlight. Give her a laxative of 1 lb. Epsom salts, and put a few drops of the following lotion into each eye, twice daily, after bathing with hot water, viz.: Sulphate of zinc, 10 grams; fluid extract of belladonna, 20 drops; distilled water, 2 ounces.
2. I am of the opinion he died of acute indigestion, although the swelling of the eyelids is not a usual symptom. Treatment should have been the administration of 2 ounces chloral hydrate in a pint of warm water, to be repeated, if necessary, in 3 hours. Had bloating been noticed, the administration of 3 ounces oil of turpentine in a pint of raw linseed oil would probably have given relief.
V.

BOOK REVIEW.

THE BUSINESS OF DAIRYING.

Thorough business methods in connection with every phase of the dairy industry, with special application to dairy students, producers and handlers of milk, are treated most admirably by Clarence B. Lane, B.S., in his book, "The Business of Dairying," published by the Orange-Judd Company, of New York.

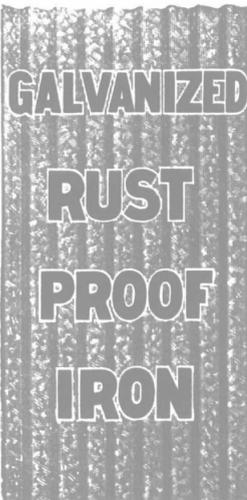
POTATO CULTURE.

Valuable information regarding the potato crop, gathered from the work of colleges and experiment stations, and flavored with the essence of several years' practical experience on two continents, is found in Samuel Fraser's book, "The Potato," published by the Orange-Judd Company, of New York.

GOSSIP.

Volume 71, of the American Shorthorn Herdbook, has been received at this office, thanks to the courtesy of the Secretary and Editor, Mr. John W. Groves, Union Stockyards, Chicago.

Mr. John Bright, the well-known importer and breeder of Clydesdale horses and Shorthorn cattle, of Myrtle, Ont., lately sold to Mr. C. A. Touriss, of River Bank, Ont., the big, smooth, quality mare, Queen (imp.), sired by the well-known and ever-popular premium horse, Baron Mitchell.



For Roofing, Siding or Ceiling

POSITIVELY THE BEST AND MOST LASTING COVERING MADE.

Requires no painting. Economical and easy to put on; no previous experience necessary. Absolutely guaranteed. Brand new, clean stock. Bright as a dollar. Sheets are full size. Comes in Corrugated, "V" Crimped, Standing Seam or Plain Flat Sheets.

PAINTED STEEL ROOFING AT \$1.25 PER HUNDRED SQUARE FEET.

Also in stock a full line of painted Steel and Iron Roofing, Siding and Ceiling, all styles at prices from \$1.25 per 100 sq. ft. up. Fill in the coupon below. We will send you samples free of charge together with a vast amount of FREE FREIGHT PREPAID PRICES.

ROOFING SUPPLIES OF EVERY KIND

FREE OUR 500-PAGE CATALOG NO. 645. It is full of information for the shrewd, careful and economical buyer. Lists thousands upon thousands of rare bargains. Price offers that command orders. Millions of dollars' worth of merchandise, bought at Sheriffs', Receivers' and other forced sales, are plainly described in this book. Send coupon below and get a copy free.

FREE BOOK OF PLANS! If you are going to build or improve, we will send you free, our book of plans, containing many illustrations and descriptions of modern residences, farm homes, barns, etc.

FREE BOOK OF BUILDING MATERIAL! It will put you in touch with the wonderful situation in the lumber market. Contains thousands of money saving offers.

FREE SPECIAL FURNITURE CATALOG! Showing Rugs and Linoleum in their natural colors and designs. We save you from 30 to 60 per cent.

We Buy Our Goods at Sheriffs', Receivers' and Manufacturers' Sales

CHICAGO HOUSE WRECKING COMPANY

35th and Iron Streets, Chicago, Ill. We Can Save You Money On Wire and Pencil.

FREE SAMPLE COUPON NO. Kind of building... Size of Roof... If you want Siding or Ceiling give diagram and full dimensions... When do you expect to order... Name... P. O... R. F. D... State...

Harrow While Plow You Make one job out of the two, and get your ground in finest condition by harrowing when the soil is first turned up. Kramer's Rotary Harrow Plow Attachment. Attaches to any gang or sulky and levels, pulverizes and makes a mulch of the "moist soil" that is not possible after the ground dries and "sets".

Scotch Shorthorns Have yet for sale, two extra good bulls, imported, just ready for service; also one good roan (Canadian-bred bull, grandson to Patton Chancellor, imp.; also a grand lot of heifers. Write or call on H. J. Davis, Woodstock, Ont. C. P. R. & G. T. R. Long-distance Bell phone.

IMPORTANT AUCTION SALE At BROOKSIDE FARM of registered SHORTHORN CATTLE AND SHROPSHIRE SHEEP To be held on Lot 13, Con. 4, Township of Westminster, on Wednesday, April 7th, 1909. Commencing at 1 o'clock p.m. 30 Scotch and Scotch topped, imported and home bred Shorthorns, all recorded in the Dominion Herdbook. 15 Registered Shearling Shropshire Ewes, sired by Rosford Eclipse (imp.) and all bred to Mr. Beattie's imported show ram. Also a good roaster mare, 5 years old, sired by Moubars, dam by Wildbrino.

SHORTHORNS! A few cows and heifers with calves at foot by Good Morning, imp. No bull to offer of breeding age. Office both stations. SCOTT BROS., HIGHGATE, ONT. M. C. Ry P. M. Ry

GEO. AMOS & SON, Moffat, Ontario. For sale: Imp. Pen Lowland =45160 = 80468, that grand stock bull, sire of first-prize calf herd at Toronto, 1908; and Augustus, a good Bruce Augusta bull calf; also Iema, various ages. Write or come and see us. Farm 11 miles east of City of Guelph, on C. P. R.

MR. A. I. HICKMAN, Court Lodge, Egerton, Kent, England, EXPORTER OF PEDIGREE LIVE STOCK Of every description. During the summer months the export of show and breeding flocks of sheep will be a specialty. Who can do better for you than the man who lives on the spot? Mr. Hickman will be at the Bell Hotel, Gloucester, during the week of the Royal Show, and will be pleased to meet there all colonial and foreign visitors.

ROBIN HILL FARM SHORTHORNS AND CLYDESDALES. We offer our stock bull, Merry Master (imp.) =45199=, for sale or exchange, also 4 two-year-old heifers and 2 yearling heifers. All got by Merry Master, and all in show condition. We also offer a few registered Clydesdale fillies and mares in foal. Wm. Ormiston & Sons, Columbus Ontario Brooklyn, G. I. R.; Myrtle C. P. R. Phone Revolution Centre.

Greengill Shorthorns! Our present offering consists of 10 young bulls, from 8 to 20 months. All nice reds and roans. A number of them from imp. sire and dam. Prices right. R. Mitchell & Sons, Nelson P. O., Ont. Burlington Int. Sta.

FOR SALE: 2-YEAR-OLD BULL, SEA LION =4385= He is got by Sittinson Marquis =55761=; his dam, Sea Lady (imp.) 70838, by Maxwell (84089). Sire bred by W. C. Edwar's & Co., Rockland, Ont. Dam bred by John Marr, Cairnbrogie, Aberdeen-shire, Scotland. CYRIL M. MOORE, MILL BROOK, ONT.

JOHN GARDHOUSE & SONS Always have for sale a number of first-class Shorthorns, Shires and Lincolns of both sexes. Drop us a line, or better, come and see for yourself. HIGHFIELD P.O., ONTARIO. Weston Sta. G. T. R. & C. P. R. Long-distance phone in house.

Scotch Shorthorns We now offer four heifer calves 10 and 11 months old. All reds. Bred from imp. sire and dams. Will be sold right. C. RANKIN & SONS, Wyebridge P.O., Ont. Wyevale Sta.

WILLOWDALE SHORTHORNS I have for sale some very fine young stock bulls and heifers ready to breed. Descendants of Joy of Morning, Broad Scotch and other noted sires. Also Chester White Swine and imported Clydesdale Horses. J. H. M. PARKER, LENNOXVILLE, QUE.

WHY NOT BUY A HIGH-CLASS SCOTCH SHORTHORN COW, Or a Heifer, Or a Bull Or a Few Shropshire Ewes, Or a Few Cotswold Ewes, NOW, While You Can Buy Them Low? I can offer you something in any of them that will make a start second to none. Write for what you want. ROBERT MILLER, STOUFFVILLE, ONT.

AN OPPORTUNITY TO SECURE YOUNG Shorthorn Bulls A few heifers will be sold cheap. One Clydesdale Stallion rising three years. MAPLE SHADE FARM. STATIONS: MYRTLE, C. P. R. BROOKLIN, G. T. R. Long-distance telephone. JOHN DRYDEN & SON, BRJOKLIN, ONT.

VALLEY HOME SHORTHORNS and BERKSHIRES Our herd is strong in Nonpareil, Marchioness, Jilt, Mina, Glosterina, Rosebud and Lady Brant blood. In order to save holding a public sale, we will sell very cheap 15 on- and two-year-old heifers and several extra choice bulls. Berkshire sows safe in pig. S. J. PEARSON & SON, Meadowvale P.O. and Sta. in pig.

SHORTHORNS Belmar Parc. Calves for sale by our grand quartette of breeding and show bulls: Nonpareil Archer, Imp., Proud Gift, Imp., Marigold Sailor, Nonpareil Eclipse. Females, imported and from imported stock, in calf to these bulls. An unsurpassed lot of yearling heifers. John Douglas, Manager. PETER WHITE, Pembroke, Ont.

PEOPLE SAID SHE HAD CONSUMPTION



Was in Bed for Three Months.

Read how Mrs. T. G. Buck, Bracebridge, Ont., was cured (and also her little boy) by the use of

DR. WOOD'S NORWAY PINE SYRUP

She writes: "I thought I would write and let you know the benefit I have received through the use of your Dr. Wood's Norway Pine Syrup. A few years ago I was so badly troubled with my lungs people said I had Consumption and that I would not live through the fall. I had two doctors attending me and they were very much alarmed about me. I was in bed three months and when I got up I could not walk, so had to go on my hands and knees for three weeks, and my limbs seemed of no use to me. I gave up all hopes of ever getting better when I happened to see in B.B.B. Almanac that Dr. Wood's Norway Pine Syrup was good for weak lungs. I thought I would try a bottle and by the time I had used it I was a lot better, so got more and it made a complete cure. My little boy was also troubled with weak lungs and it cured him. I keep it in the house all the time and would not be without it for anything."

Price 25 cents at all dealers. Beware of imitations of Dr. Wood's Norway Pine Syrup. Ask for it and insist on getting the original. Put up in a yellow wrapper and three pine trees the trade mark.

FITS CURED

For proof that fits can be cured, write to Mr. Wm. Stinson, 134 Tyndall Ave., Toronto, Ontario.

For pamphlet giving full particulars of simple home treatment. 20 years' success. Over 1,000 testimonials in one year. Sole proprietors: Trench's Remedies, Limited, Dublin.

RIPLLEYS COOKERS

Recommended and used by Wis., Iowa, Georgia and New Mexico State Experiment Stations. Made of Oat Iron and Heavy Steel. Last for years. Run dairy separators, cook feed, heat hay and poultry houses, etc. Heat water in tanks or cook food 250 feet away. Little fuel needed. Burns coal, coke, wood, etc. as a stove. No fire to trust or leak of water in 25 minutes. Holds barrel contents in America. Cooker and Brooder's Supply Catalog Free. Special price—only allowed Canadian.

Rippley Mfg. Co. Bldg., Box 5, Grouton, Ill., U. S. A. Northern Agents—International Stock Food Co., Minneapolis, Minn.

A maid-servant in the employ of a certain woman was left the other day in charge of the children while her mistress went for a long drive.

"Well, Mary," asked the lady, on her return, "how did the children behave during my absence? Nicely, I hope."

"Nicely, ma'am," Mary answered, "but at the end they fought terribly together."

"Fight! Mercy me! why did they fight?"

"To decide," said Mary, "which was behaving the best."

DODD'S KIDNEY PILLS

CURES ALL KIDNEY DISEASES

BRIGHT'S DISEASE
RHEUMATISM
DIABETES
GRANDMA'S BACKACHE

Do not discontinue the use of these pills until you are cured. The public may be misled by cheap imitations, sold only in...

QUESTIONS AND ANSWERS. Miscellaneous.

LINSEED MEAL FOR HORSES—SOWING MANGELS AND CARROTS WITH GRAIN DRILL—HULLLESS BARLEY.

1. Is linseed meal good to feed with oats to horses, and in what quantities? Would it have any bad effect on their kidneys, or fed to a mare in foal?

2. Would you advise sowing sugar mangels and carrots with a disk grain drill and how?

3. Is beardless, hullless barley a profitable crop? How is it for horse feed? Will it ripen with oats, sown together, and in what proportion would you advise sowing?

Ans.—Linseed meal, if not given in too large quantities, is satisfactory for horses. A handful each time, along with a gallon of oats, is advised by some feeders. The high commercial value of the oil in flaxseed, however, makes it an expensive food. We have experienced, or heard of, no ill effect on kidneys, or injury to mares in foal, when fed in small quantities.

2. Sowing carrots with a grain drill would be too uncertain. Special drills are made for sowing root seeds, and the use of one of these is advisable. Root seeds are too high in price to waste seed, and it is essential that the seed should be evenly placed in order to avoid misses in the rows. Some sow sugar mangels with a grain drill by mixing the seed with coarse sawdust or peas (about one part peas to three parts mangels), and covering all the openings in the grain box except those needed to sow the rows the proper distance apart. With carrots, the nature of the seed would make such practice inadvisable.

3. Successive experiments conducted for six years at Ontario Agricultural College, show the following averages: Mand-scheuri barley, 1.9 tons straw and 2,715 pounds grain; Black Hullless barley, 2 tons straw and 2,527 pounds grain; White Hullless barley, 1.9 tons straw and 1,992 pounds grain. Common barley comprises about 12 or 15 per cent. hull, which is practically worthless from a feeding standpoint. You can draw your own conclusions as to whether or not hullless barley is a profitable crop. Soil conditions and grain requirements will have to be taken into consideration when comparing barley with oats or peas. Hullless barley cannot be recommended as a horse feed. It is a strong feed, and would have to be fed in limited quantities. Some feed it boiled. The Ontario Agricultural College experiments conducted for six successive years, show the average dates of ripening from seeding of the same dates to be: Mand-scheuri barley, August 4; Black Hullless barley, August 4; White Hullless barley, August 7; Alaska oats, August 7; Joannette oats, August 14. You will see, therefore, that much depends on the varieties used. White Hullless barley and Alaska oats would ripen, approximately, at the same time. The proportions used would have to be regulated according to the stock for which you were producing feed. For hogs you could use two-thirds barley, or more, while for horses it would not be wise to have over one-third barley. In fact, it is not advisable to feed such mixture to horses continuously. Cattle do very well on equal parts of barley and oats. In every case, of course, it is well to have the grain ground.

GOSSIP.

Messrs. Henry Arkell & Son, Arkell, Ont., write: Our auction sale of Oxford Down ewes, held on March 15th, was a decided success, there being quite a number of buyers from a distance. Prices ranged from \$15 to \$31. Some six-year-old ewes sold at the former. Everything offered was sold. The sale was ably conducted by Mr. James McDonald, our most prominent stock auctioneer. We may say our retail trade in Oxford Downs in Canada the past season has been very good. They were distributed from Nova Scotia in the East to British Columbia in the West; and we attribute most of these sales to our advertisement in "The Farmer's Advocate."



Shorthorns Clydesdales Yorkshires

BY AUCTION, ON

Friday, April 9th, 1909,

AT THE SALE PAVILION, MYRTLE STATION, ONT.,

Under the Auspices of the Myrtle Sales Association.

There will be sold by auction several imported and Canadian-bred Clydesdale stallions, mares and fillies. An essentially high-class lot of big, well-bred quality Clydesdales. About 30 head of young Scotch-bred Shorthorns, bulls and heifers. Crimson Flowers, Duchess of Glosters, Marr Stamfords and Wedding Gifts. These are an extra good lot, in good condition. Also a number of young Yorkshire sows and boars. The whole making the sale of the year of high-class animals. The sale will be held under cover, commencing at 1 p. m. Terms: Cash, or six months' on bankable paper at 6 per cent.

Wm. Smith, Pres. Fred. Silversides, Auct. A. Quin, Sec.

SPRING VALLEY SHORTHORNS.



Our herd is pure Scotch, imp. and home-bred. 50 head to choose from. Our present crop of young bulls are the best we ever had. All sired by the great stock bull, imp. Bapton Chancellor. High-class show things among them, including this fall Toronto winners. Nearly every one a herd header.

KYLE BROS., AYR, ONT., P. O. and STATION.

Shorthorn Cattle AND LINCOLN SHEEP.

Females of all ages for sale of the thick-fleshed, low-down kind that have been raised naturally, neither stuffed nor starved. Twenty-five Lincoln ewes, bred to our best imported stud ram, also a few choice yearling rams. Prices very reasonable for quick sale.

J. T. GIBSON, DENFIELD, ONT.

A. Edward Meyer,

P. O. Box 378, Guelph, Ontario,

Breeds SCOTCH SHORTHORNS Exclusively

Twelve of the most noted Scotch tribes have representatives in my herd. Herd bulls: Scottish Hero (imp.) = 55042 = (90065) 295765 A. H. B.; Gloster King = 48708 = 283904 A. H. B. Young stock for sale. Long-distance phone in house.

7 Imported Scotch Shorthorn Bulls 7

Six imported bull calves from 9 to 14 months old, 3 reds and 3 roans. They are of such noted families as Clara, Jilt, Roan Lady, Butterfly, Claret and Broadhooks. One imp. bull 2 years old, red; a most valuable sire. One bull 11 months old, roan, from imp. sire and dam; promising for a show bull. Two bulls 12 months old, from imp. sire and dam; suitable for pure-bred or grade herd. Also females all ages. Write for catalogue. Prices reasonable. Farm 3/4 mile from Burlington Junction station, G. T. R.

FRED. BARNETT, MANAGER.

J. F. MITCHELL, BURLINGTON, ONT.

1854 MAPLE LODGE STOCK FARM 1909

A few extra good young SHORTHORN bulls and heifers for sale. LEICESTER ram lambs by the grand champion ram, "Sanford." Right good ones, and a few choice ewes.

A. W. SMITH, MAPLE LODGE P. O., ONT. Lucan Crossing Station, G. T. Ry.

SHORTHORNS

Nine bulls from 8 to 20 months old, reds and roans; 10 yearling heifers and a few cows. Will sell very cheap to make room in stables.

CLYDESDALES

One pair of bay mares and one dark brown, heavy draft and two spring colts.

JAMES McARTHUR, Gobles, Ontario.

WE ARE PRICING VERY REASONABLY 10 Choicely-bred Young Shorthorn Bulls

Also one extra good imported bull, 22 months old. We have always something good to offer in females. Imported or home-bred. Write for what you want, or come and see them. Bell phone at each farm. W. G. PETTIT & SONS, Farms close to Burlington Jct. Sta., G. T. R. FREEMAN, ONTARIO.

Shorthorn Bulls! Scotch Shorthorns!

Herd heading quality and breeding. Also good ones at farmers' prices. Females for sale. Write, or come and see. Farm adjoins town.

H. SMITH, EXETER, ONT.

I am offering a few choice young bulls, also heifers in calf to imp. bull. Will be pleased to furnish pedigrees and prices upon application.

JOHN MILLER, Brougham, Ontario. Clarendon Stn., C. P. R.



SOME SHOW PROPOSITIONS IN BOTH MALE AND FEMALE

SHORTHORNS

as well as a number of the useful sort of both sexes. Prices right. Large lot to select from. Up-to-date in breeding, etc. Catalogue.

JOHN CLANCY, Manager.

H. Cargill & Son, Cargill, Ont.

Shorthorn Cows and Heifers.

I have Village Maids, Village Blossoms, English Ladies, Lancasters and Wimples for sale. Four with calves at foot, and one yearling heifer fit for any show-ring. One mile east of St. Mary's.

HUGH THOMSON, Box 56, ST. MARY'S, ONT.

Scotch Shorthorns

Canada's greatest living sire. Milled's Royal, heads my herd. For sale are young bulls and heifers, show stuff and Toronto winners, out of Stamford, Lady Ythan, Claret, Emeline, Matchless and Belona dams. A visit will be appreciated. GEO. GIER, Grand Valley P. O., Ont. Waldemer Sta., C. P. R.

QUESTIONS AND ANSWERS.
Miscellaneous.

SEEDING TO ALFALFA.

I am desirous of seeding some land to alfalfa this spring. The piece that I think will be the best adapted to it on my farm is sown to wheat. Is it likely to be a success if I sow it there about May 1st, and harrow well after?

W. A.

Ans.—It may, possibly, do fairly well, but as a rule alfalfa is not very successfully seeded with wheat.

ALFALFA ROOTS AND DRAIN TILES.

Have been told that alfalfa roots will grow down and completely clog under-drains. As our land is drained where I am going to sow the alfalfa, and is a sandy loam, would be pleased to have your opinion.

J. E.

Ans.—Experience has indicated little or no trouble from alfalfa roots obstructing tile drains, providing the tile are clean and free from silt.

MILK PANS IN WINTER.

What is the best place to keep milk in pans in winter? Is the cellar floor too cold?

L. W.

Ans.—Milk pans can be kept in any clean, cool place, where there are no foul odors, and where the milk or cream does not freeze. In the ordinary cellar, it is not often that the floor is too cold. A temperature of 50 to 60 degrees Fahrenheit is recommended, but below 50 degrees is satisfactory. Drafts should be avoided.

STEER HAS COUGH.

I have a yearling steer, in good condition, bright and lively, except at times, when he stands with his head hanging; has a short, smothered cough (only while the spell lasts), and passes large quantities of very bloody water. The first spell was noticed in December, but they are becoming frequent. He eats well, but seems to drink very fast, taking great gulps. What is the cause, or what to do for him?

F. S. R.

Ans.—Since he is doing fairly well, it is probable that no medicinal treatment is necessary, and the cough will probably cease when he gets on the grass. A level teaspoonful of saltpetre given twice a day in feed for three or four days, will act upon the kidneys and improve the condition of the urine.

CEMENT OR PLANK SILO.

What is the cost of building a round cement silo 16 x 30 feet? Does the corn keep as well as in a plank silo?

J. D. M.

Ans.—The cost will vary with the distance you have to haul the sand, gravel and cement, provided you take into account labor for men and teams. Some men are so located that there is little expense connected with placing the sand or gravel on the spot. An approximate cost would be \$175, but you will have to figure it out for yourself, taking into consideration the convenience of materials, your chances for renting curbing, etc. Opinions differ, but it is generally agreed that corn keeps as well in a properly-constructed cement silo as in a wooden structure.

FEEDING BRAN—ECZEMA.

1. What do you consider the best way to feed a cow bran to produce the most milk, fed dry, or as a hot mash?
2. I have a cow whose hair is coming off in patches. I cannot see any vermin on her to cause it. Please let me know the cause and cure?

NEW SUBSCRIBER.

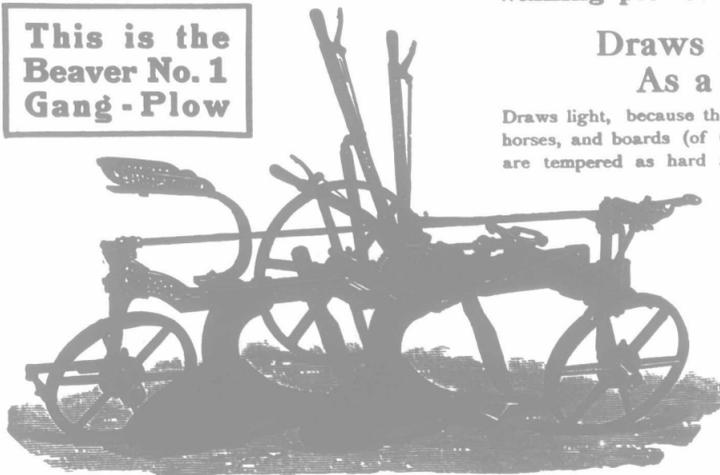
Ans.—To produce the most milk, we think the hot mash would be the most effective, though it is questionable whether sufficient to pay for the extra time involved in preparation and feeding. Experiments have proven that, as a rule, cooking food for stock has little, if any, advantage in results over feeding it in the raw state.

2. Give her a thorough washing with warm, strong soapsuds, applied with a scrubbing brush, and rub with straw wisps and cloths until dry. Then dress with a solution of corrosive sublimate, 25 grains to a quart of water. There may be small white lice present, scarcely visible to the naked eye; if so, the above solution will destroy them.

This Plow Saves You Money

Three horses and an untrained BOY can do more plowing and BETTER plowing in a day, with this gang-plow, than two skilled men and four horses, using walking plows! Think what that SAVES!

This is the Beaver No. 1 Gang - Plow



Draws Almost As Light As a Walking Plow

Draws light, because the draft is straight, no neck-weight on the horses, and boards (of Cockshutt Special soft-centre crucible steel) are tempered as hard as glass and polished like cutlery—they'll scour in ANY soil. Anybody who can guide a team straight can do better plowing with this gang than an expert with ordinary plows. It is THE plow for unskilled labor—once adjusted, it cannot go wrong. Little strength needed to operate levers; they are fitted with our new "helping spring," which makes the lift so easy a child can handle them readily.

Plus-Strength—Minus-Draft

Like all the Cockshutt Line, this Gang-Plow has Plus-Strength built into it—strength to stand usage that would wreck an ordinary plow—more strength than it will probably ever need, but MAY need—strength to insure you against breakdowns in busy-time. And it has Minus-Draft designed into it—all the ways to reduce draft and friction that thirty-two years' experience in building implements for the practical farmer have taught us. You pay nothing more to get these extra-value features found ONLY in the Cockshutt Line; but you save a lot by getting them. Send to-day for illustrated details. Write direct to us.

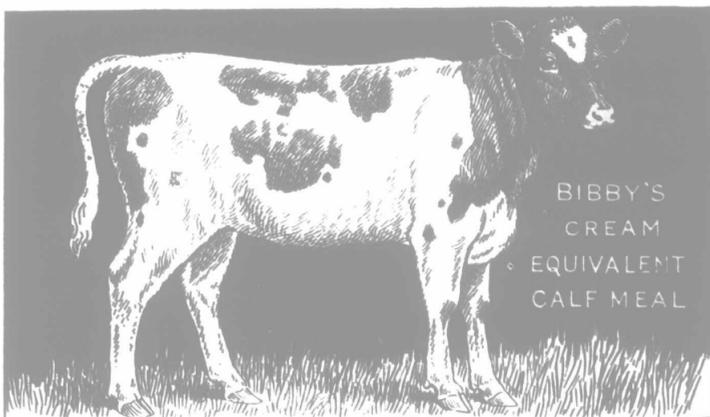
The Steadiest-Running Plow Built

No matter what the soil nor how rough and uneven the land, the Beaver Gang will cut every furrow the same depth and width. That is due to the EXTRA-LARGE land wheel—it rides smoothly over things that would bump another plow out of the ground. Steady, too, because the cushion-spring on land-wheel axle-arm absorbs shocks and concussions, and the plow goes steadily ahead. Cockshutt Straightener Device corrects crooked furrows. Readily handled by a mere boy—can't go wrong. Adjustable Frame changes the furrow width in a jiffy; while new Fine-Adjustment Ratchet alters furrow depth by fractions of inches—merely pull a handy lever. Can be supplied with three styles of bottoms for different kinds of plow-work, from very wide to very narrow. Dust-proof wheel bearings; perfect oiling device; a dozen other BETTERMENTS that put the Beaver Gang ten years ahead of them all. Investigate and know that for yourself. Do so NOW—it will save you money, time, horseflesh, both with labor, and give you better plowing in far less time.

The Cockshutt Line built right to farm, right, includes not only more than 120 styles of plows—ranging from light garden plows to huge 12-furrow engine gangs—but also all styles of seeders, cultivators and harrows. Write us for details of the kind of implements the business farmer ought to buy this season.

(Would you like a handsomely-colored hanger, showing two items of the Cockshutt Line? Glad to send you one if you'll just enclose two-cent stamp for postage.)

COCKSHUTT PLOW CO.
LIMITED
BRANTFORD - ONTARIO



BIBBY'S CREAM EQUIVALENT CALF MEAL

THE COST OF CALVES

The average dairyman is unable to raise young stock profitably because of the expense of feeding the amount of new milk necessary for the thrifty growth of young calves. Even when ordinary calf-foods are used it is necessary to add so much milk that the cost of feeding is excessive—and there is the added expense of risking scoured and pot-bellied calves. Yet here is a food, which when simply added to water, half-a-pound to six quarts, makes a gruel which contains all the elements of nutriment found in a like quantity of fresh milk, and which can be fed with perfect safety to the youngest stock. In fact, there is no other food, save fresh milk itself, which contains so much nutriment as

BIBBY'S CREAM EQUIVALENT

Sold by most dealers, or direct from WM. RENNIE CO., Ltd., Toronto, Montreal, Winnipeg, Vancouver. 2

BRAMPTON JERSEYS

CANADA'S PREMIER HERD.—Strengthened regularly by importations from United States, England and the Island of Jersey. We have animals of all ages and both sexes for sale, and the largest herd in Canada to choose from. Write for prices and particulars. Long-distance telephone at farm.

B. H. BULL & SON, BRAMPTON, ONT.

WANTED—HERDSMAN

Capable of taking charge of show and breeding herd. Apply, giving full particulars, to J. A. WATT, SALEM, ONT., FLORA STATION, G. T. R. AND C. P. R.

Glen Gow Shorthorns

Our present offering is 9 bulls from 6 to 14 months of age, sired by imp. Ben Loman and imp. Joy of Morning, and out of imp. and Canadian-bred cows. Also a number of very choice heifers. No fancy prices asked. Long-distance phone. WM. SMITH, Columbus, Ontario Brooklin and Myrtle Stns.

Shorthorns, Cotswolds, Berkshires.

Nine bulls from 9 to 14 months, from imp. and home-bred cows, and sired by Pride of Day 55192; also cows, heifers and heifer calves. Nothing to offer in Cotswolds or Berkshires.

Chas. E. Bonnycastle, Campbellford, Ont. Post Office and Station.

MAPLE HOME SHORTHORNS

Our present offering: Two choice young bulls; also some good heifers and young cows. Away above the average. Pure Scotch and Scotch-topped.

A. D. SCHMIDT & SONS, Elmira, Ont.

CLOVER DELL SHORTHORNS

My herd are profitable milking Shorthorns. For sale are a few females and two good red bulls, of good milking dams, for spring service. L. A. Wakely, Bolton, Ont., P.O. and Station. Farm within 1/2 mile of station.

Brownlee Shorthorns Three young bulls left yet. 14 to 16 months. Will sell at a bargain. Also a few heifers. Very reasonable. Good milking strains. C. P. R. station. D. BROWN, AYR, ONT.

ARE YOU IN WANT OF A CHOICE BULL TO HEAD YOUR HERD?

We are offering choice bull calves sired by Fountain's Boyle, who won first prize at Toronto, London and Ottawa, who also headed first-prize herd at Toronto and Ottawa. Also offering some choice heifers.

D. DUNCAN, DON, ONT. DUNCAN STATION, C. N. O.

Now is the time to buy a bull for service next year, because we sell **CHEAPER** now than we do next spring. Why not write to us **RIGHT AWAY** for a **BARGAIN** in bulls from R. O. M. dams? Or better yet, call and see us.

E. & F. MALLORY,
FRANKFORD, ONTARIO

Centre and Hill View Holsteins



We are now offering 8 choice young bulls from 6 to 10 months of age, with high official backing. These are a grand lot of young bulls. We are entirely sold out of females for the present.

P. D. EDE,
Oxford Centre P. O., Woodstock Sta., Ont.

LAKEVIEW HOLSTEINS

Herd headed by Count Hengerveld Fayne De Kol. His dam, Grace Fayne 2nd, 26.30 lbs. butter in 7 days, is dam of world's champion 4-year-old butter cow. Sire Count Hengerveld De Kol, 70 A. R. O. daughters, including world's champion milk cow. For sale: 1 service bull; 10 bull calves, by 20-lb. butter cows. 75 head to select from.

W. D. BRECKON, Mgr., Bronte, Ont.

WOODBINE STOCK FARM

Offers a few fine young Holstein bulls and bull calves, sired by Sir Mechthilde Posch. Sire's dam holds world's largest two-day public test record, dam lanthe Jewel Mechthilde, 27.65 lbs. butter in 7 days; average test, 4.46 per cent. fat; out of dams with superior breeding and quality.

Shipping stations—Paris, G. T. R.; Ayr, C. P. R.
A. KENNEDY, Ayr, Ont.

IMPERIAL HOLSTEINS!

For sale: 13 bulls of serviceable age, sired by Tidy Abbekirk Mercedes Posch, whose 7 nearest dams have records within a fraction of 27 lbs. Out of show cows, with high official records. A high-class lot of young bulls. **W. H. SIMMONS, New Durham, Ont., Oxford County**

HOMEGOOD HOLSTEINS

For Sale—Thrifty bull calves from R. O. M. 4% dams. Choice cows in calf; also heifer calves. Railroad station on the place.

M. L. & M. H. MALEY, Springford, Ont.

Glenwood Stock Farm—Holsteins and Yorkshires

Holsteins all s/d out. Have a few young Yorkshire sows, about 2 months old, for sale cheap. True to type and first-class. Herd from imported stock.
Th. S. B. Carlaw & Son, Warworth P. O., Ont. Camp Elliott Station

SPRINGBROOK AYRSHIRES are large producers of milk, testing high in butter-fat. Young stock for sale.

Orders booked for calves of 1909, male and female. Prices right. Write or call on **W. F. STEPHEN, Box 163, Huntingdon, Que.**

Teacher: "You have named all domestic animals save one. It has bristly hair, it is grimy, likes dirt, and is fond of mud. Well, Tom?" "Tom (shamefacedly): That's me."

Once More the Proof is Given

That Dodd's Kidney Pills will Cure the Deadly Bright's Disease.

Martin O'Grady Suffered From Bright's Disease for a Year, but the old Reliable Kidney Remedy Cured Him

Emmett, Renfrew Co., Ont., March 28.—(Special).—That the one sure cure for Bright's disease, the most deadly of all kidney diseases, is Dodd's Kidney Pills, is again proved in the case of Martin O'Grady, of this place. And for his benefit of other sufferers, Mr. O'Grady has given the following statement for publication:

"For over a year I suffered from Bright's disease. I was attended by a doctor, but he did me no good. My appetite was fitful, my sleep broken and unrefreshing. My memory failed me and I was always tired and nervous. I had sharp pain and pressure at the top of my head.

"Being advised to try Dodd's Kidney Pills, I bought a couple of boxes and found relief soon after I started taking them."

This is only one of hundreds of cases in which Dodd's Kidney Pills have conquered the worst form of kidney disease. They never fail to cure Bright's disease, Diabetes, Rheumatism, Lumbago, or Neuritis.

QUESTIONS AND ANSWERS.
Miscellaneous.

FLAXSEED AND ROLLED OATS.

A member of our family has a great desire to eat flaxseed and rolled oats. Do you think it will injure her health?

A SUBSCRIBER.

Ans.—We should think it would be quite safe—providing she eats a reasonable amount, thoroughly well cooked.

LEAKY SLATE SINK.

We have a slate sink in the house, which has sprung a leak in the joints. Could you give any advice for mending so as to hold hot and cold water?

E. W. W.

Ans.—A plumber states that probably shavings of lead forced into the opening joints with a chisel or other tool, might stop the leakage. Another thinks melted alum, or melted resin, with a little tallow in it, might answer the purpose. The parts should be thoroughly dry before applying any of these.

AMERICAN CORPORATIONS — A CO-PARTNERSHIP DIFFICULTY.

1. Is there any form of name or word used in corporation name of limited-liability joint-stock companies in the United States, that they may be known as such limited-liability companies, as the word "limited" is used in Canada?

2. A and B are in a partnership business (farming), which is kept in good financial standing, but B has become involved in private debt, which consists of mortgage on a house and lot, which is not on property, or included in the partnership business, some promissory notes, and outstanding accounts. His liabilities exceed all assets, including interest in partnership interest. His creditors have decided on assignment. Can the other partner, A, be called upon to pay any of B's debts under aforesaid circumstances?

Ans.—1. All the different States have different laws relating to joint-stock companies, and it would be necessary to know to what particular State you refer before your query could be answered.

CEMENT FIREPLACE.

I purpose to build (of one-third cement, two-thirds sand) log fireplace, three feet wide, two feet deep, inside; base, one foot thick, tapering to six inches, at five feet high, carrying it up through the roof at the six inches. Will the cement stand fire? Could it be improved by adding more cement? What size should the vent be inside? Would it do built with an arch front, no other support but the cement and sand?

Ans.—Concrete made of proportions 1 part cement, 2 parts sand, will make a No. 1 fireplace, if the sand to be used is properly selected. An additional amount of cement will not improve. The amount of material, as suggested in your letter, is more than is required to build this chimney. Four inches thick would be sufficient to make the concrete at any part. There now are many reinforced concrete chimneys for factory purposes from 250 to 350 feet high. Those chimneys on the upper sections are only three inches thick. Of course, they are reinforced with iron. When with concrete chimneys you can withstand the heat of iron furnaces and smelting works, it is needless to say that for dwelling-house purposes no better chimney can be erected, and that any fire which would be used in a dwelling-house would not have any effect upon the chimney. For a two-story house, the inside of chimney should be 8 x 12 inches. The fireplace would be built with an arch in front of any desired width, and would be all right without any support but the cement, but the usual method is to lay in two iron rods, 1/2-inch in thickness across the top of the arch, having rods bent at the ends. The rods are laid in the cement about 1 inch from the surface, and sufficient concrete thoroughly tamped in around them. A little wire reinforcing might also be used in the concrete immediately surrounding the fireplace, which will prevent the chimney from cracking, should it become overheated.

LONDON CONCRETE MACHINERY CO., Limited.

OIL CAKE

J. & J. Livingston Brand

DOMINION LINSEED OIL CO., LIMITED,
BADEN, ONTARIO. 31 Mill St., MONTREAL, QUE.

The finest feed known for stock. Once a user, always a user. Sold either fine or coarse ground. Write:

The Maples Holstein Herd!

RECORD-OF-MERIT COWS.
Headed by Lord Wayne Mechthilde Calamity. Nothing for sale at present but choice bull calves from Record of Merit dams; also a few good cows at reasonable prices.

WAIURN RIVERS, Falden's Corners, Ont.

DON'T Buy a **HOLSTEIN BULL** till you get my prices on choice goods from 14 months to 1 month old, from best producing strains. "Fairview Stock Farm." **FRED ABBOTT, Harrietsville, Ont.**

FAIRVIEW HERD HOLSTEINS

The greatest A. R. O. herd of in northern New York. Headed by Pontiac Korndyke, the greatest sire of the breed, having five daughters whose seven-day records average 29 1/4 pounds each, and over 4 3/4% fat. Assisted by Rag Apple Korndyke, a son of Pontiac Korndyke, out of Pontiac Rag Apple 31.62 pounds butter in 7 days, and 126.56 pounds in 30 days, at butter in 7 days. Cows and heifers in calf to the above 4 years old. Two bulls for sale, also young bulls sired by them out of large-record cows. Write, or come and inspect our herd. **E. H. DOLLAR, Heuvelton, St. Law. Co., N. Y., near Prescott, Ont.**

HIGH PRICES PAID FOR HIDES, SHEEPSKINS, RAW FURS AND CALFSKINS

E. T. CARTER & CO.,
84 Front St., East, Toronto, Ont. We pay **FREIGHT** and **EXPRESS CHARGES** **PROMPT RETURNS.**

Write for our **COMPLETE PRICE LISTS.** Issued every little while

Holsteins at Ridgedale Farm—Eight bull calves on hand for sale, up to eight months old, which I offer at low prices to quick buyers. Write for description and prices, or come and see them. **R. W. WALKER, Utica P. O., Ont.**

Shipping stations: Myrtle, C. P. R., and Port Perry, G. T. R. Ontario Co.

EVERGREEN STOCK FARM

Females all sold. Still have a few young bulls from 12 to 15 months old, sired by a son of Tidy Abbekirk, record 25.58 lbs. butter and 581 lbs. milk in 7 days. Dams also in Record of Merit.
F. E. PETTIT, Burgessville, Oxford Co., Ontario.

Maple Hill Holstein-Friesians

Special Offer: I must sell in next 30 days two cows; one bred in Nov. to Prince Posch Pieterje C.; one fresh in Dec., just bred. One yearling bull fit for service.
G. W. CLEMONS, ST. GEORGE, ONT.

HOLSTEINS

We must sell at least 25 cows and heifers at once in order to make room for the increase of our large herd. This is a chance of a lifetime to buy good cattle at bargain prices. The best way to arrange to come and look the herd over. If you cannot, we will do our best for you by correspondence. Also a few young bulls. 100 head to select from. Imported **Pontiac Hermes**, son of Hengerveld De Kol, world's greatest sire, head of herd. All leading breeds represented.
Putnam station, near Ingersoll.
H. E. GEORGE, Crampton, Ont.

MAPLE GLEN For sale: Only 1 bull, 11 months old, left; dam is sister to a 26-lb. tested cow. Any female in herd for sale, 7 with records 20 1/4 to 26 1/4 lb. off all tests. An 8-yr-old G. D. of Paul Beets De K. in calf to O. K. land Sir Maida—her record 21.88 as a 5-yr-old. Price \$400, or will dispose of herd en bloc, a great foundation privilege. **G. A. Gilroy, Glen Buell, Ont.** Long-distance phone connects with Brockville.

BUSINESS HOLSTEINS!

Over 60 head to select from. Milk yield from 60 to 85 lbs. a day, and from 35 to 47 lbs. a day for 2-yr-olds. There are 10 2-yr-old heifers, 8 1-yr-olds, and a number of neifer calves. Bulls from 1-yr.-old down. Priced right. Truthfully described. **W. Higginson, Inkerman, Ont.**



Stoneycroft Ayrshires

Choice young bulls and heifers of the very best breeding, combining show and dairy quality.

Large Improved Yorkshire Pigs from imported sires and dams, now ready to ship.

Stoneycroft Stock Farm, Ste. Anne de Bellevue, Que.

Prizewinning Ayrshires

FOR SALE:
5 High-class Bulls, from 6 to 24 months of age; 10 Cows and Heifers, from 6 months to 5 years of age.

All bred from the deepest-milking strains.

A. Kennedy & Son, Vernon, Ontario.
Hillview Stock Farm. Winchester station, C. P. R.

HOWGLEN AYRSHIRES!

For sale: 75 pure-bred registered Ayrshires, all ages; prizewinners; many imported. Apply to

ALLAN P. BLUE, Eustis, Quebec.

Ayrshires from a Prizewinning Herd

Have some nice bull and heifer calves for sale at reasonable prices. For particulars, etc., write to **WM. STEWART & SON, Campbellford Sta., Menie P. O., Ont.**

When Writing, Mention This Paper.

Sale of the Most Celebrated Herd of Ayrshires in the World.

Mr. Wickett, Auctioneer, Castle Douglas, has received instructions from Mr. Andrew Mitchell, Barchesk, Kirkcubright, Scotland, to sell on

THURSDAY, MAY 20th,

his world-renowned herd of Ayrshires, consisting of over 200 head of the choicest cattle ever exposed to public auction, and on

FRIDAY, MAY 21st,

his celebrated stud of Clydesdales, consisting of 30 head, mostly Macgregor and Baren's Pride blood. Included in the sale will be the dam and full sister of the champion show and breeding horse, Baron's Gem, and the dam of Criterion; all sure in foal. Cattle bought for export under three years old to pass tuberculin test. Arrangements made with Donaldson Bros. for cheap fares to purchasers at this sale.

AYRSHIRES Bull and heifer calves from producing dams. Right good ones.

N. DYMENT, Clappison, Ont.

Hickory Hill Stock Farm. Dundas Station and telegraph.

BURNSIDE AYRSHIRES

are in such demand that I have decided to make another importation. I intend attending the great dispersion sale of the world-renowned Barchesk Herd, belonging to Mr. Andrew Mitchell, Kirkcubright, Scot., where some 300 of the choicest Ayrshires ever offered will be sold. Orders entrusted to me will be carefully attended to. Brokers, take advantage of this great sale, and replenish with a few good ones. Correspondence solicited and satisfaction guaranteed. Long-distance phone in house.

R. R. NESS, HOWICK, QUE.





PUT UP THE HEAVY, HOG-PROOF IDEAL WOVEN WIRE FENCE

You want a fence that is so heavy, stiff and strong that it will discourage any attempt at rooting. After an argument with the IDEAL your hogs will become thoroughly discouraged of trying to get under it. The IDEAL is undoubtedly the fence for you.

The IDEAL is the fence the railroads purchase because of its weight and quality. No. 9 hard steel wire throughout. Heaviest galvanizing on any fence. But the IDEAL lock is the BIG reason why you should buy the IDEAL fence. No lock equal to the IDEAL in gripping-tenacity has yet been discovered. Chances are there never will be. When stretched up, IDEAL is a very handsome fence. Every strand measures exactly true. Every lock is

correctly applied. You see, the IDEAL is manufactured by the most improved fence machinery, in a plant that is considered a model among fence factories. With such superior manufacturing facilities the natural result is a fence overshadowing others in quality—and that is IDEAL fence. For further reasons read our free booklet.

Agents Wanted to Sell This Superior Fence

IDEAL Agents make the best living, because IDEAL Fence has the weight, strength and quality that make it sell easiest. Let us send you our money-making proposition.

THE MCGREGOR-BANWELL FENCE CO., LIMITED, WALKERVILLE, ONT.

STAMMERERS

The ARNOTT METHOD is the only logical method for the cure of Stammering. It treats the CAUSE, not merely the HABIT, and insures natural speech. Pamphlet, particulars and references sent on request. **THE ARNOTT INSTITUTE** BERLIN, ONT. CAN.

CATTLE AND SHEEP LABELS

SIZE.	PRICE, DOZ.	50 TAGS.
Cattle	75c.	\$2 00
Light Cattle	60c.	1 50
Sheep or Hog	40c.	1 00

Postage paid. No duty to pay. Cattle labels with name and address and numbers; sheep or hog labels with name and numbers. Write for sample—free. F. G. JAMES, BOWMANVILLE, ONTARIO.

QUESTIONS AND ANSWERS. Miscellaneous.

ECZEMA—SULPHUR FOR CATTLE.

A fat steer has numerous small lumps on skin. They appear first under the root of tail, and look like a small, white pea. One would think to look at them that there was matter in them, but they seem plump and hard to the touch. It is several weeks since we first noticed them, and thought they might disappear, but there is quite a number now between the hind legs and on the brisket, and a few generally over the body. One under the tail has grown as large as a ten-cent piece, and appears firmly fixed in the skin like a smooth wart. The animal appears in perfectly good health, eats his food regularly, and is thrifty. Will this affect the sale of the animal, or what would you recommend as a remedy?

2. Is it good for cattle to give them sulphur occasionally during the winter months?

Ans.—Wash the affected parts with a solution of corrosive sublimate, 40 grains to a quart of water, once a day for three days. We don't think it should affect his sale.

2. Yes; in moderation, if not allowed out in wet or stormy weather.

LIME FOR STONE WALL—CEMENT IN WALL.

How many cubic feet of stone wall will a bushel of lime build, and how much will a barrel of cement, with gravel and field stone, build?

Ans.—A stone wall requires a cubic yard of mortar to five to eight cubic yards of stone, depending on the building quality of the stone. Mortar is made from about one part of lime to three parts of sand. A bushel contains 32 quarts, and a cubic foot 25 quarts. Since the lime and sand, when thoroughly mixed to form mortar, gives but little more than the bulk of sand, and the mortar in turn fills in the chinks between the stones, a cubic foot of lime would suffice for, approximately, six cubic feet of wall, provided there was no waste. A bushel of lime then would build seven or eight cubic feet of wall. The wall that can be built from a barrel of cement, also, can be given only as an approximation. It will vary with the quality of the cement and the quality of the sand or gravel. In some cases, too, it is possible to work in small stones, provided they are not placed too close to the surface. For wall-building, cement is mixed with sand or gravel in proportions varying from 1:7 to 1:12. If the mixture were 1:10, the barrel of cement would give you 40 cubic feet of concrete. In building, it is calculated that 125 cubic feet of concrete builds 100 cubic feet of wall. Therefore, the barrel of cement would give you, approximately, 32 cubic feet of wall. If small stones can be used freely, it would give more wall.

Newcastle Stock Farm

I have a splendid lot of TAMWORTH SOWS well forward in pig, and well worth looking after; also grand selection of boars, 3 months to 10 months old, several prizewinners, and a lot of dams that have been prizewinners all over this part of Ontario. I have also a few choice Shorthorn heifers well forward in calf to my Cargill-bred bull, and others ready to breed. All will be sold well worth the money. A. A. COLWILL, NEWCASTLE, ONT.

SUNNYMOUNT BERKSHIRES

Highest standard of type and quality. For sale: Sows of all ages, and 4 yearling boars. A grand, good lot. Also younger ones. Pairs not akin. JOHN McLEOD, C.P.R. & G.T.R. Milton P.O., Ont.

Maple Villa Oxfords, Yorkshires

The demand for Oxford Down sheep and Yorkshires has been the best I ever had. I have still for sale shearing ewes and ewe lambs, and young sows sale in pig. These will certainly give satisfaction. J. A. GERSWELL, BONDHEAD P. O., ONTARIO, Simcoe County.

Willowdale Berkshires!

Won the leading honors at Toronto this fall. For sale are both sexes and all ages, from imp. stock on both sides. Show things a specialty. Everything guaranteed as represented. J. J. WILSON, MILTON, ONT., P. O. AND STATION. C. P. R. AND G. T. R.

Hilton Stock Farm Holsteins and Tamworths.

Present offering: 6 yearling heifers and a very real younger ones. All very choice. Of Tamworths, pigs of all ages and both sexes, pairs not akin. R. O. MORROW & SON, Hilton, Ont. Brighton Tel. and Stn.

PINE GROVE BERKSHIRES.

Sows bred and ready to breed. Nice things, three and four months old. W. W. BROWNRIDGE, Milton, C. P. R. Ashgrove, Ont. Georgetown, G. T. R.

OHIO IMPROVED CHESTER WHITES.—Largest strains. Oldest-established registered herd in Canada. Young sows in farrow. Choice pigs 6 weeks to 6 months old. Pairs furnished not akin. Express charges prepaid. Pedigrees and safe delivery guaranteed. E. D. GEORGE Putnam, Ont.

Morrison Tamworths, Shorthorns and Clydesdales. Tamworths from Toronto winners. Either sex. Any age. Sows bred and ready to breed. Pairs not akin. CHAS. CURRIE, Morrison, Ont. Schaw Sta., C. P. R.

DUROC-JERSEY SWINE

Imported and home-bred. Sows ready to breed. Boars fit for service, and younger ones either sex. Also Embden geese. MAC CAMPBELL & SONS, HARWICH, ONT.

MAPLE GROVE YORKSHIRES! A very choice bunch of sows, mostly imported. Boars ready for service. Pigs of all ages. M. G. Champion—20102—champion, Toronto, 1907, is stock boar. A square deal or none is our motto. H. S. McDIARMID, FINGAL P. O., ONT. Shedden Station.

ELMFIELD 50 young pigs for sale, both sexes. Young sows bred to imported boar, also sows to Canadian-bred boar due to farrow about 1st October. G. B. Muma, Avr. Ont. C. P. R. Paris, G. T. R.

When Writing, Mention This Paper.

SHEEP SCAB

And How To Cure It

A book that should be in the hands of every shepherd, farmer and stockman who raises sheep.

It tells what "Scab" is—how to detect it—how the disease spreads—how to cure it—and how to rid the flocks of it.

This book was written by men who have had 65 years experience in raising sheep, and whose famous rams, ewes and lambs have taken first prizes at the leading fairs of the world.

FREE Copy of this valuable book will be mailed free, if you tell us in what paper you saw this advertisement and how many heads of sheep you have.

WM. COOPER & NEPHEWS, TORONTO.

Southdown Sheep

Unequaled for fine quality of both mutton and wool, hardness of constitution, and earliness of maturity.

STRIDE & SON,

Will sell by auction at CHICHESTER, SUSSEX, ENGLAND, on AUGUST 18th and 19th, next 1909, 6,000 Southdown ewes (August 18th), 500 Southdown rams and ram lambs (August 19th). On SEPTEMBER 15th, next, 1909, 4,000 Southdown ewes, 500 Southdown rams and ram lambs.

Commissions at these sales, or any other time, carefully executed. Telegrams and cables:

STRIDE, CHICHESTER, ENGLAND.

Postal address:

Stride & Son Chichester, Sussex, England.

IMPORTED HORNED DORSETS

I have for sale a few of both sexes, the get of last year's champion all round the circuit, Imp. Romulus 2nd. Canada's banner flock of Dorsets.

JAS. ROBERTSON & SONS, Milton P.O. and Sta., C. P. R. and G. T. R.

SOUTHDOWNS AND COLLIES.

Long-distance Telephone.

Orders now solicited for especially-fitted sheep. Your choice of early lambs from imported and prizewinning Canadian-bred ewes, and by the sire of the Grand Champion wether at Chicago, 1907. Twenty shearings, the choice of last year's lamb crop, also for sale.

ROBT. McEWEN, Byron, Ont. Ry. Stn., London, Ont.

Oxford Down Sheep, Shorthorn Cattle, Yorkshire Hogs—Present offering: Lambs of either sex. For prices, etc., write to John Cousins & Sons, Buena Vista Farm, Harriston, Ont.

CLAYFIELD Buy now of the Champion Cotswold Flock of America, 1906. Flock headers, ranch rams, ewes of different ages. All of first-class quality, and prices reasonable. Write, or call on J. C. ROSS, Box 61, Jarvis, Ont.

Pine Grove Yorkshires

classes. Our Yorkshires are noted for superior excellence.

J. Featherstone & Son, Streetsville, Ont.

At the late Guelph Winter Show we won decidedly the best of it in the bacon classes. Both sexes and all ages for sale.

MONKLAND YORKSHIRES

are the easily-fed, quick-maturing kind. The sort the farmers want. All ages for sale. 100 sows bred now.

JAMES WILSON & SONS, FERGUS, ONTARIO.

For Your Pocketbook's Sake Read This.

I am so confident that the Olds Engine is the most economical and most durable engine you can buy that I will make this proposition to every buyer of an Olds Engine:

I agree to replace, free of charge, any part of an Olds Engine that breaks or becomes worn, from any cause whatsoever, within one year from date of shipment, provided the replacement is one you think should be borne by the manufacturer. You are to be the only judge. There is to be no argument, no delay in returning old parts and getting new ones; you decide and I abide by your decision. J. B. SEAGER, Gen'l Mgr.

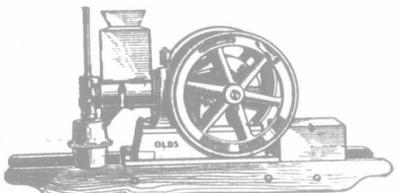
Do you think this proposition could be made on any engine but a practically perfect one? You can easily see that to stand this supreme test of durability and perfect workmanship it must be built right, of the very best material, of the simplest construction. This is the kind of an engine you want. You take no chances in buying an Olds. All of my representatives can furnish these repairs without any delay. They do not have to consult me. Write to my nearest agent. He can fix you out with the best engine you can buy, no matter what others cost.

OLDS ENGINES

Give you the power you need at the price you can afford to pay for it.

DO NOT THINK OF BUYING AN ENGINE WITHOUT INVESTIGATING AN OLDS.

Write To-day for Our Handsome Catalogue. It contains many fine pictures of the very latest models of Olds Engines, with a detailed description that makes the engine question as plain to you as an open book. It contains letters from farmers who have used the Olds Engines, and they give their practical, every-day experience with it. Olds Engines are made in all sizes to suit every kind of work on the farm. We have exactly the kind of engine you want. Tell me what you want to do with it, and I will tell you just exactly the kind of engine you want to buy to do the work. It will be an expert opinion that costs you nothing.



Olds Hopper Jacket Engine on Skids.

E. B. ECHLIN,
248 Lock St.,
LONDON, ONTARIO.

MAIN OFFICE:
Olds Gas Power Co.,
Lansing, Mich.

Graphic Demonstration of Experiment by the
ONTARIO AGRICULTURAL COLLEGE, GUELPH, ONT.

RAISED FROM
CANADIAN GROWN SEEDS BEST IMPORTED SEEDS

INCREASE IN YIELD PER ACRE ABOUT 1/2 OBTAINED BY SOWING CANADIAN GROWN SEEDS.

SUPPORT HOME INDUSTRY.

We don't ask you to take our unsupported word as to the superiority of Home-grown Seeds, we give you FACTS, as demonstrated by experts of the Ontario Agricultural College. To make you acquainted with

R. R. R. S. Reliable Red Ribbon Seeds

We will send you FREE, a package of Devitt's Early Sugar Corn, and our new catalogue, if you ask for same. Also kindly send us names of friends who are buying seeds this spring.

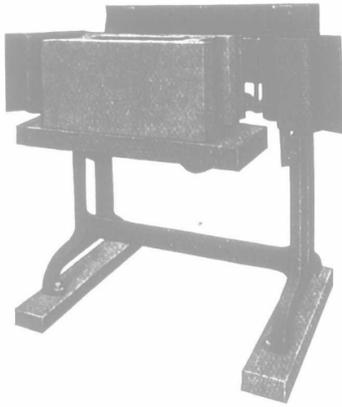
ONTARIO SEED CO.,
37 King Street, Waterloo, Ont.
Pioneer Canadian Seed Growers.

If you are going to build, or are thinking of going into the contracting business, it will pay you to get our catalogue and three-days free-trial offer on our new

Singer Down-face Block Machine

Made in three sizes. Machine and parts for making 4, 8 and 16 inch lengths, in veneer, and 8-inch thick wall blocks, both smooth and rock face, ONLY \$34.50

VINING BROS. MFG. CO.,
Niagara Falls, Ont.



Please Mention this Paper.

QUESTIONS AND ANSWERS. Miscellaneous.

YEAST TREATMENT.

About a year ago the yeast treatment for sterile mares and cows was given in "The Farmer's Advocate." If the yeast is prepared and not used for a few days, will it still be good, and how long after mixing will it remain effective? W. D.

Ans.—We should judge that it would be good for two or three, as the instructions are to prepare it 24 hours before the animal is expected to be in heat, but we have no definite information on that point.

WASHY DRIVER.

I have a horse rising five years old, fed on hay and oats. When driven on the road he scours badly. Can you give me a cure for him? SUBSCRIBER.

Ans.—Give him a purgative ball made up of 8 drams aloes and 2 drams ginger. After the bowels regain normal condition, give 1 dram each of gentian, ginger and sulphate of iron, night and morning, for three or four days, to tone up the digestive system. Feed first quality hay and oats, water before feeding, and drive slowly first few miles after feeding.

ALFALFA.

I intend seeding four acres which was our last year root ground, with alfalfa. The soil is of a light clay loam, lying to the north, and is free from weeds.

1. Would you seed it down with barley, as it is dry, and can be sown early in spring.
2. How many pounds to the acre would you recommend?
3. How may the seed be treated by means of nitro-culture?

A FARMER.

Ans.—1. Seed either alone or with a bushel of barley per acre. Either is all right. Something may be said on both sides.

2. Twenty pounds of good seed.
3. According to directions sent with the nitro-culture.

GOITRE IN LAMBS.

We have a very fine Leicester ewe which last spring produced a lamb with lumps each side of windpipe. Lamb was soft and flabby, died at three days old. This ewe is soon due to lamb again; is in fine condition, though wintered in an open shed, with plenty of exercise; fed on hay with no roots. What can we do to save the lamb this spring? E. W.

Ans.—This is goitre, which is liable to occur when the in-lamb ewes have been liberally fed with roots, and have had little exercise. With the treatment the ewe has had this winter, the probability is that no goitre will appear in her lamb. We have never known it to occur when the ewes have had only dry feed. Little can be done to save a lamb born with goitre. In some cases the enlargement is removed by painting it with tincture of iodine. In the case of older sheep affected, a cure may be effected by cutting into the growth quite deep, and as soon as it stops bleeding, injecting with a small syringe a small quantity of full-strength tincture of iodine.

SMUT IN BARLEY.

Last spring we bought seed barley, which, when it headed out, showed quite a number of stalks, which stood about six inches higher than the barley, with black heads, but no barley. We think it would be called smut. Kindly advise, through your valuable paper, if such grain is fit for seed, or can it be treated in any way to improve the seed? E. H. W.

Ans.—You are, doubtless, correct in your assertion that the barley is infested with smut. The formalin treatment (one pound of formalin, as bought in the drug stores, to about 35 gallons of water) is the standard remedy. If you notice pieces of smutted heads or smutted kernels in your seed, it will be necessary, first of all, to remove as many as possible of these, by a judicious use of the fanning mill, and then to treat the seed in such way that it can be well stirred, and the smut skinned off as it rises to the surface. If smutted kernels remain in the treated seed, they are broken after the seed dries and reinfection is the result. Special care must be taken to give thorough treatment.

SKIN DISEASES

These troublesome afflictions are caused wholly by bad blood and an unhealthy state of the system, and can be easily cured by the wonderful blood cleansing properties of

Burdock Blood Bitters

Many remarkable cures have been made by this remedy, and not only have the unsightly skin diseases been removed, and a bright clear complexion been produced, but the entire system has been renovated and invigorated at the same time.

SALT RHEUM CURED.

Mrs. John O'Connor, Burlington, N.B., writes:—"For years I suffered with Salt Rheum. I tried a dozen different medicines, but most of them only made it worse. I was advised to try Burdock Blood Bitters. I got a bottle and before I had taken half a dozen doses I could see a change so I continued its use and now I am completely cured. I cannot say too much for your wonderful medicine."

DO YOU KNOW
THAT WORN-OUT
LANDS MAY BE MADE
PRODUCTIVE AND PROFITABLE
BY THE JUDICIOUS USE OF
THE RIGHT KIND OF
FERTILIZER
NOW IF YOU HAVE
A PIECE OF LAND THAT
WON'T GROW ANYTHING
BUT WEEDS, TALK WITH
US ABOUT IT AND LET US
SUGGEST
THE RIGHT FERTILIZER
WE FEEL VERY SURE THAT
WE CAN SHOW YOU HOW TO
USE FERTILIZERS
WITHOUT GREAT EXPENSE SO
YOUR LAND WILL PAY
CONSULT US FREELY IT IS
OUR BUSINESS TO KNOW
ENQUIRIES FREELY ANSWERED
AGENTS WANTED FOR
TERRITORY NOT TAKEN UP
THE W.A. FREEMAN CO. LIMITED
HAMILTON ONTARIO

BEAL
Engraving and
Electrotyping
Company, Limited

MAKERS OF EVERYTHING
IN FINE PRINTING PLATES
LARGEST STOCK CUT
HOUSE IN CANADA
WHEN ISSUING YOUR
NEXT ROUTE OR SALE
CARD, ORDER YOUR
ENGRAVING FROM US.
193-195-KING ST.
LONDON, CANADA.

→ CAN ←
YOUR OWN FRUIT & VEGETABLES!
Keep Profits at Home. We'll Show You How.
CANNERS' SUPPLY CO., DETROIT, MICH.

Marlin

.22 Caliber Repeating Rifle

Model No 20

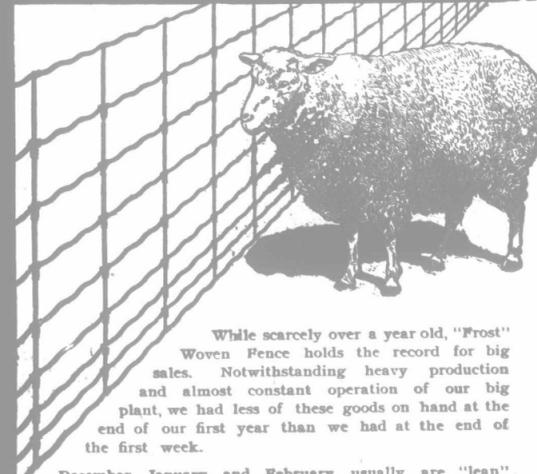
The safety, comfort and convenience of the *Marlin* solid top, closed-in breech and side ejection features are combined with the quick, easy manipulation of the popular sliding fore-end or "pump" action in the new Model 20 *Marlin* rifle.

In rapid firing—the real test of a repeater—the *Marlin* solid top is always a protection and prevents smoke and gases blowing into your face or eyes, and never interferes with the aim; the **fat forearm fits your hand** and helps quick operation.

It handles the short, long and long-rifle cartridges without change in adjustment, and the deep Ballard rifling guarantees the accuracy, making it the finest little rifle in the world for target shooting and for all small game up to 150 or 200 yards.

For full description of all *Marlin* Repeaters, just get our 136-page catalog. Mailed free for 3 stamps postage.

The Marlin Firearms Co.,
113 Willow Street, NEW HAVEN, CONN.



While scarcely over a year old, "Frost" Woven Fence holds the record for big sales. Notwithstanding heavy production and almost constant operation of our big plant, we had less of these goods on hand at the end of our first year than we had at the end of the first week.

December, January and February usually are "lean" months in the fence business, but "Frost" factory is working overtime. We are busy making a fence that is generally acknowledged the most perfect "factory-made" fence on the market. It enjoys the distinction of possessing the strongest and most secure binding (having more inches and weight of wire in the tie) on a "ready-made" fence. The horizontal and stay wires are made from the same grade of hard steel wire as "Frost" Coiled Wire.

Ample provisions are made for expansion and contraction.

No "Shoddy" Here. It has the A.1. "Frost" Fence Quality

There is no "shoddy" in this sheep. It's like "Frost" Fence in quality. Unlike the "shoddy" fence, there are no jointed or soft wire stays, no short kinked laterals, no locks with unsecured ends to loosen, no poorly galvanized wires, in the "Frost" Fence. It is "all wool" in quality. It's all No. 9 wire.



In fact, "Frost" Woven Fence has become a keen rival of fencing with Coiled Wire Laterals. It is made in 37 different styles, giving a complete assortment in heights, different spacings of horizontal and stay wires.

"Frost" Woven Fence is daily proving itself positively the best proposition for anyone who has some spare time which he can devote to the handling of its sale. If you would like to talk this matter over, we will be very glad to put our time against yours. We will send a traveller if you will give us the tip.

Now if you are engaged in wire fence business but want to enjoy the BIG trade, better get in touch with us at once as we are establishing new agencies in all unrepresented fields.

FROST WIRE FENCE CO., LIMITED, Hamilton, Ont. MANITOBA FROST WIRE FENCE CO., LIMITED, Winnipeg, Man.

"Frost" Fence

STOCK MEN



Advertise your fancy stock by means of first-class

DRAWINGS AND ENGRAVINGS

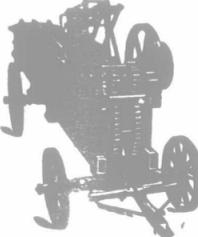
Send us your photos, and our stock artist will bring out the points.

THE TORONTO ENGRAVING COMPANY LIMITED
TORONTO - CANADA
DESIGNERS ILLUSTRATORS ENGRAVERS

100 Men Wanted

to sell the

Columbia Hay Press



We guarantee it the best belt press made or no sale. Capacity, 50 tons in 10 hours. Write for full description and agency.

Columbia Hay Press Co'y,
KINGSVILLE, Ont.

GOES LIKE SIXTY BELLS LIKE SIXTY BELLS FOR \$65

GILSON GASOLINE ENGINE

For Pumping, Cream Separators, Churns, Wash Machines, etc. **FREE TRIAL**. Ask for catalog—all sizes.

GILSON M. CO., 150 York St., Guelph, Ont.

FREE Book of Facts and Figures On Roofing and Samples to Test

J-M ASBESTOS ROOFING

Write for this book to-day. Its suggestions will save you money and trouble if you are going to build or repair. We'll also send samples of ASBESTOS ROOFING, the only kind that protects buildings from fire; the only permanently durable ready roofing, which needs no painting, coating or attention of any kind. Other ready roofings have a felt foundation, made of shoddy, paper pulp, rags, wool, etc. Our foundation is *Asbestos*, the fireproof, indestructible mineral fibre—waterproofed and weatherproofed.

Let Us Quote Price

on any roofing material you need. We make all kinds of ready roofing and Asbestos Siding. Also J-M Roof Coating, the most durable compound known for making old leaky roofs tight again. Get our money-saving prices and suggestions before you buy.

Write for Book No. 80 and the samples.

THE CANADIAN H. W. JOHNS-MANVILLE CO., LTD.
85-87 Wellington St. West, Toronto. 2

RESISTS
FIRE
ROT
RUST
WEAR

Choice Farm Lands

FOR SALE ON EASY PAYMENTS.

In Western Canada there are great opportunities for the willing farmer. He can make money and success of farming. We have for sale the very choicest of Farm Lands in Saskatchewan, and guarantee to please the most particular. Let us tell you about them, and how others are making money here. Write at once for maps and pamphlets and full information. Our years of experience are at your disposal. All we want is to know if you are interested. Write at once.

TRACKSELL, ANDERSON & CO., REGINA, SASK.
British Columbia Office: 1210 Broad St., Victoria.

STUMP AND TREE PULLERS



Made in five different sizes. The only malleable iron stump puller made. It is manufactured here and warranted here. It is the only stump puller made on which you have a chance to try it without making full advance payments. Catalogue A.

Write for further particulars to:

CANADIAN SWENSONS, Limited,
Lindsay, Ontario, Canada.

CANADIAN PACIFIC HOMESEEKERS' EXCURSIONS

TO Manitoba, Saskatchewan, Alberta

Special Trains leave Toronto 2.00 p.m. on

APRIL 6, 20	MAY 4, 18	JUNE 1, 18, 28
JULY 13, 27	AUG. 10, 24	SEPT. 7, 21

Second class tickets from Ontario stations to principal Northwest points at

LOW ROUND-TRIP RATES

Winnipeg and return \$32.00; Edmonton and return \$42.50, and to other points in proportion. Tickets good to return within 60 days from going date.

TOURIST SLEEPING CARS

on all excursions. Comfortable berths, fully equipped with bedding, can be secured at moderate rates through local agent.

Early application must be made

ASK FOR HOMESEEKERS' PAMPHLET
containing rates and full information.

Apply to nearest C.P.R. Agent or to R. L. Thompson, Dist. Pass. Agt., Toronto.

ONLY DIRECT LINE NO CHANGE OF CARS

W. Fulton, Agent, London, Ont.

LAND FOR SETTLEMENT!

Lands are offered for settlement in some cases FREE, in others at 50 CENTS per acre, in various districts in NORTHERN ONTARIO. Write for information as to terms, homestead regulations, special railway rates, etc.

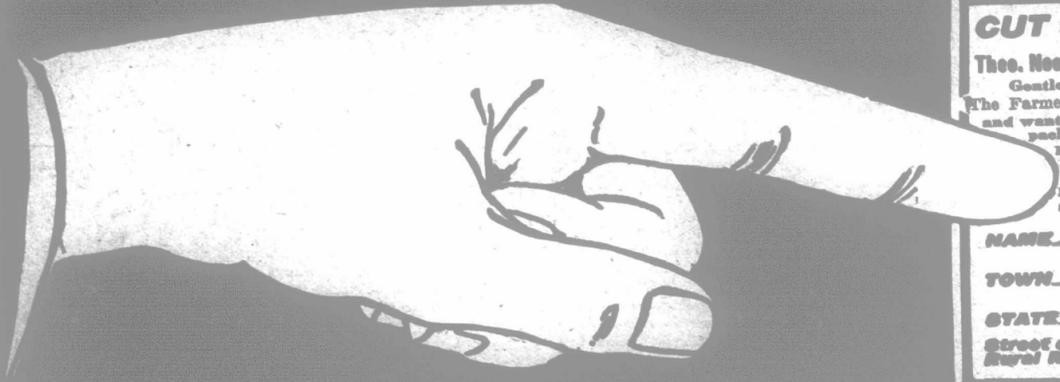
HON. JAMES S. DUFF,
Minister of Agriculture,
Thea. Southworth,
Director of Colonization, Toronto.

Boys for Farm Help

The managers of Dr. Barnardo's Homes invite applications from farmers, or others, for the boys who are arriving periodically from England to be placed in this country. The young immigrants are mostly between 11 and 13 years of age; all will have passed through a period of training in Dr. Barnardo's English Institutions, and will have been carefully selected with a view to their moral and physical suitability for Canadian life. Full particulars as to the terms and conditions upon which the boys are placed may be obtained upon application to Mr. Alfred B. Owen, Agent Dr. Barnardo's Homes, 50-52 Peter St., Toronto.

When Writing, Mention This Paper.

USE THIS COUPON



CUT OUT THIS COUPON

Theo. Noel Co., Limited, Vitae-Ore Bldg., Chicago
Gentlemen—I have clipped this coupon from The Farmer's Advocate and Home Magazine and want you to send me a full-sized One Dollar package of Vitae-Ore for me to try. I will not pay you one single penny if it does not benefit me. I am to be the judge. The following is my address, to which trial package is to be sent by mail, postpaid and Duty Free:

NAME _____
TOWN _____
STATE _____
Street or Rural Route _____

We Do the Rest.

Get your scissors or knife and cut out the coupon. Write your name and address plainly on same and mail it to us. We do the rest. This is all we ask, all we need, for we just want to know that you need it and will use it when it comes to you. If you want to write a letter, telling us something about your case, we will be glad to receive it and read it carefully, but you don't need to unless you want to, for the COUPON TELLS IT ALL. You don't need to send any money, don't need to send any stamps, for the trial is AT OUR EXPENSE—NOT YOURS. We believe in Vitae-Ore and are willing to back our belief with OUR MONEY and don't ask you to believe until you have seen, until you have felt, UNTIL YOU KNOW. That's the kind of remedy Vitae-Ore is—that's the kind of people we are. If you want to try such a remedy, if you want to deal with people who don't want your money, until you are benefited, if you want to get cured without waste of money, and in the shortest possible time, USE THE COUPON TODAY and start the treatment which your neighbors and thousands of others have followed to success.

Not New, But True

DANIEL WEBSTER once said about a certain political issue, "There are lots of new things about it and lots of true things—the trouble is the NEW things are not TRUE and the TRUE things are not NEW." There is nothing new about Vitae-Ore—you have heard of it before—you couldn't help hearing of it. Its name has appeared in this paper, year after year. You may not have read our offer, nor answered it, but you ought to have done so. Our offer in this advertisement, the claim, we make for Vitae-Ore, the arrangements we give, are not new, but IT IS ALL TRUE. You have but to write, to send for it, to direct that it be sent to you—and it is sent to you. NO QUESTIONS, NO QUIBBLING, NO MONNY. If you want to pay for it, all right. If you don't, YOU DON'T HAVE TO. Enough are SATISFIED, enough want to pay, ENOUGH DO PAY to make Vitae-Ore's fame grow from year to year like a green-bay tree, and it is because IT IS ALL TRUE. Your fellow readers who have sent for a package and tested it have proven this. ITS HISTORY IS AN OPEN BOOK and all will find it ALL TRUE.

Cured of Dyspepsia

Lost Many Pounds in Weight and Had to Quit Work—Doctors and Remedies Failed to Cure.

PARRY HARBOR, ORE.—I have been troubled for two years with Dyspepsia and tried many doctors and different remedies, in fact, about every one I heard of for that trouble, with no permanent relief. Finally in 1905, it developed so severely that I was compelled to give up work. I had lost many pounds in weight. At this time I read the Vitae-Ore advertisement and procured a package on trial. After one month's treatment, I had such relief that I bought two more packages. When I finished the second package, I had gained twenty-six pounds in weight, and when I had taken the third package, was strong and healthy and weighed more than I ever did in my life. I am now enjoying a health and comfort that words cannot express.
A. S. POIRIER.

IF YOU ARE SICK AND AILING,

and your family, your friends and those about you, refuse to accept? How can you refuse to be helped to the help you want? WE TAKE ALL THE RISK!

no matter what the trouble may be, if you need help, if you want help, HERE IS A CHANCE FOR YOU. How can you, in justice to yourself

Suffered 10,000 Deaths.

Doctored 15 Years with 11 Doctors for Stomach, Heart, Kidney and Female Troubles.

DAWSON, TEXAS.—I bless the day that I sent for a trial treatment of Vitae-Ore, for my health is better now than it has been for years. I have suffered so long and so much for fifteen years, at times almost death. I had consulted and doctored with no less than eleven doctors during that time, the best that could be had in this vicinity, but they couldn't help me at all. Each one treated me for a different ailment and none seemed to make out just what my trouble really was. Some said it was Female Trouble and I was therefore operated on for same, but got no relief. I then doctored for Stomach, Rheumatism and Heart Trouble with the same disappointing results. I suffered ten thousand deaths. My Kidneys were in an awful fix; they would act often, but very scant and thick with sediment and blood. I would have sinking spells and my Heart would palpitate so terribly that I thought my time had come. A terrible pain would start in my left hip and go down my left leg and I would froth at the mouth like one in a fit. I would vomit every day for weeks at a time and often could not retain even water on my stomach. Two packages of Vitae-Ore did more for me than \$100.00 worth of the other medicine I had taken. I feel better than I have for fifteen years, sleep like a child, can eat well and have gained in weight, now weighing 147 pounds. I am thirty-three years old. My periods are no longer painful, although formerly they caused me such pain that I would have to lie in bed; my kidneys now feel sound. I am forever trying to induce sufferers to use Vitae-Ore and thus repay some of the debt of gratitude I owe to it.
MARY E. ROBERTS.



This is Our 30-Day Trial Offer!

WE WANT TO SEND you a full-sized One Dollar package of Vitae-Ore, enough for 30 days' continuous treatment, by mail, postpaid, and we want to send it to you on 30 days' trial. We don't want a penny—we just want you to try it, just want a word from you asking for it, and will be glad to send it to you. We take absolutely all the risk—we take all chances. You don't risk a penny! All we ask is that you use V.-O. for 30 days and pay us \$1.00 if it has helped you, if you are satisfied that it has done you more than \$1.00 worth of positive, actual, visible good. Otherwise you pay nothing, we ask nothing, we want nothing. Can you not spare 100 minutes during the next 30 days to try it? Can you not give 5 minutes to write for it, 3 minutes to properly prepare it upon its arrival, and 3 minutes each day for 30 days to use it. That is all it takes. Cannot you give 100 minutes time if it means new health, new strength, new blood, new force, new energy, vigor, life and happiness? You are to be the judge. We are satisfied with your decision, are perfectly willing to trust to your honor, to your judgment, as to whether or not V.-O. has benefited you. Read what Vitae-Ore is, and write for it today.

WHAT VITAE-ORE IS.

Vitae-Ore is a mineral remedy, a combination of substances from which many world's noted curative springs derive medicinal power and healing virtue. These properties of the springs come from the natural deposits of mineral in the earth through which water forces its way, only a very small proportion of the medicinal substances in these mineral deposits being thus taken up by the liquid. Vitae-Ore consists of compounds of Iron, Sulphur and Magnesium, elements which are among the chief curative agents in nearly every healing mineral spring and are necessary for the creation and retention of health. One package of this mineral substance, mixed with water, equals in medicinal strength and curative, healing value, many gallons of the world's powerful mineral waters drunk fresh at the springs.

For Both Internal and External Use.

Beware of Imitations!

Don't be deceived by spurious compounds placed on the Canadian market to imitate the original Vitae-Ore and deceive the Canadian Public. There is only one original Vitae-Ore, which is sold by the Theo. Noel Company, Ltd., and bears the red-ink signature of Theo. Noel, the founder of Vitae-Ore, to prove its genuineness. This is the Vitae-Ore which has been sold in Canada, Great Britain and the United States for many years, the Vitae-Ore which has cured thousands, the Vitae-Ore you want and should make sure of getting by using the above coupon. If you have used Vitae-Ore and need a further supply, be sure you address your order to the Theo. Noel Company, Limited, Chicago, Ills. Goods will be promptly forwarded to you, postpaid and duty free.

TOOK MEDICINE 20 YEARS.

Doctor Said He Had Kidney and Liver Trouble, Catarrh and Bronchitis, But Did Not Help Him.

APALONA, IND.—I feel it my duty to tell what Vitae-Ore has accomplished for me. For the last twenty years I have taken all kinds of medicine, but at no time received more than a slight temporary relief. Three years ago I took treatment from one of the best doctors at Leopold, Indiana. He examined me and gave as his opinion that I had Liver and Kidney Trouble, Catarrh and Bronchitis. I was at that time taken with a severe pain in my back which he diagnosed as Rheumatic Lumbago. I doctored with him continually and persistently for five months' time, getting relief for only a very short time, and gave up hope of ever getting well again. Vitae-Ore was recommended to me by a friend who had used it and spoke of it very highly. I procured a full treatment and began immediately to use it according to directions. As a result, my suffering is now a thing of the past, and my cure is a permanent one, as this occurred fifteen months ago, during which time I have felt as well as I ever did in my life and continue to feel so. I am forty-four years old. My wife also has reason to praise it as strongly as I have, she having been cured by its use of a Stomach Trouble. I conscientiously believe that Vitae-Ore has saved my life.
JOSEPH L. MEUNIER.



You Are To Be The Judge

USE VITAE-ORE FOR Rheumatism, Lumbago, Kidney, Bladder and Liver Diseases, Dropsy, Stomach Disorders, Female Ailments, Functional Heart Trouble, Catarrh of Any Part, Nervous Prostration, Anaemia, Sores and Ulcers, Constipation, or Other Bowel Trouble, Impure Blood, or if you are just Run-Down or Worn-Out. Send the Coupon for a 30-day trial treatment of Vitae-Ore right away, and see what it will do for you. Sent Prepaid and All Duty Free. ADDRESS

THEO. NOEL CO., Limited F. A. Dept. CHICAGO, ILL.
Vitae-Ore Bldg.