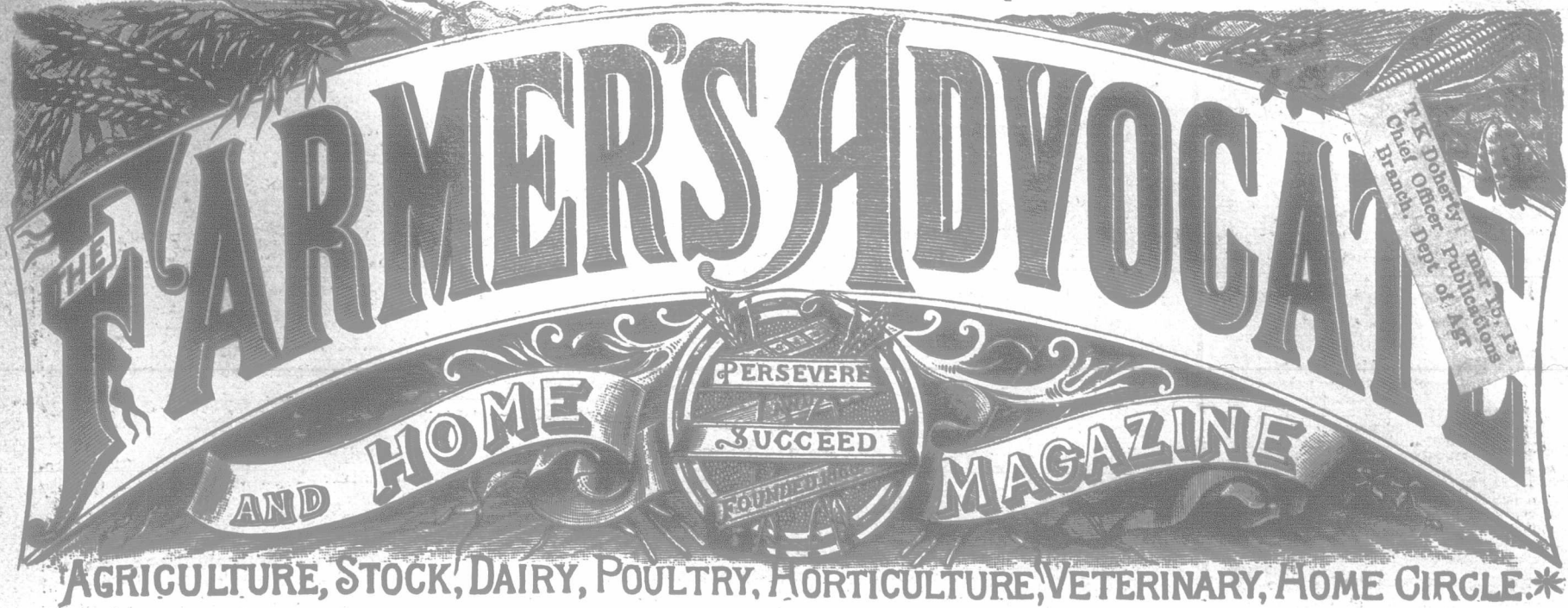


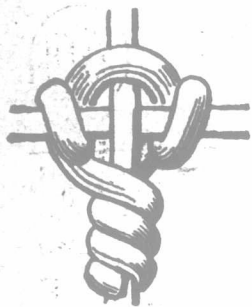
PUBLISHED EVERY WEEK. \$1.50 PER YEAR.



VOL. XLVIII.

LONDON, ONTARIO, FEBRUARY 20, 1913

No. 1065



Mr. Farmer! you are paying for good fences

Why not have them?



THAT'S the plain unvarnished truth—if you have not good fences around your fields you are paying for mighty good ones. But—don't take our word for it. Take a pencil and jot down what poor fences have actually cost you during the last few years. The total is a great deal more than the entire cost of good fences.

“Frost” Fences

are good fences---worth more than they cost

That's the candid opinion of hundreds of practical farmers—men who judge a Fence by its **durable** qualities—the **long years of service** they get out of it.

Here are the **real** reasons for the **lasting** qualities of the “Frost” Fence—the reasons why we so fearlessly **guarantee** it.

We know the **quality** of every rod of wire woven into the “Frost” Fence, for the very good reason that we **make** it at our **own** mills, every inch of it.

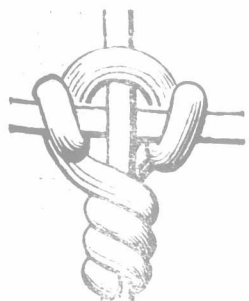
Lateral and upright wires are No. 9 Hard Steel of **thoroughly tested** stock. The laterals are permanently **waved**—this gives that **wonderful** resilience—the **come-back** qualities for which the “Frost” Fence is famed.

Note the tie wire—it is wrapped **several** times around **both** Laterals and Stays making an **extra** neat and **doubly strong** binding.

Remember this: You should judge a Fence by what **it is going to cost** --not by the price asked.

If you have any lingering doubts on the Fence question ask us to give you the names and addresses of farmers who know from experience. Or call on the “Frost” dealer of your locality—if you don't know him we'll introduce you. 40

FROST WIRE FENCE COMPANY, LIMITED
Hamilton, Ontario



Tools that take away drudgery

Get better results in your field or garden with half the work. Save time and money besides. You can do it with these labor-saving crop-increasing farm and garden tools—

Planet Jr

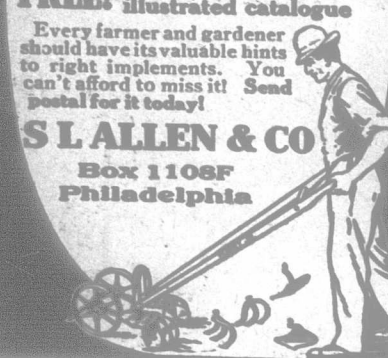
No. 14 Planet Jr Double Wheel Disc Hoe, Cultivator and Plow is new; popular especially with peat-land workers. Carries new-design Prong teeth. 3 discs on each side; steel frame. Works 2 acres a day better than several men with hand hoes.

No. 51 Planet Jr Horse Hoe, Cultivator, and Hiller Combined is our latest, best tool of the kind. Thorough work in rows up to 4 feet apart. Strong; fully guaranteed. Can be fitted with all-steel wheel—new this year.

FREE An instructive 64-page illustrated catalogue

Every farmer and gardener should have its valuable hints to right implements. You can't afford to miss it! Send postal for it today!

S. L. ALLEN & CO.
Box 1108F
Philadelphia



Write for name of our nearest agency.

SYNOPSIS OF DOMINION LAND REGULATIONS

ANY PERSON who is the sole head of a family, or any male over 18 years old, may homestead a quarter section of available Dominion land in Manitoba, Saskatchewan or Alberta. The applicant must appear in person at the Dominion Lands Agency or Sub-agency of the district. Entry by proxy may be made at any agency, on certain conditions, by father, mother, son, daughter, brother or sister of the intending homesteader.

Duties—Six months' residence upon and cultivation of the land in each of three years. A homesteader may live within nine miles of his homestead on a farm of at least 80 acres solely owned and occupied by him or by his father, mother, son, daughter, brother or sister.

In certain districts a homesteader in good standing may pre-empt a quarter-section alongside his homestead. Price \$3.00 per acre.

Duties—Must reside upon the homestead or pre-emption six months in each of six years from date of homestead entry (including the time required to earn homestead patent) and cultivate 50 acres extra.

A homesteader who has exhausted his homestead right and cannot obtain a pre-emption may enter for a purchased homestead in certain districts. Price \$5.00 per acre. **Duties**—Must reside six months in each of three years, cultivate fifty acres and erect a house worth \$300.00.

W. W. CORY,
Deputy of the Minister of the Interior

N.B.—Unauthorized publication of this advertisement will not be paid for.

TO FARMERS' CLUBS

Cunard Line
(Canadian Service)

have opened up an

Immigration Department

to arrange for labor for you from the Old Country. We have an organization of over 2,000 agencies. Many in the heart of the agricultural districts of England, Scotland and Wales.

Tell us if you want "help."

Drop this office a line, and if necessary we will gladly come and see you and arrange details.

THE CUNARD STEAMSHIP CO. Limited

J. B. HOSEASON, Immigration Agent
114 King St. West, TORONTO

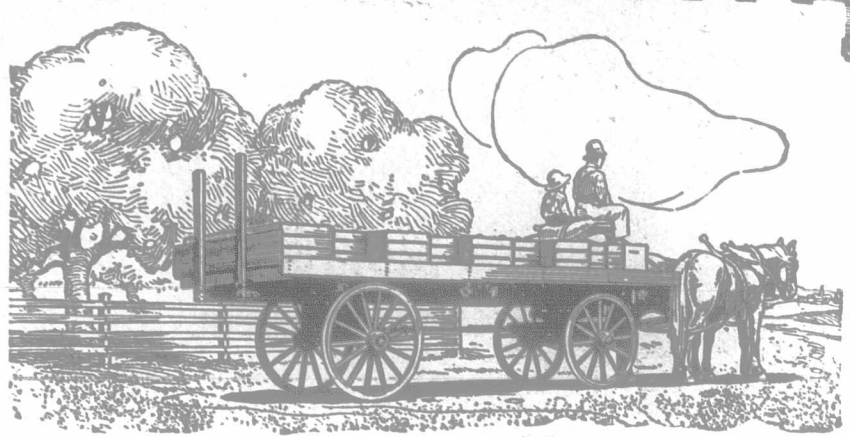
MALLORY'S SEED CORN

Improved prize winning strains.
N. E. Mallory, Blenheim, Ont.

ADVOCATE ADVERTISEMENTS PAY.

IHC Wagons Are Tough

DID you ever notice, when one of the wheels of your loaded wagon dropped into a rut or bumped over a stone, how the seat springs gave and rebounded, almost throwing you off? That is an indication of the shock and strain that the rigid spokes and axles have to stand whenever the wagon is traveling over a rough road or through a field. Even on a smooth road there is always the crushing strain of the load, affecting every part from the top box to the lowest point of the tire. IHC wagons




possible. Consequently, IHC wagons are practically all of the same high standard of quality throughout.

You cannot do better than to equip your farm with IHC wagons. The IHC local agent sells the wagon best suited to your work and your conditions. See the wagon at his place of business and get catalogues and literature from him, or, address your request to the nearest branch house.

Eastern Canadian Branches
International Harvester Company of America
(Incorporated)

At Hamilton, Ont.; London, Ont.; Montreal, P. Q.;
Ottawa, Ont.; St. John, N. B.; Quebec, P. Q.

Built at Chatham and Petrolia, Ont.



CITY COMFORT AND CONVENIENCE
in Your Country Home

The greatest comfort of the city home is its complete water system. The sanitary bath and running water to supply kitchen, lavatory and wash tub are features that appear as ideal to the country resident. It has never occurred to some that they might enjoy these luxuries with all the advantages of city homes.

The Heller-Aller

Pneumatic Water Supply System makes it handy to have running water anywhere in the house, stable or yard for all domestic purposes. The cost is so low that nearly every country resident can afford to install it, giving comfort and improving sanitary conditions. Operated by windmill, electric motor, gasoline engine or hand power.

We have a system to suit all requirements. Write for information.



THE HELLER-ALLER COMPANY, Windsor, Ont.

TELEPHONES

For **INFORMATION** and **ESTIMATES** for local telephone systems;

For guaranteed construction material and telephone equipment

Write:

Canadian Independent Telephone Co., Limited
20 Duncan Street
TORONTO ONTARIO
ASK FOR NO. 3 BULLETIN

FOR YOUR FARM, YOUR HOME, YOUR FACTORY
FOR EVERY POWER PURPOSE

A Gilson "Goes-Like-Sixty" Engine with New Features and Latest Improvements.

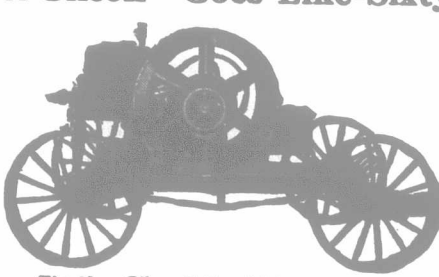
**MORE VALUE
MORE POWER
MORE SERVICE
MORE SATISFACTION**

Does satisfaction mean anything to you? Does money saved in fuel, in time, in repairs and expense bills appeal to you? Get Gilson Facts, and find out how the Gilson 60-SPEED engine does the greatest variety of work—how it gives the maximum satisfaction—saves money in equipment, and yields 100% service at lowest cost. Every engine covered by a cast-iron guarantee.

The New Gilson 5, 6 and 8 h.p. engines, equipped with our new friction clutch pulley, with five removable rims, each of a different diameter. Change to the proper speed for any job in five minutes. A NEW and EXCLUSIVE GILSON FEATURE.

We also make 60-SPEED engines in 1 1/2 and 3 h.p. sizes. These are mounted on truck, with line shaft and five interchangeable pulleys, and pump-jack. Drop us a card to-day, and we will send you full descriptive literature. We are making special prices to the first purchaser of one of these engines in every locality. Write NOW. Agents wanted.

GILSON MFG. CO., LTD., 120 York St., GUELPH, ONT.



STUMP EXTRACTOR

If you are troubled with stumps, give our "Patent Samson Stump Extractor" a trial. It has now been in use in Europe for the past three years with the greatest success. By its assistance, two men will do the work of three men and a horse. It can also be used for felling trees.

WRITE US FOR DETAILS.

The Canadian Boving Co., Ltd.
164 Bay Street, TORONTO

Corn That Will Grow

Canadian-grown seed corn. Your money back if not satisfied.

J. O. DUKE, RUTHVEN, ONT.

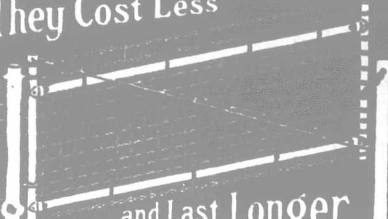
They Cost Less

"Clay" Gates

STRONGEST and best farm gate made. 30,000 sold in 1912. Can't sag, bend or break. Can be raised as shown. Good for Winter and Summer. Send for illustrated price list.

The CANADIAN GATE CO. Ltd.
34 Morris St., GUELPH, Ont.

and Last Longer



STANDARD GASOLINE ENGINE

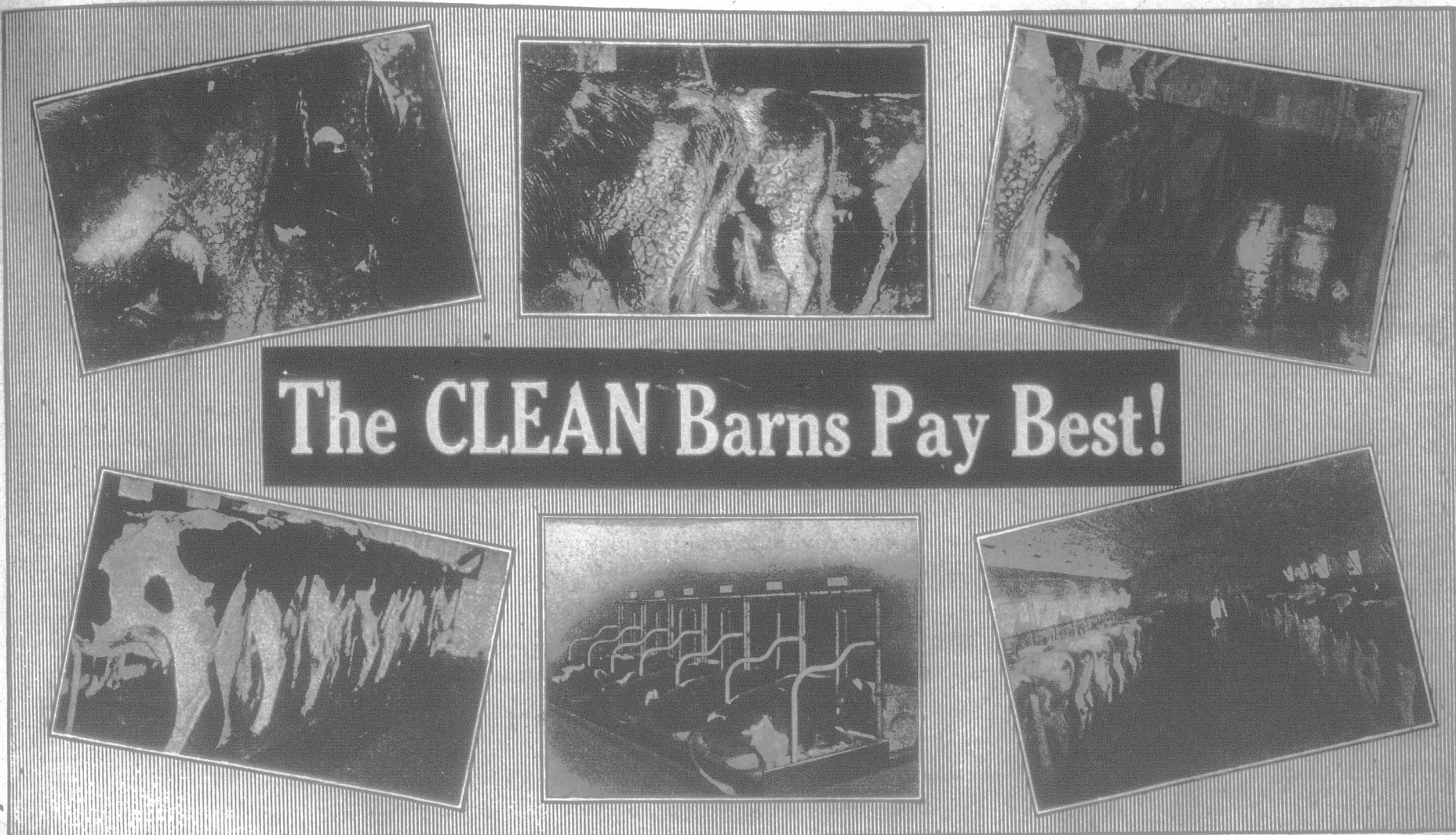
Every one sold on a strong guarantee. Ask for our catalogue of engines. London Concrete Machinery Co., Dept. B, London, Ont.

Largest makers of Concrete Machinery in Canada.

Strawberry Plants Grown on the shore of Lake Erie. 28 selected varieties. Catalogue free.

LAKEVIEW FRUIT FARM.
Grovesend, Ontario.





The CLEAN Barns Pay Best!

Modern Barns Are Easy To Clean—Easy to Keep Clean

If you could line up every cow so the manure would all drop into the gutter, none of it on the bedding in the stall—if you could remove the manure from your barn in half the time, with half the work—wouldn't it be worth real money to you?

If you could feed your cows individually—giving each one her share—making it impossible for one to rob from another—if you could water them in the stall, all at the same time—if you could prevent cows from nosing their feed into the stalls—if you could make play out of getting the manure into the spreader,

wagon or shed, or on the pile 30 or 40 feet away from the barn—wouldn't those advantages mean dollars and cents to you?

And if you found that the equipment necessary to make all these things real in your dairy, would pay for itself the first year and would last a lifetime—would you be interested enough to investigate more thoroughly?

You will answer "yes"—if you are in the dairy business for profit. That is why we want you to mail the coupon today, for our two fine free books which fully describe and illustrate the many advantages of

The BT Sanitary Barn Equipment

Stalls, Stanchions, Pens, Litter Carriers, Feed Carriers, etc.

There are five patented features of the BT Stalls and Stanchions that make them five times better than any other. Our Stall Book tells about them. The Alignment Device, Sure Stop Swinging Post, Double Curve Partition, Individual Self-Cleaning Mangers, Stanchion Rests. These are the features that make the BT Stalls and Stanchions the choice of dairy men who want the greatest efficiency in their barns.

The BT Manure Carrier has twelve or more advantages over any other, advantages that you cannot afford to overlook when deciding on the carrier to buy. The easy bent I-Beam Track requires no special curves. The adjustable button-on hangers, the movable track section, simple switches, double windlass chain, solid steel windlass shaft, clean, easy hand-wheel windlass, friction track, latch trip, etc., heavy galvanized tub—think of all the features possessed by the BT Carrier, and everyone a work-saver, time-saver and money-maker. Isn't it worth while to investigate the BT Equipment?

Barn-Building Book Free

For years we have had a special study of dairy barns—not only how they should be equipped, but how they should be constructed, lighted and drained—how they should be designed and arranged to be most profitable to the owners.

Some of this knowledge is incorporated in our book, "How to Build a Dairy Barn." This book contains information that every farmer should know regarding sanitary housing of dairy cows. It describes lighting, ventilation, stable floor construction, and contains suggestions about silos, site, appearance, exposure, design, drainage and equipment. Illustrated by many blue prints.

We will send a copy of this book free—providing you answer the questions in the coupon.

If you intend building or remodelling, write us for full information in regard to our Free Barn Planning Service.

Send In Your Name

We want you to write us for our book, even if you only intend making a few changes or additions in your stable. We believe you will find many paragraphs of interest, the fine illustrations of modern barns—inside and outside views, the letters from owners of BT equipment, facts and figures. Simply fill in the coupon and the books you request will be mailed to you free at once.

Stall Book tells all about BT Stalls and Stanchions, Calf Pens, Cow Pens, Box Stalls, etc. Carrier Book about BT Litter Carriers, Feed Carriers, Milk Can Conveyors and Feed Trucks. Fill in the coupon and mail it.

Beatty Bros.,

LIMITED,

481 Hill Street, Fergus, Ont.

For Free Books

BEATTY BROS., LIMITED

481 Hill Street

Fergus, Ont.

Please send me free, as per offer, books I have checked below.

- Stall Book, on Stalls, Stanchions, Pens, etc.
- Carrier Book, on Carriers, Trucks, etc.
- Building Book.

How many cows have you?

Do you contemplate remodelling?

Building?


Is so, when?

Name

P. O.

Province

BROWNS



WRITE FOR CATALOGUE WRITE FOR AGENCY

BROWNS NURSERIES
WELLAND COUNTY, ONT.

GOVERNMENT STANDARD SEEDS

Sold under the guarantee that if they do not entirely satisfy you on arrival, you may ship them back at our expense. We buy most of our seeds direct from the farmers here who grow them.

ALFALFA.—There is practically no home-grown seed this year, as the wet weather caused a new growth of plant instead of seed. We have some splendid seed though, suited to our land, which we recommend. Price, \$12.00 per bushel.

RED CLOVER.—A splendid, clean, bright sample. Price \$15 per bushel.

ALSIKE.—Clean and bright. Price, \$15 per bushel.

TIMOTHY.—Bright and clean. Price, \$3.25 per bushel.

O. A. C. No. 21 BARLEY.—90c. per bush.

SILVER MINE OATS.—60c. per bush.

SIBERIAN OATS.—60c. per bush.

BANNER OATS.—60. per bush.

These prices good till next issue. Bags extra—Cotton 25c., jute 10c. Cash to accompany order. Ask for samples.

The Caledonia Milling Co., Ltd.
CALEDONIA, ONT.

T-A Wheels
Defy Bad Roads



These Wide - Tire Steel Wheels are built especially to overcome the troubles of travelling over rocky, sandy or muddy roads. They carry 25 to 50 per cent. heavier loads without causing any heavier draft on the horses.



Built low for loading and unloading

Get a T-A Handy Farm Wagon—it's just the kind you need on your farm. This sturdy little wagon will get over the ground quicker and with less strain on your horses than any other wagon that's made.

Tudhope-Anderson Co., Ltd.
Orillia, Ontario.

Drop us a card and get our catalogue telling all about

T-A Wide-Tire Steel Wheels & Handy Farm Wagons

HACKNEY AUTO - PLOW
"The Great One-Man Outfit"

The only "One-Man" Machine on the market that can be used successfully for plowing, seeding, harvesting, threshing, as a tractor for hauling loads, road grader, and as a stationary engine for all power purposes.

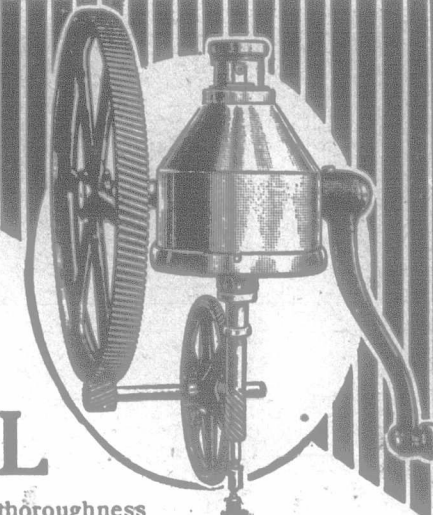
Send for illustrated catalogue and testimonials.

HACKNEY MANUFACTURING CO.
618 Prior Ave. St. Paul, Minn.

AGENTS \$25 a Week

FREE SAMPLE New patented lock stitch awl. Sew anything; shoes, harness, buggy tops, etc. Sells like wildfire. Low price. Big profits. Enormous demand! Write quick for sample to workers. Thomas Awl Co., 7544 Home St., Dayton, O.


The Simplest CREAM SEPARATOR Ever Built — DE LAVAL



EXCELS ALL OTHERS not only in thoroughness of separation, sanitary cleanliness, ease of running and durability, but as well in its great simplicity.

THERE IS NOTHING ABOUT THE OPERATION, CLEANING, adjustment or repair of a modern De Laval Cream Separator which requires expert knowledge or special tools.

NOR ARE THERE ANY PARTS WHICH REQUIRE FREQUENT adjustment in order to maintain good running or to conform to varying conditions in the every-day use of a cream separator.



DE LAVAL

Combination Wrench, furnished with each De Laval machine, which is the only tool required in setting up, taking down or using the De Laval, the simplest cream separator ever built.

THERE IS NOTHING ABOUT THE MACHINE THAT CANNOT be taken apart, removed or replaced by any one who can use a wrench or screw driver. In fact, the only tool which is needed in the use or the operation of a De Laval Cream Separator is the combination wrench and screw driver illustrated above, which is furnished free with every machine. Visit the local De Laval agent and see for yourself its simplicity of construction.

DE LAVAL DAIRY SUPPLY CO., LIMITED
173 William St., MONTREAL 128 James St., WINNIPEG

Tested With Boiling Water



Sizes 2½ to 60 h.-p. Semi-portable, as illustrated; also stationary and portable.

Every Renfrew-Standard Gasoline Engine is thoroughly tested before shipment. It must show at least 10% more horse-power than it is rated, by an actual brake test, with boiling water in the hopper. This test also proves the soundness of the workmanship. Every

Renfrew-Standard

Engine is also tested for balance. It must be so perfectly balanced that it will run with clock-like precision and smoothness. It must start easily without cranking. In short, the engine must be absolutely right in every particular before our inspectors affix their O.K.'s. If you were at the factory, you might think we were over-particular. But just think what our painstaking and care mean to the purchaser of a Renfrew-Standard Engine. It assures him getting an engine whose reliability has been proven under test—one that will give him great satisfaction.


Write for our engine catalogue. It describes the Renfrew-Standard in detail, and contains information about gasoline engines that every progressive farmer would like to know.

The Renfrew Machinery Company, Limited
Head Office and Works: RENFREW, ONTARIO
AGENCIES EVERYWHERE IN CANADA

Write for particulars about our 1½ h.-p. Gifford Engines

Evergreens FOR Everyone

We have the largest stock in Canada of Evergreen Ornamental Trees and Shrubs. Thousands and tens of thousands of Spruce and Arbor Vitæ for windbreaks and hedges at prices within the reach of everyone.



IRISH JUNIPER.

We have the stately Irish Junipers and Pyramidal Arbor Vita, which are well suited for planting on lots in cemeteries or for single specimens on the lawn. Write for prices and information, which is always furnished cheerfully and promptly.

E. D. SMITH & SON, Ltd.
WINONA, (900 Acres) ONTARIO

No. 6 COLUMBIA IGNITOR DRY CELL



Would you hire a lazy man? No, you want a worker.

PATENTED COLUMBIA BATTERIES

are honest, hard workers. Don't accept any other. You deserve COLUMBIAS and will get them if you insist.

Cost No More; Last Longer

For sale by all good dealers

National Carbon Co.
Cleveland, Ohio
Factories in U. S. and Canada
Fahnestock Connections without extra charge.

THE SAVING HABIT

Should be acquired early in life—your future years will then be provided for.

There is no better way than through Endowment Assurance.

A small yearly payment will provide a fund to meet future wants, and during the payment period your family is protected.

THE FEDERAL LIFE ASSURANCE COMPANY
Hamilton, Ontario

BEST RESULTS ARE OBTAINED FROM ADVOCATE ADVERTISEMENTS.

ens

e

k in Can-
tal Trees
and tens
nd Arbor
hedges at
everyone.

Junipers
which are
on lots in
cimens on
es and in-
ways fur-
mptly.

N, Ltd.

NTARIO

d you
lazy
No,
ant a

NTED
MBIA
ERIES

work-
ot any
serve
nd will
insist.

dealers

n Co.

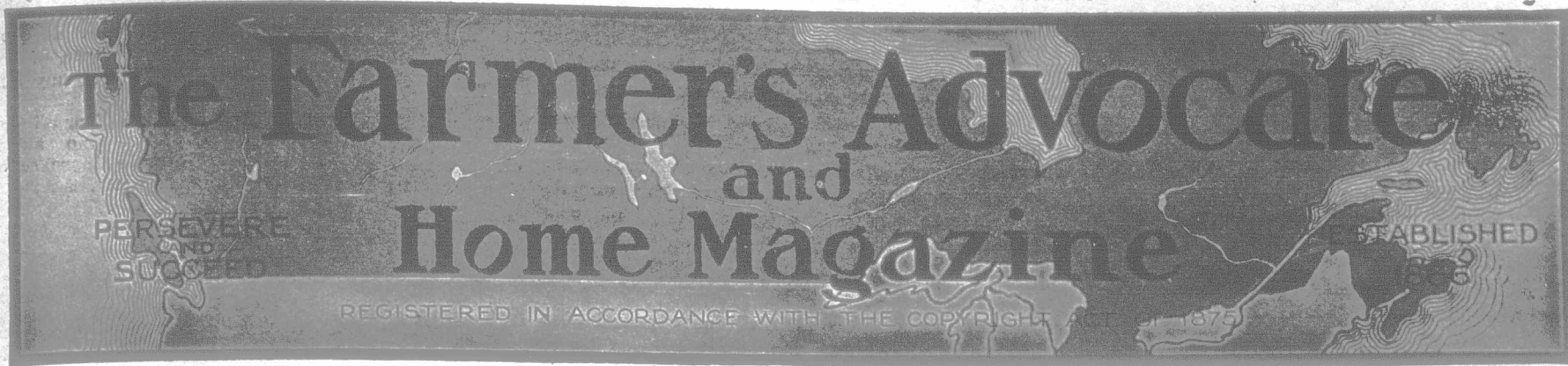
Canada
out extra

HABIT

a life—your
provided for.
an through

will provide
es, and dur-
ur family is

IFE
PANY
Ontario



Vol. XLVIII.

LONDON, ONTARIO, FEBRUARY 20, 1913.

No. 1065

EDITORIAL.

A new record for late dates in silo filling has been made by a number of farmers near Clarkson, in Peel Co., Ont., who ensiled the first of last season's corn crop the last few days of January.

The ensilage of third-cutting alfalfa mixed with corn is a practice which seems to be commendable for seasons of short corn crop, and poor September hay weather. Under other circumstances we believe the alfalfa might better be made into hay.

One of the best things that can happen rural districts, is the cultivation of a community or neighborhood spirit, with unity of aim and co-operative effort that will in turn develop a worthy pride in the farming and other achievements of the locality.

That public school systems of which so much has been boasted, should tend to the undoing of farming, the country's most essential industry, by becoming one of the chief factors in rural depopulation, is a subject deserving first place on any program of educational reform.

Advertisers when sending in copy for their advertisements, are requested to furnish same on a separate sheet of paper from the correspondence. By so doing, the matter will be more conveniently handled here, and with less danger of being misplaced.

Rev. John McNeil, a distinguished British preacher, now stationed as pastor of a Toronto church, in the course of a recent address at an annual banquet of life insurance men, wound up by proposing a new degree that deserves to crowd some of the other often ornamental initials off the parchment. It was not the "D. D.," or "LL. D.," he declared, that a man should seek to have after his name, but "W. D." standing for "well done."

The monthly meat bill is a big item in the city man's cost of living. The farmer can procure a good supply in winter at a much less cost, by killing his own fat stock and keeping a quarter of beef, or mutton, or a side of pork now and then. In summer the co-operative beef ring solves the problem. There is a wide margin between wholesale values on the farm and retail prices in the butcher shop, and as an old Irish saw has it, "There's a sight 'o miscellaneous eatin' in a pig."

When we read of certain feeders reporting better results with alfalfa silage than with corn silage, we wonder what their corn silage is like. Our cattle did better on corn silage, but it was made from heavily eared hill corn, well matured. A Middlesex County correspondent touched this point up about right. He did not think his alfalfa-corn mixture was just as good as first-class silage made from well-cobbed corn, but was better than silage made from corn that was not well-matured or cobbed. Where the proportion of alfalfa was small, even this criticism might not apply. The alfalfa might, in that case, prove an advantage, by tending to balance up the ration.

All Shoulders to the Wheel.

Canada is a big country. She has men of big ideas, and men willing and capable of carrying out these ideas. Canada is a growing and expanding country, and the present is an epoch-making period in the history of many of her industries. Agriculture is the stiff backbone from which radiate all the strong ribs which go to form the framework of our rising nation; but agriculture has not reached its greatest strength, and there is a great opportunity, at the present time, in many different ways to place it on a sounder, more economic basis than it has ever previously attained in this country. It must be kept before the people—not only Canadian-born individuals, but also the countless thousands yearly flocking to our shores.

There are many links which go to make up the chain of "showing" the people agriculture, and one of the best of these is a thoroughly unadulterated agricultural exhibition, where all the "thrillers" come from the farm as live-stock, grain, fruit, or other products. Many of the breed societies in annual meeting discussed the question of what they called a "National" agricultural exhibition, and all were strongly in favor of the project, such exhibition to be held under the patronage of the Dominion Department of Agriculture, and run exclusively by farmers, fruit-growers, live-stock men, and the producers of special crops. What an impressive show such could be made.

Such a show, if inaugurated, would of necessity be a winter event. It could not well be held in the autumn, as it would clash with the great fall exhibitions. In short it would be a great winter agricultural exhibition, comprising live-stock (fat and breeding classes) and all the products of the soil. Every province in the Dominion would be represented, and the best Canada produces would be on exhibition. Truly a good way to demonstrate the best types and the best methods in successful agriculture.

A few weeks ago there appeared in these columns an article dealing with the subject of a large winter live-stock show for this country, and the term there used was "International" the idea being to give our American cousins an opportunity to compete. Undoubtedly, whether the exhibition is known as "National" or International, competition from the States of the Union will be invited in the open classes, the same as at the Canadian National Exhibition, held in Toronto, in September. The wider the scope of the show, the greater its interest and value.

What a splendid opportunity this would be for display exhibits from the various provinces, leaving competition altogether out of consideration. Anyone who has attended the great "Land show," held annually in Chicago, could appreciate this fact. Chicago has a National Dairy Show, an International Live-stock Exhibition and a Land Show, the latter representing the products of the soil of the various States. Three wonderful exhibitions. Now Canada does not need three such shows nor yet two of them, but she has a place for one really great exposition combining all three features. Let the representatives of all these interests stand together, and the strength resulting from numbers would be great enough to overcome all obstacles. This great "three in one" is what is needed, and all selfishness of spirit in each of the classes of exhibitors should be banished for the good of the whole.

It is coming. When the influential men begin

to push the matter, something is sure to follow. All plans must be carefully laid, and equipment arranged to accommodate increasing entries from year to year. Patchwork is always unsatisfactory, as has been amply demonstrated time and again.

Situated at the most central point in a city large enough to accommodate the crowds, placed under careful management and above all things run as a strictly agricultural exhibition with fairness, and consideration shown to all, with the agricultural interests standing solidly at the back of it, success is assured.

A Minimum Fat Per-Cent.

The Canadian Jersey Cattle Club at its annual meeting adopted two or three noteworthy resolutions, one being an expression of opinion that no cow should be enrolled in the Canadian Record of Performance unless registered in the Canadian National Records, and yielding milk with an average test of at least three per cent. butter fat.

"Naming no names," it is tolerably safe guessing the mark at which these broad general observations were directed. Without meaning to excite any unbrotherly breed rivalry, we would probably be not far wrong in surmising that there is a spotted "nigger in the woodpile."

So far as registration in the National Records is concerned, it is but fair to point out that the facilities of the Record of Performance scheme were offered to the Canadian Holstein-Friesian Association when it was—as it still is—the only breed society in Canada not in the National Records. Protest on this score comes, therefore, too late.

The other position taken by the Jersey breeders opens a nice point for consideration. There is in force a federal standard stipulating that legal whole milk shall contain not less than three and a quarter per cent. (3.25%) of butter fat. The Ontario Milk Act is less exacting, but even it forbids the sale for human consumption of milk containing less than three per cent. fat. Cases are cited by Mr. Reid, Secretary of the Jersey Cattle Club, of cows enrolled in the Holstein official records of production with an average test of less than three per cent. butter fat.

This milk if sold unmixed with the milk of other cows would be, from a legal point of view, adulterated. At least it would not class legally as whole milk. While the average test of any breed of cattle in Canada would run well above three per cent., there are individuals which fall below. Furthermore, without gainsaying the enormous milk-producing and profit-earning capacity of the Holstein cow, it is to be noted that where Holsteins have largely supplanted other breeds, there is a noticeable decrease in the test of the milk, and a persistent increase in the number of pounds of milk required to make a pound of cheese. To the credit of Holstein cattle be it said that there are many good-testing strains, and breeders have shown a commendable enterprise in seeking to diffuse the blood of these strains. We hope this effort will continue, and that by selection the average test of Holstein milk may be raised. Meantime there is something to be said for the Jersey breeders' position, although it would seem rather a hardship to disqualify an eighteen or twenty-thousand-pound cow yielding over five hundred pounds of butter fat, because her own individual milk did not come up to the legal standard. Probably it is

THE FARMER'S ADVOCATE AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL
IN THE DOMINION.

PUBLISHED WEEKLY BY
THE WILLIAM WELD COMPANY (LIMITED).

JOHN WELD, MANAGER.

Agents for "The Farmer's Advocate and Home Journal,"
Winnipeg, Man.

1. THE FARMER'S ADVOCATE AND HOME MAGAZINE is published every Thursday. It is impartial and independent of all cliques and parties, handsomely illustrated with original engravings, and furnishes the most practical, reliable and profitable information for farmers, dairymen, gardeners, stockmen and home-makers, of any publication in Canada.
2. TERMS OF SUBSCRIPTION.—In Canada, England, Ireland, Scotland, Newfoundland and New Zealand, \$1.50 per year, in advance; \$2.00 per year when not paid in advance. United States, \$2.50 per year; all other countries 12s.; in advance.
3. ADVERTISING RATES.—Single insertion, 25 cents per line, agents. 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 arrears must be made as required by law.
5. THE LAW IS, that all subscribers to newspapers are held responsible until all arrears are paid and their paper ordered to be discontinued.
6. REMITTANCES should be made direct to us, either by Money Order or Registered Letter, which will be at our risk. When made otherwise we will not be responsible.
7. THE DATE ON YOUR LABEL shows to what time your subscription is paid.
8. ANONYMOUS communications will receive no attention. In every case the "Full Name and Post-office Address must be given."
9. WHEN A REPLY BY MAIL IS REQUIRED to Urgent Veterinary or Legal Enquiries, \$1.00 must be enclosed.
10. LETTERS intended for publication should be written on one side of the paper only.
11. CHANGE OF ADDRESS.—Subscribers when ordering a change of address should give the old as well as the new P.O. address.
12. WE INVITE FARMERS to write us on any agricultural topic. We are always pleased to receive practical articles. For such as we consider valuable we will pay ten cents per inch printed matter. Criticisms of Articles, Suggestions How to Improve "The Farmer's Advocate and Home Magazine," Descriptions of New Grains, Roots 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.

one of those cases where discussion may serve without the necessity for resorting to drastic action.

Cows Must Pay Their Way.

A well-known live-stock enthusiast was recently heard to say that the man who did most valuable work in the foundation and development of the Shorthorn breed was Bates, because he produced a "smashing" good beef animal, which was, at the same time, a great producer at the pail. Following Bates work came the Scotch Shorthorn, a very valuable introduction, for, had it not come, the evils of incestuous breeding would have totally eliminated the milking strains which Bates had produced. Pedigree craze and the thick-fleshed Scotch type held sway for many years with many breeders, with little or no attention to milking propensities. Those were the days of cheaper land, less costly production, and beef could be made pay a fair profit regardless of milk. The final destiny of all beef animals, no matter how long the pedigree or how flashy the type, is the butcher's block. That must not be lost sight of. Just so soon as beef, fancy or common, cannot be produced at a profit, just so soon must those engaged in its production change their methods or quit the business. As Peter White, retiring president of the Dominion Shorthorn Breeders' Association, put it in his address at the recent annual meeting of that Association, "A cow will not be called a cow unless she pays her way, and yields a profit at the pail."

Sponsors of the dual-purpose cow have been ridiculed by some of the breeders of the specialized breeds. Shorthorn breeders, who have been putting forth a strenuous effort (and not without avail) to produce profitable milkers and profitable beef producers in the same animal, have been the "butt" of many a scathing criticism, yet Bates did it and, while he over-did in-breeding, hundreds of the heavy-milking Shorthorn cows of Great Britain to the present day owe their milking capabilities to his efforts. Those who have been privileged to see the greatest

Shorthorn herd in the world to-day, that of Wm. Duthie, Collynie, Scotland, say that the nations of the herd are not kept in show-yard condition all the time, but may be seen at home in fair flesh swinging large and well-filled udders. In short they are milkers as well as beef producers. The greater portion of the milk of the world's metropolis is produced by just the class of cow which the "milk specialist" calls an impossibility—the dual-purpose cow.

For several years there has been in Canada a movement on foot to establish milk records for Shorthorns, and at last it is to bear fruit. Bulls from heavy-milking strains are in demand, and are scarce. People have ignored the Shorthorn's ability to fill the pail, but the breeders still believe she can do it, and to prove it a Record of Performance standard is to be established for the breed, and official milk records published as an appendix to each annual volume of the Herd Book. Milk records have done much to increase production in the dairy breeds, and are sure to work the same good for Shorthorns. Shorthorn cows have been known in this country to produce over 10,000 lbs. of milk in a single milking period, and the calf has grown into a number-one beef steer, in fact the champion steer at the Eastern Ontario Live-Stock and Poultry show in 1912 was a son of one of the heaviest milking cows in the Shorthorn herd at the Central Experimental Farm, Ottawa. As good a type of beef steer as has been seen in many a day was produced by an imported Shorthorn cow which, in the herd at Macdonald College, gave over 8,000 pounds of milk in a year. A pure-bred Shorthorn cow of Bates breeding, in our herd at Weldwood, under very ordinary farm conditions has yielded 8,500 pounds of milk in ten months, having been bred to calve twelve months after the commencement of this period. Even more remarkable was the record of a fine big, straight roan Shorthorn grade, which, with only three good quarters, yielded 9,500 pounds in twelve months after dropping a particularly fine calf, and sold readily to the butcher for seventy dollars, killing out a particularly good carcass of beef. Hundreds of profitable steers and heifers have been produced from cows which yield a profit in milk. That Shorthorn breeders have faith in the ability of their cattle to come up to expectations and fill the bill, was evidenced when W. A. Dryden, of Brooklin, introduced the resolution previously referred to, and when it was carried unanimously by the large and representative number of breeders present. The reason that our beef cattle of the present day have been such poor milkers is not the fault of the cattle, but of the breeders who, pressing on towards the pinnacle of beef fame, lost sight entirely of the fact that any cow, no matter what the breed, from her maternal instinct should be and must be a milk producer. Beef at the present time is profitable. So is milk. The two combined are the right thing for the mixed farmer, and now that organized effort is being put forward in that direction, satisfactory results may be expected.

Maintenance, the Great Road Problem.

The greatest problem in connection with good roads is not construction, but maintenance. Here is the weak spot of most systems, the crucial difficulty and the point most liable to be overlooked. "The Farmer's Advocate" has all along recognized this fact, and is pleased to observe this emphatic opinion from the United States Director of the Office of Public Roads:

"Too much stress can not be laid upon the importance of maintenance in connection with the work of improving the roads. The people in nearly all the States are filled with enthusiasm for road improvement and are spending enormous sums of money in the construction of superb roads, and yet, almost without exception, they are making little provision to care for the roads after they are built. This is true not only in the various counties, but under many of our State highway departments.

"To maintain the roads in good condition year after year requires a considerable annual outlay, but this outlay is infinitely less than the loss which must fall upon the people eventually if they allow their roads to go to utter ruin. The thing for all advocates of good roads to do is to urge continuous, systematic maintenance and the setting aside every year of an amount

per mile estimated by the engineer in charge to be sufficient for the proper maintenance of the road—a course which must make for economy and efficiency."

This argues strongly for a system of provincial aid towards the maintenance of Ontario subsidized county roads, rather than the increase of the grant towards construction of new roads.

TAKE NOTICE.

We ask every subscriber to examine the date on the address label of his paper to see if due credit has been given.

Sometimes subscribers pay local people, publishers or postmasters, who fail to report promptly, which causes trouble.

If you have not paid for 1913, please send us express order or postal note.

A Banker's View of Our Banking System.

Editor "The Farmer's Advocate":

As a subscriber to your valuable paper, I have read with interest the various articles and comments on our Canadian Banks in your recent issues. As one who has spent a number of years in the service of one of these banks, and has given some thought to the matter, permit me to occupy a little of your space to give to your readers another viewpoint.

There are over twenty-two thousand banks in the United States, and during the last fifty years there have been five panics, during which there has been a general suspension of cash payments. Everyone remembers the panic of 1907, and those who had any business connections with the States will recall the difficulties experienced by all classes of business men there, owing to the impossibility of procuring the cash necessary for carrying on the business.

In England, until the latter part of the nineteenth century, the business of the country was carried on, in general, by numerous small one-office banks, somewhat similar to those of the United States to-day, and that country experienced panics during which there was a general suspension of cash payments in 1825, 1836, 1847, 1857 and 1866. After the latter panic, the great joint-stock-company banks began extending through the opening of new branches and the absorbing of small institutions, with the result that there has been no general suspension of cash payments in the last thirty years. In fact, owing to the strong position of these joint-stock banks, the Bank of England was able, at the time of the Baring crisis in 1890, with their assistance, to save the situation.

Canada has the "Branch System" of banks, and as a result, there has been no general suspension of cash payments for more than seventy years—not since 1837. In 1907 the banks did not even demand the fifteen days' notice on time deposits which they may require.

To this system of Branch Banks, and the resultant concentrated control of Canadian financial matters, we owe largely the prosperity of the country and our immunity from disastrous panics.

A great deal has been heard of late about the "Big Interests" and the "Money Trusts" who control the Banks for their own benefit and to the detriment of the farmer in particular, and small business concerns in general. This is due to lack of knowledge of the banks and banking generally. A survey of the lists of shareholders of the various banks would reveal, at once, who the controlling interests are, and it would be found that it is the people of Canada in general who are the owners of the majority of Canadian bank shares—not any particular "interest" or interests. Therefore, the control of the banks lies in the hands of the public.

Every shareholder has the good of his bank at heart, so when the time arrives to elect directors it is found that those best fitted to look after the bank's interests are those elected. We have, therefore, men on the directorates of our great monetary institutions of sterling worth and integrity, whose reputations are country-wide—in some cases world-wide.

A properly conducted bank has interests as diversified as the interests of the people of the country in which it does business. It cannot afford to carry manufacturing, or mining, or lumbering, or farming interests exclusively. For the protection of itself and its depositors "the eggs must not all be in one basket." This fact alone, to my mind, is sufficient to dispel the fears that the "big interests" are getting what they desire, while the farmer goes begging. The his-

tory of nearly all our bank failures proves the danger to a bank in placing an undue proportion in any one class of enterprises.

To give the public the best service is the aim of every bank, if for no other reason than that it is good business to do so, because competition is keener nowhere than between banks. To give this service it is necessary to open branches. Some are loaning offices—that is, they are situated in a community where the demand for loans is much greater than the amount of deposits they receive. Others are deposit offices, in which the deposits exceed the demand for loans. The surplus deposits of one branch are used at another where there is a deficit, but never to the detriment of the local borrowers. Seldom, if ever, do deposits and loans balance one another in a branch, so a bank must, of necessity, have both kinds of offices, as one complements the other, and, taken together, gives to the institution a properly balanced business.

Under our branch system it is possible to open branches in places so small that independent single-office banks could not exist in them. Thus the farmer and country merchant is enabled to enjoy the same banking facilities as persons in the largest communities. In fact, it has been my experience that the man doing business with a country branch receives better attention and obtains better rates than the man of the same financial standing in the large centres.

The Bank Act gives to the banks the right to issue notes to the extent of the paid-up capital, and, in addition, to the further extent of fifteen per cent. of the paid-up capital and rest during certain seasons of the year, subject to a five per cent. tax. These notes are secured by deposits with the Dominion Government of five per cent. of the average annual circulation. This fund may be used to pay the notes of any defunct bank, and the notes are also a first lien on the bank's assets. The holder of any bank note is absolutely secured therefore. These notes furnish an additional working capital and enable a branch, which would otherwise be run at a loss, to show a profit. The profit is not great, however. H. M. P. Eckhardt, in his book, "A Rational Banking System," estimates it at 2.47 per cent, and he further gives some interesting figures regarding the way the note issue affects branch profits. On page 184 he says: "Suppose at the hypothetical branch in question the deposits are \$130,000, the loans and discounts \$100,000. Of the deposits \$40,000 are free, and \$90,000 are subject to interest at three per cent. The average rate on the discounts is six per cent. The income from such a branch might be: Interest on loans, \$100,000 at six per cent. equals \$6,000; exchange, commissions, etc., \$1,200; gross profits, \$7,200. The outgo: Interests on deposits, \$90,000, at three per cent., equals \$2,700; salaries, rents, taxes, and other expenses, \$5,000; total outgo, \$7,700. The net deficit to be charged to head office is \$500.

Now the branch must carry an average of \$3,000, with the bank's New York correspondent for drawing purposes, \$1,000 in silver coins, and \$4,000 in small notes of \$1 and \$2 denominations. That makes \$8,000 cash funds carried. As the deposits exceed the loans by \$30,000, the branch draws that much of a surplus from the locality. And as it is using only \$8,000 of this surplus for its own purposes, a balance of \$22,000 has been put at the disposal of the head office. Finally, owing to the payments of the bank's own notes at this branch, the note circulation of the whole bank is greater by an average of \$50,000 through the entire year. Allowing for a cash reserve of \$15,000, or 30 per cent., against the branch's circulation, the parent bank gains the use of a further sum of \$35,000. Thus the bank obtains the use of \$57,000 from this particular branch at a cost of \$500 per year, or less than one per cent. (.87 per cent. to be exact). Under these circumstances the branch is profitable, since it is usually not very difficult for the head office to invest the funds at a profit over that ratio of cost."

Mr. Eckhardt goes on to show that without the right of issue this same branch would only have a surplus of \$2,000 at the same cost—viz., \$500 per year, or 25 per cent. It is clear, therefore, that the privilege of note issue granted to the banks does not mean as much to them as the public imagine. It does, however, enable them to furnish a banking service in the smaller places, second to none, and the public reap a greater benefit from it than the banks, not only in increased banking facilities, but in lower rates charged for loans.

It is impossible to go deeply into this subject in such a limited space, but I trust I have succeeded in making the resolutions between the chartered banks of Canada and the public somewhat clearer, and, in showing that the banks are not weapons in the hands of powerful interests, who are grinding down the farming community, but are, rather, great financial institutions, operating under one of the best—if not the best—banking

systems in the world, governed by men who are working for the best interests of Canada, which, in the final analysis, means their clients and themselves.

REDMOND D. BLACK.

Cost of a Trip to Britain.

Editor "The Farmer's Advocate.":

As several people have asked me various questions regarding our trip to the old country, I thought that it might be a good idea to answer them through the medium of "The Farmer's Advocate," which is the great encyclopedia for all Canadian farmers. A great many think that they cannot get away for such a trip, that they could not be spared, and that the work would not get along without them; that they could not afford the expense, and a great many others give what they consider good reasons for not enjoying themselves. Now we were at one time very much in the same way of thinking, in fact we are all apt to think that the world would stand still if we were out of it, but this is a great mistake.

In the end of last May myself and wife left our two youngest, both in their teens, to do the housekeeping, bookkeeping and farming. And there were two sets of public books to keep, in which no one but myself had made an entry for the last 30 years. We had no care on our minds, never worried about anything, and when we came back we found everything had gone on just as well without us, and the books balanced up to a cent. A trip to the Old Country is a great educator, and we met a very great number of very fine people, who were before entire strangers to us. And our minds were broadened; in fact I believe it was as good to us as a like term at the University, and then we saw and visited a great number of relatives and friends whom we had not seen for years.

Now as to cost. We travelled 2nd. cabin, and the ocean and railway tickets for both of us cost \$120.50, that is from our home to Liverpool. Some have asked me if we could not have travelled steerage, and thus have saved some money. The steerage would not be so bad going over, but coming back I would not think of it. There are so many foreigners with whom we Canadians don't care to be in too close contact. I believe that the steerage of to-day is pretty nearly as good as the second cabin was the first time that I crossed, forty years ago. No, I would not advise any Canadian farmer to go steerage. And if I had money to burn, I would not care to go saloon. I think that you will, generally speaking, meet with a more sociable, friendly class of people, whose company you can enjoy in the second cabin, than you will meet in the saloon. More liberal too. The collection taken up for the Seaman's Orphans Home at the concert in the second cabin, was considerably larger than that taken up at the concert given in

the saloon. And our board in the second cabin was everything that anyone could wish. The very best food served in the very best manner. In regard to the tips to the steward, I always thought that the steamship company gave them good wages, and that the passengers paid their fares and were not under any obligation to tip the stewards very handsomely. One man told me that he handed the steward 50 cents, but the steward said that was no use to him, of course he expected that the man would give him a dollar, but the man quite coolly replied, well, if it is of no use to you it is to me, and he put it in his pocket again. He asked me if I thought that he did right. Why certainly, I replied. A voyage across the Atlantic with pleasant companions is very enjoyable if you are not seasick, and I think that seasickness can be very much prevented by giving the system a thorough course of medicine, and have it in good working order before going on board.

Railway fares are much cheaper in the Old Land than in Canada. We travelled from Liverpool to Dornoch in the far North of Scotland, and then down through Scotland by a different route, down through England to Old London, and back to Liverpool by a different route, thus we practically travelled nearly the whole length of both Scotland and England, and stopped off nearly any place we pleased, and it only cost a little over \$60 for us both. Street-car fares are generally very low. In most of the cities you can travel quite a way for a penny, and 2½ pence (5 cents) will take you a long ride. We had a motor ride up a beautiful glen 16 miles out, and the same distance return for \$1.00 each, very good value for the money. Of course, at some of the famous summer resorts fares may be a little higher. One can take the steamer at Liverpool and go over to Ireland, and travel over the whole length of the Emerald Isle at a cost of about \$25.00, exclusive of hotel bills and lunches, and these are moderate. In Old London, the Metropolis of the world, we lived at a very comfortable private boarding house, and the lady was a first-class cook and served the best of meals, our room cost just 60 cents a day. Our breakfasts cost 16 cents each. Dinners and teas 25 cents each, everything of the best. There are any number of good restaurants in the cities in the Old Land where good meals can be had for from 25 to 50 cents, and even in the good hotels where one might have to be passed, two people can have supper, bed and breakfast for \$3.25, and in some places for much less. The return fare on the ocean steamer costs a little more than going over. Say about \$10. There is little or no advantage in taking a return ticket.

Unless a couple are very extravagant, they can take a trip to the Old Land and have a good time on \$500. If they have many kind friends to entertain them here and there, perhaps a little less might do, if not, perhaps, it might



Douglas Heir [13171] (16425). Imported Clydesdale stallion; first in the yearling class at London Exhibition, 1912. Sire, Black Douglas. Owned by C. E. Glasgow, Pt. Stanley, Ont.

take a little more. Now don't begrudge spending so much, take the good of your money and enjoy it, and let your families earn their own money; my father used to say that no one understood the real value of money unless he earned it by the sweat of his body, and there is a world of truth in that remark. A sensible farmer in paying out some money made this remark: "Money is like manure, it is of no use unless it is spread." Perhaps some may read this, who, when they were married had neither the time nor the money for a wedding trip. Well, take it now, better late than never is an old saying that is very true. You will feel ten years younger when you return. D. L.

HORSES.

Compulsory stallion inspection should not be long delayed. Horse Breeders' Associations are unanimously in favor of it, and, in fact, no dissenting voices are heard. Thorough inspection would get rid of the inferior sire, and once he is gone his place will be taken by the right kind.

A Canadian National Trotting and Pacing Association is likely to be developed by the breeders of Standard-Bred horses in this country. Such an association properly conducted should prove a large money-maker, and as the profits accruing therefrom are to be used for the furtherance of the Standard-Bred horse in Canada, this breed should get a great "lift" in Canada.

Inspect the Stallion.

With stallion enrolment in force only about six months in Ontario, horsemen are now convinced that the real need is compulsory, not optional inspection. Some criticize the act saying that it is no good, but such criticism scarcely seems just. All are agreed that it does not go far enough, but what important measure does at its first inspection? We must agree that the enrolment and optional inspection was a step in the right direction. This is evidenced by the fact that horsemen now are eager for the compulsory clause. Human nature is prone to many idiosyncrasies. It is much easier to coax than to drive the populace, and horse breeders are no exception. Had inspection been made compulsory the first shot from the legislative gun, there would have been no end to adverse criticism of the bill. Criticism would then have been destructive, whereas now it is constructive making for the improvement of the bill which must appeal to all as in the best interests of horsebreeding. Some of our horsemen are afraid that it will cause a shortage of stallions, but the horse industry will not be injured by the loss of the inferior sires, and there will be a living and a good trade in many districts for a first-class horse, where the "scrub" now gets the mares because of the low price of his service. Stop him doing business and the better type of stallion will get the patronage, and when there is work for the good horse, there will be plenty of men to purchase one and stand him for service in the community. High-class sires are not over-plentiful but with the supply in the homes of the breeders to draw on together with the large number of noted studs in this country, a reasonable supply is assured. Besides such an act will make a ready sale for the best type of Canadian purebred entire colts—colts which are certain to be far more valuable to the industry than the non-descript grade. Inspection is sure to come, and until it does and even afterwards each breeder should be his own inspector, and use nothing but the horse that he is sure is right in every way.

Advance the Hackney.

At the annual meeting of the Canadian Hackney Horse Society, recently held in Toronto, a committee was appointed to wait on the Dominion Minister of Agriculture asking him to grant assistance to Hackney stallions on the same basis as Thoroughbred stallions are now aided—viz., the owner of every stallion complying with the rules to get \$250 from the funds of the Live Stock Branch at the close of each season.

When this grant was made to stallions of the Thoroughbred breed, it was done because it was then believed that this blood was necessary for the improvement of our light horses. The main object in view was to produce a better class of saddle horses or army mounts, and to add "hot" blood to our "cold-blooded" mares. Hackney breeders think they have some claim on such money, and that the Hackney sire is also very valuable in the improvement of our light horses.

The Hackney is generally thought of as a fancy carriage or high-stepping horse, but colts from a Hackney stallion and a common mare may be very fair saddle horses, according to some noted authorities on the breed, and on saddle horses generally. Some of the exhibitions in the

Old Land include in their programmes classes for saddle horses got by Hackney sires. The Council of the Hackney Horse Society of England has decided to give prizes for such classes at their coming March show. Writing on this subject in the Live Stock Journal Almanac, Sir Walter Gilbey, England's foremost Hackney breeder, says in part: "It is not the first time that such classes have been included. Some fifteen years ago—in 1897—the prize list embraced two such classes for riding horses got by Hackney sires—one for saddle mares and geldings up to 15 hands and one for saddle mares or geldings over 15 hands. Both classes filled well, the former bringing 21 and the latter 17 entries; and as far as support was concerned, these classes might have been retained as a feature of the show ever since."

The nurturing and developing of the breed as a harness horse was the real aim of the work, and it was thought inadvisable at that stage of the society's history to continue it; but, says Sir Walter Gilbey, "Fifteen years have brought about large changes. The main purpose of the society is achieved, for the place of the Hackney as our finest carriage horse is established; and the increasing use of the Hackney sire to get saddle stock, and the fact that his use for this purpose is not generally known, make it expedient to bring him prominently before the public as a saddle-horse sire."

Continuing, he says: "For several years past some of the most successful among the animals exhibited in the riding classes at county shows have been horses got by Hackneys. Their breeding is not openly stated; the conditions of entry do not require declaration of their breeding, and the Hackney blood in their veins is not always acknowledged; this reticence regarding their Hackney origin is due to the prejudices entertained against the breed by the riding men who officiate as judges.

"The idea that Hackney blood is detrimental to the saddle-horse has long been prevalent, but there is no foundation whatever for the belief; on the contrary, those who care to inform themselves of facts have only to see what has been done, and is still being done, on the Continent, where Hackney blood has been of the utmost value in building up breeds of saddle horses. Nowhere has its utility been more fully demonstrated than in the State studs of Hungary."

The article referred to goes on to say that foreign breeders are recognizing the value of the Hackney as a sire of saddle horses.

The greater number of Hackney-bred winners at county shows in England have been out of Thoroughbred dams, but the owner in the past has shown a tendency to lay more stress on the importance of the Thoroughbred blood.

Two classes are arranged for the March show, previously referred to, based on the true saddle-horse standard of weight-carrying power. In each class the horses must be sired by a Hackney stallion, and are to be shown in saddle and judged on riding action. "The idea that the Hackney cannot beget a saddle-horse dies hard. The Hackney, properly mated, is an ideal sire for saddle stock, and the revival of classes to enter which Hackney parentage must be acknowledged is a long step in the right direction."

This is restoring the Hackney to his ancient use, for in the earlier centuries the Norfolk trotters—the ancestors of our modern Hackneys—were the real road horses of England and were used under the saddle. Superb harness action has been developed during the last 50 years. Crossing with a Thoroughbred modifies the extremely high action and makes a very desirable riding-horse. The trot of a harness-bred Hackney could never be considered suitable for a saddle-horse, but the Hackney energy is valuable, and when his gait is blended with that of the smoother going Thoroughbred, or even a good trotting mare, the progeny has paces well suited to the saddle.

Many of these proofs, coming as they do from such an experienced and noted horseman as Sir Walter Gilbey, should carry some weight. The Hackney must have, and surely could have if properly used, a beneficial effect upon the blood of the light mares in Canada. But would it not be a good way to establish the rights of the Hackney stallion as a sire of saddlers, or a better class of useful drivers, by including a class or two for Hackney-sired saddle or Hackney-sired trotting horses at some of our leading shows? England is demonstrating the Hackney's value in this way. Why not try it here, whether the Government sees fit to give the asked-for aid or not? If such aid is granted to the Hackney breeders, where will the scheme end? It may or may not be deserving in their case, but a similar petition was mentioned at the annual meeting of the Pony breeders this year. And this is not the limit. It will go from one class of stock to another, from one breed to another, until everything, from draft horses to bantam roosters, would be asking for subsidies. Greatest progress usually comes through "self-help." The scheme of giving prizes for saddle-horses sired by Hack-

ney stallions looks like a good one. Show what the horse is capable of, and his place in the market and in the economy of the country is assured.

Higher Quality Shires.

Canadian Shire breeders in annual meeting a couple of weeks ago in Toronto discussed at some length the matter of improving the quality of their breed, especially in regard to feathering. Similar discussions have been taking place in the Agricultural Press of England. A writer in the "Live Stock Journal" recently expressed himself thus: "This question, an abundant quantity of hair on the legs of Shire horses, is simply one of those exhibition fads which invariably arise when the showing of a certain breed of live stock passes mainly into the hands of exhibitors rather than of the breeders and users of animals. It has been the same in every branch of the live-stock business; fancy of some kind, it may be so-called—line breeding, fashionable pedigrees, fancy points, and excessive growth of hair on the cart-horses' legs, where it is a nuisance rather than a benefit; color of face, quantity of wool on the face or cheeks and legs of sheep; large heads, long snouts, and tremendous ear amongst pigs, as in the past, short snouts, heavy jaws and wide shoulders, feathery legs, long legs, and other fads amongst poultrymen are all signs of the breeding of the various kinds of animals having passed from practical and useful to fancy lines.

"When expressing my doubts as to the utility of these fashionable mops on the Shire horse's extremities, or, as someone has called them, these four extra caudal appendages, objection is not taken to a limited amount of long, straight, silky hair, as this is invariably an indication of quality of bone and muscle and endurance."

Fortunately, Canadian Shire breeders are not exhibitors and exhibitors alone. They are breeders and users, and keep Shires not as a fad, but for their utility. New blood has come from England, the home of the breed, and styles and types in this country have been to a large extent governed by styles and types in that country. Too large a quantity of hair, and especially of coarse hair, is not of any particular value as far as actual usefulness is concerned, and it is not an indication of quality. A fair amount of the fine glossy, silky kind of feathering does no harm, improves the animal's appearance, and is a sure indication of a strong, flinty, high quality of bone. In fact, it means quality throughout. Canadian Shire men have taken a right stand in determining to reduce undue amounts of feathering and to improve quality.

LIVE STOCK.

Stock Interests Show a United Front.

Self-satisfaction has caused many a downfall. The greatest progress is usually made when the individual is sure that he is on the right track, and is pushed to his best efforts by competition or other circumstances. The breeders of several of our best known breeds of live-stock, in a period of their breed's success, sometimes are prone to think that nothing can happen to the industry to mar its future. A live-stock country with an area as large as that of Canada, and with a population of less than eight millions, importing meat seems absurd. Yet that is just what has been happening of late. Whether the breeders became satisfied with their lot and failed to continue to push their breeds before the people is where the blame rests or not it is difficult to say. It is certain that this is not the only cause, but it is quite probable that it is one of them. Things are taking a different turn. The annual meetings of the breed associations, recently held, were extraordinarily well attended, and there was a spirit of unity of purpose which permeated each and every meeting, which cannot fail to make itself felt in the near future. An awakening is at hand. Breed societies have relegated to the far remote past all breed prejudices, and all the associations now stand together with but one purpose—the furtherance of Canada's live-stock industry. There is too much good in the breed fostered by any breeder to allow that breed to be scoffed at by the champion of some other breed. Every progressive breeder should be proud of the breed upon which he chooses to put forth his best efforts, but his pride in those to which his particular fancy turns should never be used to the disadvantage of another good breed by "haggling" or unfair criticism. Canada has some of the best live-stock in the world. The only thing lacking is that she hasn't enough of it. But if we may judge from the tone of the speeches at the various breed-society meetings in Toronto this month, more high-class horses, cattle, sheep and pigs may soon be found grazing off the luxurious pastures

of our fertile fields, and being fed in the well regulated stables of the country. Let each man push his breed, and all breeds present a united live-stock front to show the people that there is no possible way to get along without good stock, and thus do the greatest good to the greatest number of agriculturists and, at the same time, to the live-stock industry, for in unity and numbers there is strength. Stick to the policy of the legitimate "boosting" of live-stock.

Experiments in Lamb Fattening.

Extensive experiments have been carried on by the Agricultural Experiment Station, at Purdue University, Indiana, in connection with the fattening of lambs. Timothy hay was tried out against clover hay, corn silage was tested as a roughage in large and small amounts, and cottonseed meal was given a fair test as a supplement to other rations for finishing lambs for market. All the lambs fed were of Western origin.

The following summary constitutes the conclusions arrived at:—

Timothy hay, in all rations where it was fed, proved a very unsatisfactory feed for fattening lambs.

Lambs fed shelled corn and timothy hay were very unthrifty.

Lambs fed shelled corn and clover had made more rapid and more economical gains than those fed shelled corn and timothy hay.

A ration of shelled corn and clover hay produced better finish on lambs than a ration of shelled corn and timothy hay.

A ration of shelled corn, cotton seed meal and clover hay, produced faster and more economical gains on fattening lambs than a ration of shelled corn, cottonseed meal, and timothy hay.

Lambs fed shelled corn, cottonseed meal, and clover hay, acquired a much better finish than others fed a ration of shelled corn, cottonseed meal and timothy hay.

The addition of corn silage once daily to a ration of shelled corn and clover hay did not affect, to any appreciable extent, the rate of gain on fattening lambs.

The addition of corn silage once daily to a ration of shelled corn and clover hay slightly reduced the cost of gains on fattening lambs, but did not greatly affect their selling value.

Lambs receiving silage once daily and clover hay once daily, ate approximately the same quantity of hay as of silage.

The grain consumption was affected very little by the addition of silage to a ration of corn and clover hay.

Lambs fed silage were never unhealthy, and never showed any unfavorable symptoms.

The addition of corn silage to a ration of shelled corn, cottonseed meal and clover hay, did not greatly affect the rate of gain nor the finish on the lambs, but did affect a small saving in cost of gain.

Lambs receiving rations of shelled corn, cottonseed meal, clover hay, and silage, ate the same quantities of grain when silage was fed twice daily, as when it was fed once daily.

Lambs receiving silage twice daily ate less hay than those receiving silage once daily.

Lambs fed silage twice daily made approximately the same gains as others fed silage once daily, but made cheaper gains, and acquired a better finish.

No bad effects were produced by feeding lambs large quantities of silage.

The ration of shelled corn, cottonseed meal, clover hay, and corn silage, proved to be the best of the seven rations fed in these trials.

The addition of cottonseed meal to a ration of shelled corn and timothy hay, increased the appetites of the lambs for both grain and hay.

The addition of cottonseed meal to a ration of shelled corn and timothy hay improved the thrift of the lambs, increased the rate of gain, decreased the cost of gain, and added greatly to the selling value of the lambs.

The addition of cottonseed meal to a ration of shelled corn and clover hay, did not greatly affect the appetites of the lambs for either grain or hay.

The addition of cottonseed meal to a ration of shelled corn and clover hay, did not greatly affect the cost of gain (average of three trials), but made slight decrease in cost of gain when corn was low as 40 cents per bushel, but made slight increase in cost of gain when corn was above 40 cents per bushel.

The addition of cottonseed meal to a ration of shelled corn, clover hay and corn silage, had no effect on the roughage consumption, but slightly increased the grain consumption in one of the three trials.

The addition of cottonseed meal to a ration of shelled corn, clover hay and corn silage, slightly increased the rate of gain, and added to the selling value of the lambs.

The addition of cottonseed meal to a ration of shelled corn, clover hay and silage, did not affect the cost of gain when corn was valued at

50 cents per bushel, but made a slight decrease in cost of gain when corn was above 50 cents per bushel.

Judging Beef Cattle as to Points.

Editor "The Farmer's Advocate":

In judging beef cattle, the breeder has much to learn from the butcher and from studying the dressed carcasses. Two steers of equal weight may represent a great deal of difference in money values. The animal of improved breeding will carry his weight well where the high-priced and choicer cuts appear. Two steers of equal flesh, too, may represent a vast amount of feeding difference, one of them fattening readily on the same feeding management that the other will receive with hardly any perceptible returns. Such differences are common in a mixed herd of cattle, but not in the herd that has been carefully built from a good plan.



A Fine Type of Lincoln.

Champion at Toronto and London, 1912. Owned by H. M. Lee, Highgate, Ont.

A local butcher recently declared to me that there existed a retail difference of \$5 per 100 lbs. between the value of the high-bred beef carcass and the nondescript that resulted from indiscriminate crosses and scrub breeding; this for the finished product. That there is an equal difference in the feeding and finishing qualities of the animal of natural high beef tendencies and those which respond only reluctantly to the highest feeding and the best of conditions, any feeder, with the present price of grain in his mind, is ready to believe. Pound for pound, two individual steers standing side by side may represent, the one a handsome profit and the other an equal loss.

What is true of individuals is no less true of types, if the type of the first is such a fixture that every animal contained in it gives similar results, and of the second such an uncertain element that its various members represent extremely different degrees of profit or loss. Fortunately,



Tamworth Sow.

First in aged class at Toronto and London. Owned by D. Douglas & Sons.

pearance of most animals in advance whether however, it is possible to determine by the aptly they are likely to prove profitable receptacles of high-priced feeds; but of far greater importance than this to the breeder of breeding stock, is the ability to tell by certain signs and indications what animals are likely to produce profitable progeny, either as feeders or for the subsequent reproduction of their kind.

Many of the judging points considered by the live-stock expert in the show ring are self-explanatory, but some of them are not, though they are equally important. Some of them vary in importance, too, depending upon whether the animal is being considered as a feeder or from the butcher's viewpoint, or strictly as a profitable breeder. The relative value of all should be understood, more particularly by the breeder than

by anyone else, because he caters not only to his own interests, but also to the requirements of both feeder and butcher. Hence the meaning of every judging quality is quite as much a part of his business as a knowledge of how to feed.

In selecting an individual for breeding purposes, notice should be taken of the position in which the animal is being held, as a bit of uneven ground, or a slightly curved body may easily lessen the prominence of some defect, so that it will hardly be noticed. Practically all live-stock judges approach the animal from the right side and from the front, at the same time noticing the head and neck, and beginning the actual handling in both beef and dairy breeds at the shoulder. From the shoulder the hand goes to the back and over the loin, which, on account of the high-priced cuts here, is a very important feature to consider, and one in which a good many otherwise excellent cattle fail. Here note the covering of the ribs for signs of natural flesh. If deficient, the ribs seem open, and the finger tips may be readily inserted between them; otherwise there is resistance. The mellowness of the flesh and character of the skin are usually noted at this point. Then the eye passes over the hind quarter and the flank. From a position squarely behind the animal, the development of the hind quarters and width of the back are studied more fully; then the examination is practically repeated on the other side. Let us now consider some of the points we have taken and the reason for considering them.

Animals well developed at the points where the choicest cuts of meat lie are especially pleasing to the butcher, and the feeder naturally selects that type of steer which gives evidence of being easily developed or "filled out" at these points. For the breeder, however, although he must consider these, there are other characteristics, some of them of as great or greater importance.

Two specially important points the breeder should have constantly in mind in making his selection are constitution and natural flesh. With the first of these the butcher has little concern, and it is only of relative importance to the feeder; but to the breeder the entire future success of his undertaking depends in a great measure upon the vigorous constitution of his stock. To indicate this, the ribs should be long and hooped, so that ample room is provided for the vital organs and the stomach; the chest broad and deep, indicating ample breathing capacity, and the nostrils wide and full.

Aside from thrift and vigor, which come with a good constitution, nothing surpasses in importance the natural flesh an animal carries. This is not the acquired fat which may be put upon any animal to a greater or less extent at the feed trough, but to the red meat or muscle which no amount of feeding alone will develop, but which is so essential in first-class beef, marbled in with the feed-bin product. This is a quality that cannot be acquired. It must be the nature of the animal to produce it, and probably no other characteristic is more certainly passed down from generation to generation than this tendency. Hence no other quality is more necessary in the bull which is to take his place in the breeders' yards. A bull that is deficient at this point betrays a weakness which renders failure of the herd inevitable.

The nervous system of the breeding animal is vastly more important than to the butcher steer and can hardly be given too close consideration. For practical purposes all cattle may be divided as of nervous and phlegmatic temperaments, although the term nervous, as here used, does not by any means express the unpleasant irritability and quick excitement which is commonly associated with that term. Rather the nervous temperament indicates strong and well-developed nerves, the senses and all the bodily functions alert and prompt, but under self-control. The phlegmatic type tends rather to sluggishness, and may in many cases even be a deficient feeder, although some of that class take on flesh quite readily. An especially hard animal to fatten, though, is almost always of the phlegmatic type. By all means the breeding animal should have a strong and well-developed system of nerves.

Quality means smoothness, fine bone, soft hide and mellow flesh. Usually an animal possessing it is an easy fatterer, although sometimes the rough and coarse steer will outgain the other, owing to a more vigorous constitution. This is one of the breeding characteristics which the owner must watch constantly in order to keep the members of his herd with enough quality to show a reasonably smooth finish, and still not impair the size of bone or of the animal very greatly. Sometimes an entire herd in which this feature has been overdone becomes so reduced in bone, size, and vigor, that the introduction of a bull decidedly coarse in his tendencies will work a vast improvement, though it is much better to so judge the successive generations that neither extreme in herd or bull will be desirable.

Johnson Co., Ill. W. H. UNDERWOOD.

Some Live Questions on Live Stock.

Editor "The Farmer's Advocate.": As it seems to be the desire of our agricultural press that the small breeders should receive greater recognition at our large agricultural exhibitions, kindly permit me, as one of that class, to present my views of the case.

I firmly believe it is impossible for the small breeder to receive any material benefit by exhibiting his stock at those large fairs, because we find such a large proportion of the best prizes won by our importers, dealers, large breeders, and governments also who have spent large sums of money in securing the best specimens of the breeds they are interested in, and, while giving them all honor and credit for the grand work they are doing for Canada, by bringing to our country such valuable animals, the blood of which, though perhaps largely diluted, must eventually find its way into the studs, herds and flocks of the smaller breeders, how can we compete successfully in the face of such opposition?

Again, as long as the present prize-giving system is in vogue we will still be unable to receive any benefit, because of the inevitable result of that system. Prior to forty years ago it was the custom, in our public schools, to give a reward of merit to every pupil with the hope of encouraging them to greater efforts. About forty years ago it was discontinued, because, while undoubtedly encouraging a few of the brighter pupils, it discouraged the many who were not so brilliantly endowed, and, yet forty years after we find this same system practiced, with this difference, only a few can win because only a few prizes are offered in each class, but we find exactly the same results benefiting and encouraging the few larger breeders, discouraging the many smaller ones who receive no prizes, and consequently not much advertising of our stock. Under such conditions why should we exhibit? Adding a few prizes would not help. The larger breeder could take them.

On the other hand our large exhibitors would not be benefited if we should exhibit our stock, because when we farmers and stock breeders visit those fairs we go to see the very best specimens of the different breeds we are interested in, not to see a lot of stock, possibly very meritorious, still may be not much better than we could see at home. Neither would we increase the educative value of those exhibitions; it is the very best specimens available that would and should be used as object lessons. They cannot directly benefit us. We are no "drawing card" for them. And yet we are greatly, although indirectly, perhaps, benefited by them because the larger breeders are undoubtedly encouraged, and anything which adds to their success must be felt through all the branches of our live-stock interests. Where would we small breeders get our material for improving our herds, if not from those who, by reason of multiplication, by production of their superior stock are enabled to sell to us smaller breeders at lesser prices than at what they purchase? We, again for the same reason, multiplication by production, can sell to the farmer to improve his stock for commercial purposes at a lesser cost than at what we purchased. I believe our large exhibitors and our smaller ones also are doing all they can do for our live-stock interests under that system.

The "midway", "thriller" and the "circus," while possibly injurious to the morals of our agriculturist, are doing very little, if any, harm to our live-stock interests. Are those interests so fragile and weakly as to be damaged by such attractions? If so, would some kind reader please explain? Why criticize and condemn our agricultural boards of management, unless able to prove the criticism and suggest a remedy. Is it not reasonable to suppose that the directors of these societies, representative men as they are, interested in live-stock interests as they must be, are doing all in their power to further these interests? How came we to be wiser than they? But because the larger exhibitions appear to encourage the large exhibitors, it does not necessarily follow that the smaller exhibitions encourage the smaller breeders, because here again at many of our township and county fairs the large breeder is again in evidence, reaping the just reward of his labors. The same prize giving system is also in force with the same results. Is it not a fact also that the greater part of the pure-bred stock, raised in any district, is sold long distances from where it was raised, very little being sold in that neighborhood or in the territory covered by that fair? Then, why exhibit at the smaller fairs if we must find other means of reaching our customers? Are the small fairs doing any good to the live-stock interest, or to any other branch of agriculture? Doubtful. Are they educative in the judging of live-stock? Very little. All the stock being judged at the same time at our small fairs, it is only possible to see one class of stock judged at one fair.

Our Farmers' Institutes are inaugurating stock judging contests, our O. A. C., is giving a

short course on stock judging also. Is it not because our agricultural societies have failed to impart this information? If they are a success in this respect why spend government money in duplicating this service? Also of what benefit is a two-bushel bag of prizewinning hand-picked grain to the cause of agriculture? Does it encourage clean farming, or does it insure that a reasonable amount of good clean seed could be purchased from that exhibitor? Are not our seed fairs and standing field competitions offshoots of dissatisfaction with existing conditions? Are they not more likely to succeed in encouraging clean farming and guaranteeing good clean seed than the system practiced at our small fairs? This is a business age; why not do business by business methods? If our small fairs are not helping agriculture, why spend government funds in perpetuating this system?

How does the stallion inspection law affect the small breeder? Is it of any benefit? Very little. The crying need of the horse industry in Canada to-day, in the draft breeds at least, is more really good sires. I very much doubt if there is in Canada to-day a really good draft stallion whose powers of reproduction are not greatly overtaxed, unless protected by the common sense of his owner or an exorbitant service fee. Many of the best accept from five to ten or eleven services a day in the breeding season even then turning some away, which must then be bred to a sire inferior to that to which the owners wished to breed. Many farmers at present are breeding to what they know to be inferior sires who are not so much sought after, because, at present high prices, a tolerably fair foal is a good deal better than no foal at all. Why is there such a demand from the "West" for our Canadian-bred stallions, many of them pretty fair, but a large number of them, though registered, not even the making of good geldings, there being many better specimens of horse flesh working in the streets of our cities? Does it not emphasize the need for a vast number of good imported stallions? Private enterprise, unless the owner has quite a number of good breeding mares, cannot meet the demand. \$1,000, \$1,500 or \$2,000, stallions are a rather risky speculation for private enterprise, because, owing to the scarcity of really good mares in many districts, the service fee cannot be placed high enough to recoup the owner. Government owned stallions, at a reasonable fee, is the only adequate solution of the present condition of the horse industry. Surely if we are wealthy enough to build a great national highway from city to city largely for the benefit of the "joy rider," or if we are wealthy enough to contribute \$35,000,000, with hints of more to follow, for an addition to Britain's navy, or if we are able to build, equip, and maintain a navy of our own, which in all probability may never be needed, we should be able to finance a scheme, the original outlay of which would be materially reduced by its earning power by service fees. Instead of this we have the stallion inspection license law a nice harmless measure, apparently not intended to meet the requirements of the present, but more especially adapted for the needs of the hereafter where conditions are already perfect. The mountain labored and brought forth a mouse. Does it not seem reasonable that our government, having spent large sums of money in attracting settlers to develop the West, and having thereby created the demand for increased motive power to develop it, should also make additional grants for the purpose of producing more good horses to all the settlers so attracted to settle in the West? The rapid development of that part of our country is undoubtedly retarded by the scarcity of good horses. Government money for everything, else why not for this?

Would a great National Dairy Show be of any benefit to the small breeder of dairy cattle? No. Would a show of dairy appliances in connection therewith enhance its value? Not at all. The manufacturers of those appliances advertise their wares to our doors selling them to us on trial, why then go to a dairy show to see them? What benefit was the dairy test at the St. Louis Exposition to our dairy cattle interests? Did it prove, because those Jersey cows there under test were the most economical producers, that the Jersey breed led all other breeds in economical production? No. It simply proved that those Jersey cows there under test were more economical producers than the representatives of the other breeds so tested.

Did it prove that, because those Holstein cows did not finish the test, the Holstein breed of cattle are quitters? Not at all. It proved nothing of any practical benefit to our dairy breeds. Have not the Holstein cattle risen in public favor more rapidly since that test than has the Jersey breed? Yet they were proved quitters. Their popularity is due to the weekly, monthly, yearly official test. The Holstein breeders are doing business in a business manner by business methods. Did the recently three-days' test at Guelph Winter Fair prove that the grades are

greater producers than the pure-breds? It only proves that after all the intelligent care bestowed on them by their breeders, after all the encouragement supposed to have been given their breeders by our agricultural exhibitions, after all the educative influence supposed to be imparted by the judges (past masters of their art) in the show ring, after all the supposed benefits of three-day tests, it was possible for a grade cow to outrank her beautiful, blue-blooded, probably \$500 or \$1,000 sisters in the most important function of a dairy cow. Not a very strong recommendation for our methods of improving the dairy qualities of our cattle. Did it prove that the Holstein bull that sired this championship cow was the most potent factor in her splendid performance? If it did, and he was bred to a Holstein two-cans-of-milk-per-day cow, should not the product of that union be a whole "cheese-factory"? It should. Yearly official testing will do more for our dairy cattle than all the national dairy shows, three-day tests, and agricultural exhibitions in existence. Is it a business way of doing business in a business age? Is it necessary to test the dairy qualities of our beefing breeds? Yes. The presence of so many inferior beef cattle on our live-stock markets is largely due to the insufficient development of the dairy qualities of our beef breeds. The dairy qualities of any breed of cattle must inevitably determine the value of that breed of cattle to the live-stock interest of our country, even in our beef breeds, if the grade females, produced by crossing and recrossing to that breed, are not profitable producers of dairy products our farmers, who are the real judges and testers of our breeding operation, will discard them, and the males that would have been produced by this crossing to the beef breed and that would have been good beef animals, are obviously not available for the beef trade. Unless the dam by her dairy products will pay her way the deficit cannot be gained, and a fair profit returned by finishing her son for beef.

Over forty years ago our farmers were turning from the beefing type, and as the dairy Shorthorn was not in evidence at that time they were forced to resort to dairy-bred sires of the dairy breeds in order to produce profitable producers of dairy products with the inevitable result of producing inferior heifers. The farmers of the "West" are to-day crying for the dairy Shorthorn. They also have rejected the beefing type. But more than this the Shorthorn breeders, the creators of the beefing type are turning to the milking Shorthorn rejected by its creators. Could any greater evidence be found proving that the beefing type must go? And yet we find at our Great Winter Fair at Guelph the beefing type is encouraged. Why should we small breeders exhibit our fat cattle at Guelph? How would we be benefited? How can a fat-stock showing benefit the live-stock interests when it has been rejected by those interests? What educative influence has a fat cattle show in reference to the beef industry?

We find that many of our most successful Shorthorn, Ayrshire, and Holstein breeders, breeders of long experience, some of them having the added knowledge of their father's operations, breeders who have benefited by showyard success, are finding it necessary or expedient or perhaps both to organize combination public auction sales for the profitable disposal of their surplus stock. Herein lies the solution of the greatest difficulty in the path of the small breeder. If a series of public auction sales were established in the winter, preferably after Jan. 1st., at convenient centres where suitable accommodation could be provided, where the small breeder and the larger one, if he wished, might offer his surplus stock for sale, it should greatly facilitate business between seller and buyer. It would be doing business in a businesslike way, by business methods in a business age. It would be the quickest and most reliable indicator of the trend of trade. The trend of trade is the infallible guiding star of our breeding operations, because if the grades produced by the pure-breds do not meet the requirements of the trade they were intended to fulfil they will be rejected by the caterers to that trade. By the test of the public auction sale it would not have taken a century to find the need for the milking Shorthorn. It should prove a greater educator than our agricultural exhibitions, national dairy, or fat stock shows. At the public auction sale we would have the privilege of handling the animal, we would have the catalogue showing the breeding and other descriptive foot notes, would see the actual value put upon our breeding operations by the buying public, the judges with whom we must finally deal, would see what families or strains of breeding were most popular. The young man contemplating pure-bred stock breeding would learn better where to place his cash, and the breeders themselves might also learn the necessity of improving their operations. It is a business way of doing business by business methods in a business age. The day is not far distant when the farmers of the "West" will be as anxious for our cattle, sheep and hogs, as they now are for our

horses. When that day comes, if cheap passenger fares could be secured, and part of the Government grant to our agricultural societies could be directed toward lessening in part or altogether the freight rates on pure-bred live-stock to the West, it should boom the live-stock interests of Canada. Yearly official testing and the public auction sale will do more for our live-stock interests than all other agencies that have been exerted in its behalf.

York Co., Ont.

J. T. PEACOCK.

[Note.—We cannot agree that the small breeder does not derive any benefit from exhibiting at any good show, whether it be large or comparatively small. Outside of our "millionaire" farmers, who farm for pleasure, the greater number of our large stock breeders commenced on a comparatively small scale, and their show-yard winnings were not always as they now are. Fair competition cannot injure any breeder, large or small. The public realize that all cannot win, and the second prize animal may be just as valuable as the first. The exhibitor's animal is never injured by being rightfully beaten by a superior individual. Our importers and extensive breeders do not seek to quash competition. It is little honor to win where one animal comprises the class. The system of awarding prizes should not discourage breeders who fail to win, but there may be room for improvement in the awarding in that there might be more and better arranged classes for young breeders and new exhibitors, and after all the difference in the "large" breeder and "small" breeder is more a matter of numbers of stock rather than so much better quality of stock. There is little to hinder a man who shows one horse or one cow from having that one as good as one of the "large" breeder's twenty or fifty. We are often too easily discouraged.]

We cannot agree that the entries of the smaller breeder do not help the exhibition, providing these entries are creditable. Small entry lists mean lack of interest invariably, and while the exhibitor may think his entry is not appreciated by the onlookers, in case he does not win, there are always a number present at the ringside who are not so fortunately situated as to have good stock, and any entry of a good type appeals to them whether it wins or not, and besides there is always a chance for difference of judgement. "Thrillers" and attractions take large amounts of money which might be spent on the agricultural end of the show, and, while they may be necessary, detract more than one might think from the interest in live-stock. Live-stock breeders must be encouraged to compete by good prizes and also fairness, and justice at the hands of show managements. Live-stock interests are not "weakly" or "fragile," but take away their support and they totter and fall. And the smaller shows cannot be condemned for they reach countless numbers who cannot see any other, and the judging is not all bad. Far from it.

Very often the judging is done by just as capable men as at the larger shows, and justice meted out just as correctly. Don't forget that the big breeders watch these shows, and if there is anything really good exhibited it will find ready sale.

Good seed, to the man interested therein is just as valuable an exhibit as is live-stock to the live-stock man. It is not a question of buying or selling value, or whether or not the man has any more like it. Hundreds see what good seed should look like, are educated and impressed.

We cannot but think that stallion enrolment is a step in the right direction, and while it does not go far enough, there is a movement on foot and likely to bear fruit to make inspection compulsory. All things must have a beginning. Do away with the "scrubs" by this means, and good stallions will soon be more plentiful.

A national dairy show and exhibit of dairy products and utensils properly run could not help but be educative and of value to the industry. Who would say the Chicago International Live-Stock Show or the Chicago National Dairy Show is not of value to live-stock and dairying? What is good for them is good for us. Short-period tests have their faults, but they are not the only feature of a dairy show, and even they do good by advertising good cattle. Neither can a beef-eating people do without the beef type of cattle, but beef type does not mean a non-milker.

Large live-stock sales offer greater chances for the large breeder to monopolize the trade than do shows. Let the small breeder try the consignment sale idea, and see where the best prices go. Our correspondent has hit upon a number of questions which are worthy of discussion. Space does not permit of further comment here, but will some of our readers take the matter up, and give our subscribers the benefit of their opinions pro and con?—Editor.]

A Good Basement Barn.

Editor "The Farmer's Advocate":

I have yours of December 31st. The subject of stable essentials as you have submitted it is, I fear, too large to be handled in a short letter, and in any case I do not consider myself well enough informed to do it justice.

A good stable, from the standpoint of a cattle feeder, is a place where, while maintaining an animal in good health, a certain amount of feed can be turned into the largest amount of beef, with the least labor. This means that there are certain essentials which must be emphasized in stable construction.

The old-fashioned bank barn is now obsolete. It was built for warmth and to save an approach, which are not considered very important points, and built at a sacrifice of light, ventilation and, in many cases, drainage, all of which are essentials.

The labor problem makes the basement barn almost a necessity to-day. The feed and bedding being where it is needed, right over the cattle, saves a great deal of handling and hauling. In valuable pure-bred stock, where health and vigor are of greatest importance, one-story byres and sheds are often used, usually in conjunction with a large basement barn, but for a feeder and finisher with only one barn the basement is best.

An ideal location for a barn is on good porous soil, probably a little inclining to gravel, with a gradual slope away from the barn in all directions. A row of evergreens or a wood on the north, east and west, not less than one hundred yards from the barn, help greatly in maintaining an even temperature in the barn, and at the same time make a protected run for the stock.

No better wall could be wished for than a slop cement wall, if properly built, and a wall one foot thick will carry any ordinary barn. Make sure that the gravel is good and sharp and clear of any surface, and use the directed quantity of any standard brand of cement. Use plenty of good hard-head stone in the middle of the wall, but have none so large as to come within an inch of the outside, as the cement would likely shell off in such a thin layer.

A cement floor is found the most satisfactory in most stables, a smooth hard cement for the feed room and feed passages, and a rougher finish on the places where animals walk or are tied. Many men cover the cement with boards in the stalls; but this is not essential if plenty of bedding is used. It very seldom pays to cement the floor of a box-stall, and it has the disadvantage of being harder to keep dry and is very slippery. A mixture of clay loam and gravel well packed in makes a satisfactory and lasting bottom, and can be refilled at any time. With a cement floor, even if roughly finished, a sloping gutter or any sloping places must be avoided, as this material gets very slippery for cattle in the winter time, even if level.

It would be hard to imagine a barn with too many windows so long as there was sufficient wall left for support, and have these windows hinged at the bottom and drawing inwards from the top, with galvanizing on either side. This method of letting fresh air into the barn, and some of the best known ways of taking the foul air out from the center near the floor and conducting it through the roof, will make an easily controlled and satisfactory system of ventilation. I can see no particular advantage in keeping the stable so warm that manure would not freeze in it, except that very few water systems are built to stand as low a temperature as that, without freezing, and in many stables this would freeze the roots. I believe a stable should be built so that the part where the animals are standing could go considerably below freezing if desired, as in the very cold weather it is almost impossible to properly ventilate and keep up the temperature, and a stable about freezing point is appreciated by most animals at night.

One or two things to be avoided in stable construction are not to set a wooden post in a cement floor or right on one where manure comes in contact with the post. Twelve to fourteen years is the life of an eight-inch post under these conditions, and it pays to use iron for setting in cement, and to raise the cement a foot or eighteen inches above the floor where the post is set on top. Never have the ceiling of the stable less than nine feet from the floor, and in most cases it pays to make it ten feet. A four-wheeled truck, with an iron frame so made that the front and rear wheels are raised a little off the floor to facilitate turning, is usually found more convenient as a feed car than a car swinging from a track, while a car on a track is the best for taking out the manure.

C. F. McEWEN.

Salt Required by Cows.

Salting cows is something that should be left entirely to the cows themselves—that, is, by supplying the salt in boxes. Some people salt their cattle once a week and some oftener, while there are also those who add the salt to the grain ration.

The past fall I installed small boxes between each pair of cows, and decided to keep these filled so as to reduce this periodical little chore, which is often forgotten. The 27th of December I bought 100 lbs. of salt and filled the boxes for 15 cows. The first day of February the 100 lbs. of salt was consumed; thus we have 15 cows eating 100 lbs. salt in 35 days, or two and six-seventh lbs. per day, which averages three ounces per cow. Very few cows get this amount per day, nor would all cows eat this amount, for what would be sufficient for one would not be enough for another. This was plainly noticeable in my herd, as some boxes had to be filled two or three times to others once, and to feed too much salt by adding to the grain ration would be as harmful as not enough. So I think the only way is to have salt accessible to the cows at all times by supplying in boxes.

N. M. A.

On Tuesday, February 11th last, a car-load of lambs was sold on Toronto market, having come all the way from Chicago. Sheep and lambs were in demand, and the supply was not sufficient for the enquiry. Owners say that sheep and lambs are not available in this country, and predict many shipments from Chicago this spring. Choice lambs sold at \$9.50 per cent on the date referred to. This is a fair indication of the shortage of sheep in Canada, and the prospects for money-making in this branch of the live-stock industry. On this same day live hogs sold as high as \$9.10 per cwt. and the best cattle at \$7. Who says there is no money in live stock?

THE FARM.

Good Fertilizer Results.

Editor "The Farmer's Advocate":

I notice a number of references to artificial fertilizers in the agricultural papers at present, and as I have been using considerable quantities during the last four years, my experience might interest other farmers.

In the year 1909 I first used fertilizers, and, wishing to see just what they would do on my mangels, I left part of the field without any fertilizer. The season was dry, but the fertilized land did not seem to suffer at all from the drouth, while the unfertilized plot was severely affected. The result was that I had almost double the crop from the fertilized land. In 1910 I sowed barley on the same land, seeding down with clover and timothy. The effect of the fertilizers applied in the previous year, could be plainly seen on the barley; but on account of scarcity of help at harvest time, it was found impossible to handle the crop from both plots separately. The effect of the fertilizers on the clover was even more noticeable, and you could see the difference to the very line between the plots. Since the first trial, I have used fertilizers every year on my roots and potatoes, always leaving a small strip without any fertilizer to note the difference, which has every season been very noticeable. In the year 1911 the mangels were on the same land as the former year, only I ran the plots of 1911 at right angles to those of the year before, leaving a strip unfertilized. So that I had one piece that had never received any fertilizer, another plot which had received fertilizers in 1910 but not in 1911, another which had fertilizers in 1911 but not in 1910, while the largest area was fertilized both years. The yield from the latter plot was much ahead of the others, the plot fertilized in 1911 being second, the plot fertilized in 1910 a good third, and the plot which had never been fertilized was a very poor fourth. The yield from the main plot, which was fertilized both years, was at the rate of 1,880 bushels per acre, whereas the unfertilized plot only gave 556 bushels. The mangels from the fertilized plot in 1911 were the largest I have ever grown and of the best keeping and feeding quality. My soil is a good medium loam in high condition. For mangels I have always used 400 lbs. acid phosphate and 130 lbs. muriate of potash per acre, and for potatoes about 350 lbs. of the phosphate, with 150 lbs. sulphate of potash. I have never used any nitrate of soda, as I always manure heavily and consider that the latter supplies sufficient nitrogen. In applying the fertilizers, I scatter them broadcast on the land in early April, or just as soon as it is possible to do so.

Halton Co., Ont.

G. W. PEACOCK.

Barn at Lynn River Stock Farm.

The accompanying plan is that of a barn situated on the farm of J. Alex. Wallace, Norfolk Co., Ontario. This barn is 186 feet long and 44 feet wide on a concrete basement wall 9 feet high and 12 inches thick, amply supplied with windows. Windows are 8 feet x 6 feet, placed horizontally, hinged at the bottom. Windows drop inward at the top against a stop, so that air has to enter over the tops of them. Ventilation is effected by means of the windows and twelve openings around the floor as intakes, with six large hay and straw chutes as outlets. Cows and heifers occupy a solid row along the south side of the stable. This row is fitted with steel stalls and stanchions throughout. Stalls are 3 feet 6 inches wide by 5 feet long from drop to manger curb. Heifer stalls are 3 feet x 4 feet 6 inches. The drop behind cows is 8 inches, and passage-way slopes gently from the outside wall to the drop. The slope is 5 inches in 8 feet. The platform on which the cows stand has a slope of 1 inch in 5 feet. The manger is of concrete, 18 inches high in front, with a smooth, hard finish inside, and rounded so that the feed will always be within reach of the cow. The manger is continuous, but woven wire partitions will eventually be used. A woven wire guard 16 inches wide will run the full length above the concrete, along the front, to keep hay and straw in the manger. This guard will be in sections, and can be dropped if desired when cleaning out mangers. Water is supplied by bowls in front of the cows.

The horses occupy the north-west quarter of basement, with eight stalls 5 feet wide and 7 feet 6 inches long, not including manger, and two double stalls ordinarily used as box-stalls. Hay is fed in racks, and any feed that drops falls into the manger, where oats are fed and salt is provided.

In the north-east quarter are eight box-stalls, each 8 feet x 14 feet, the first one being used for gas engine, pump and cream separator.

Under each approach is a root cellar 14 feet x 14 feet, opening into the mixing room.

Between the approaches are two silos, each 12 feet x 40 feet, also opening into mixing room. The granary is located on the floor above, between the approaches, so that grain is also convenient to mixing room.

At each end of the main floor is a large box 44 feet x 30 feet, and between the drive floors is a mow 44 feet x 45 feet. The driveways are connected under the mow, so that the teams come in one approach and out the other.

A steel hay track runs the full length of the barn, and in the basement a little carrier track runs the full length on both sides. Manure is drawn to the fields every day.

A strong deputation is to be sent to Toronto, February 21st, from Guelph, Ont., to interview the Provincial Minister of Agriculture, with a view to retaining the Ontario Provincial Winter Fair at Guelph.

To Plow Toronto's Vacant Lots

At the Annual Convention of the Ontario Plowmen's Association, held in the Canadian Foresters' Hall, 22 College Street, Toronto, Tuesday, February 4th, at 2 p.m., the following officers and directors were elected: President—Frank Weir, Agincourt; First Vice-President—Jas. McLean, Richmond Hill; Second Vice-President—A. P. Pollard, R.M.D.3, Zion; Treasurer—T. A. Paterson, Ellesmere; Secretary—J. Lockie Wilson, Toronto; Directors—L. W. Smith, Millbrook; W. H. Hunter, Napanee; Alexander Edgar, Ayr; A. Warnica, Craigvale; W. A. Dickieson, Rockwood; Dr. A. E. Hanna, Perth; R. W. Holmes, Ardrea; E. Allsopp, Minesing; A. P. Pollard, R.M.D.3, Zion; T. J. Chisholm, Hornby; Frank Weir, Agincourt; N. W. Malloy, Teston; Jas. McLean, Richmond Hill; W. Doherty, Agincourt; T. A. Paterson, Ellesmere.

All the Branches were represented, and the meeting was a success both as regards the large number of delegates and members in attendance and the interest in all matters brought up for discussion. The Treasurer's Report showed the society to be in good financial standing.

The constitution was amended as follows: That the Central Association set aside 50 per cent. of the Government grant, to be apportioned equally between all the Branches, and the remainder of the funds at the disposal of the Association to be apportioned two-thirds on membership and one-third on cash expended.

The following resolutions were passed unanimously:

1.—That we, the Ontario Plowmen's Association, in meeting assembled, after hearing the suggestion of our secretary, J. Lockie Wilson, re movement on foot in the city of Toronto for the utilization of vacant lots, hereby tender the services of fifty plowmen, with teams and plows, to the City Council of Toronto, and will arrange to have them come to the city at a date to be fixed in the spring, and will, free of charge, plow a number of such lots as may be selected by a committee of the Council.

2.—That, whereas the Ontario Plowmen's Association requested the Federal Government for a grant of \$27,000, to be apportioned among the several Provinces according to population, and received a reply from the Hon. Martin Burrell, Dominion Minister of Agriculture, that our request would receive his earnest consideration, and whereas the Federal Minister of Agriculture has placed at the disposal of the Ontario Government for agricultural educational purposes the sum of \$195,000, we therefore respectfully apply to the Hon. James Duff, Minister of Agriculture for Ontario, for a grant to the Ontario Plowmen's Association out of the aforesaid Federal appropriation, \$5,000.

3.—We are in agreement with the several farmers' organizations that have passed resolutions re the removal of duty on traction ditching machines which are not manufactured in Canada. As plowmen, we are vitally interested in the cultivation of the soil, and are of opinion that proper drainage is necessary thereto. We, therefore, join with the other organizations in requesting the Federal Government at the present Session of Parliament to place traction ditching machines on the Free List, and that our secretary forward a copy of this resolution to the Right Hon. R. L. Borden and the Hon. Messrs. Burrell and White.

Sweet or Bokhara Clover.

Editor "The Farmer's Advocate":
The writer has had three years' experience with this most valuable plant, and has a small idea of the great use to which it can be put as a feed and as a foliage crop.

This great old clover, once thought to be an obnoxious weed, has proven to have advantages that no other plant has for the farmer.

1st.—In planting beans one can take this crop off and sow fall wheat, and at the same time seed with sweet clover, and when wheat is taken off the following summer you will find a lot of grand pasture that fall, and the following May or first of June one has from twelve to eighteen inches of the very best fertilizing foliage and roots to plough down, it containing one-third more nitrogen than the alfalfa plant. Or again one can seed with oats, and the following spring he has this early foliage in time to plough down for corn, potatoes, beans or roots, and still not losing any time with the soil.

2nd.—This clover will catch on poor land where others fail, and when once seeded with this valuable plant there would be no trouble to get a catch of alfalfa, as the soil would be thoroughly inoculated.

This last year I had corn on sweet clover sod and it was one of the very best crops, growing at a height of fourteen feet, was some six or eight days earlier and eared heavily.

3rd.—As a pasture it is a grand milk producer, and cattle soon get to relish it.

The foliage with its rapid growth supplies a great amount of feed on any kind of soil, even in an old gravel pit or any worn out soil, and, at the same time, wonderfully increases the fertility of the soil, and at little cost. One great advantage with this clover is that the hard winter has little effect on it.

As to seed, I find any seed store can get it at a price about the same as alfalfa, and it requires about one peck to the acre for seeding.

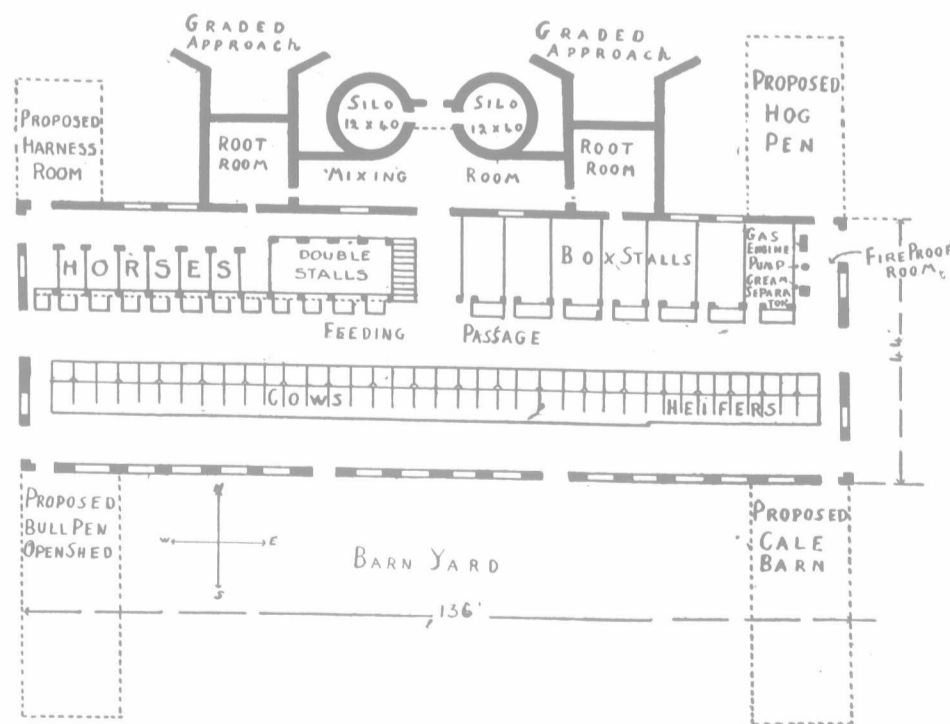
C. WITTS.

[Note.—The statement that the foliage and roots of sweet clover contain one-third more nitrogen than the alfalfa plant may require explanation. Henry gives the quantity of nitrogen per thousand pounds of green forage as 6.1 lbs. for sweet clover, and 7.7 pounds for alfalfa. Perhaps Mr. Wits was assuming a greater yield of sweet clover.—Editor.]

Agriculture for Clergymen.

Much is being said, and some things done today regarding the training of teachers for rural schools. But what is being done in the way of providing special training for the country ministers? The need for it is fully as great as for the teacher, and the same argument holds good for both—namely, that any leader or public servant to be truly efficient, must be in full sympathy with, must understand, and must live the daily life of those with whom and for whom he works. Farmers do not lead farmers, and here comes in the minister's opportunity. The country minister must be a leader, yes, a leader in better farming. For this leadership he has some advantages not possessed by the teacher. He is associated with the adults as well as with the children and young people, and he is not likely to be so migratory as the present country teacher, however, both teachers and preachers must know agriculture, and the social and economic conditions of farm life. This is positively fundamental. The minister of a country church ought to know more of what Jesus knew, and of what Zavitz, Howitt, Dean, and the Days know; that is, a great deal about farm crops, the flowers of the field, the cattle and the soil; in fact, he should know the science of agriculture right up to date. Arrangements should be made to give young ministers contemplating work in rural districts a course in agriculture. For much of the present neglect in the matter of special training for our rural pastors our universities are accountable. The work of the theological school is not planned to meet the specific need of those entering the rural field. Perhaps the nucleus of the situation is that too few students purposely and consistently plan to undertake rural work or make it a serious life study. The country parish is regarded as a stepping stone, the sooner passed the better. We need a country clergy who will study the problems of rural life as city clergy study those of urban life.

It is an entirely wrong idea that the "back numbers", and the very young among ministers will do for the country. There is no greater opportunity in the wide world for noble work by the young minister than in the rural field, if he is properly trained for it. The sooner that students generally, and theological students particularly, appreciate the fact that the profession of agriculture is just as dignified as any other profession, and that the farmer is, in truth, God's best expression of an ordinary man, the better it will be for all concerned. There are



Basement Plan of J. A. Wallace's Barn.

many problems that a minister can help to solve. Business principles must be applied to farming; improved methods put into operation, and the farmer himself aroused from his indifference. These things cannot be accomplished by talk and bulletins; the farmer must be reached by personal touch, and that through the occupation whereby he lives.

The church can inspire the country people with a desire to know and appreciate nature and rural life, and can also inspire the ideal of self-culture, but it must not neglect to encourage the use of such means and methods as will improve the quality and quantity of the products of the farm. Social, church and school prosperity rise and fall with production on the farms. It is very well to say that the farmer must give of his time and means for the enterprise which makes for the good of the community, and that the salary of the preachers and teachers should be increased, and the roads should be improved. But these things will be slow in coming, and society can have small claim upon the farmer until farming is made more profitable, and the farmer is receiving a reasonable income for his labor.

F. C. NUNNICK.

Agriculturist of the Conservation Commission, Ottawa.



Drainage Canal, Point Pelee.

Clover as a Fertilizer.

Early in the spring a field of four acres was ploughed four to five inches deep. The soil was a sandy loam of medium quality. In the previous year barley had been grown on two acres of this land, and with it ten pounds of red clover seed per acre had been sown. This clover had made rapid growth after the barley was harvested, and before winter set in it had made a good mat of foliage about a foot high. One acre had been in brome grass, half an acre had been sown with a mixture of pasture grasses without clover, and an adjoining half acre with pasture grasses associated with a goodly proportion of clover.

After ploughing and harrowing the whole area of four acres, it was sown with oats—the Bavarian. Where clover had been ploughed under, its effect was very clearly shown in the growth of the oats, the crop grown after clover being much greener in color and more vigorous in growth of both leaf and stalk, and when measured about the time when the heads of grain were shooting out, the plants, on an average, were about a foot taller than the oats on the adjoining land, where no clover had been used.

When harvested the results were as follows:—

	Oats.	
	Bush.	Lbs.
1 acre sown after brome grass.....	33	8
1/2 acre sown after mixture of pasture grasses without clover	36	16
1/2 acre sown after mixture of pasture with clover	46	4
2 acres sown after barley with clover	43	28

The average of the crop sown when no clover had been used was 34 bushels 29 lbs. per acre, while the average of that sown after clover was 44 bushels 33 lbs.—a difference of 10 bushels 4 lbs. per acre, in favor of the crops grown after the ploughing under of clover.

FRANK T. SHUTT, Dominion Chemist.

Draining Marshes Below Lake Level.

We have all heard of the dykes of Holland. We have read of how the brave and stolid Dutchmen, with extraordinary labor and perseverance, first erected these barriers against the encroaching sea, and now by canal and windmill pumps, joined to expert agricultural methods, they transformed sandy, sodden wastes into a very paradise of garden and pasture land. We have, with admiration for their pluck, learned also how they have again and again extended these dykes further outward, wresting from the wild North Sea added stretches of territory. But it will come as a real surprise to most of us to learn that here in Canada there are large areas on which splendid crops are grown that are lower than surrounding or adjacent waters.

The centre of the north half of Pelee Island was, until 26 years ago, a marsh, across which sportsmen paddled their canoes in their chase after wild ducks and geese. About that time L. S. Brown, who owned a part of the marsh, influenced Dr. John M. Scudder, of Cincinnati, to buy from the McCormicks, of Pelee Island, a large tract of marsh land and undertake the draining of it by embanking at one point to keep out the lake, and dredging a canal from which the water as it collected could be pumped out. He installed a pump at the north end of the island, a large dash wheel 26 feet in diameter, which worked well for a number of years. The dredge by which the canal was scooped out was built right there in the marsh and set to work at once. When the work was completed, Dr. Scudder had the land surveyed into small farm lots, and, after putting in a lot of small ditches, proceeded to sell the property. The best of it brought \$35 to \$40 per acre. After five or six years, a considerable number of people having bought farms, the owners of these places, with

Dr. Scudder's cordial approval, got the whole scheme placed under the Municipal Drainage Act. The canals were then re-dredged, and two more pumps installed—one at the east and one at the west side of the island—the total cost being \$25,000. Debentures were issued to meet this expenditure, the payment of which was spread over a period of 20 years. New and better pumps have since displaced those installed at first. The engines at the east and west pumps are now of 30 h.p. each, and the one at the north end 45 horse-power. The pumps are operated day and night during a freshet, and as needed at other times, standing idle for weeks and sometimes months together in very dry weather. The average yearly cost of pumping is rather over \$3,000. This and other expenses of maintenance are levied as yearly taxes on the lands affected, about 5,000 acres in all, according to the engineer's estimate of benefit received. Thus on these lands there is an addition to ordinary taxes of from 30 cents to \$1 per acre annually for this purpose.

The "big marsh" in this system is, roughly speaking, in the form of a huge letter T, the base of the letter being at the north end and the cross head extending from the west to the east side of the island. The canal must be altogether about twelve miles in length, and is so placed that all the marsh on both sides of it is drained or drainable. The earth thrown out by the first dredgings is on one side only and forms the roadway, which is always high and dry except for sticky clay mud on the surface at times. The depth of black muck in the marsh is scarcely anywhere more than two feet, and shades out to nothing as it approaches the higher land. Untold damage was done in the earlier days after drainage by fire getting in and burning off the muck over considerable areas. It is said to have been burned in some cases on purpose so that breaking up could be more easily done.

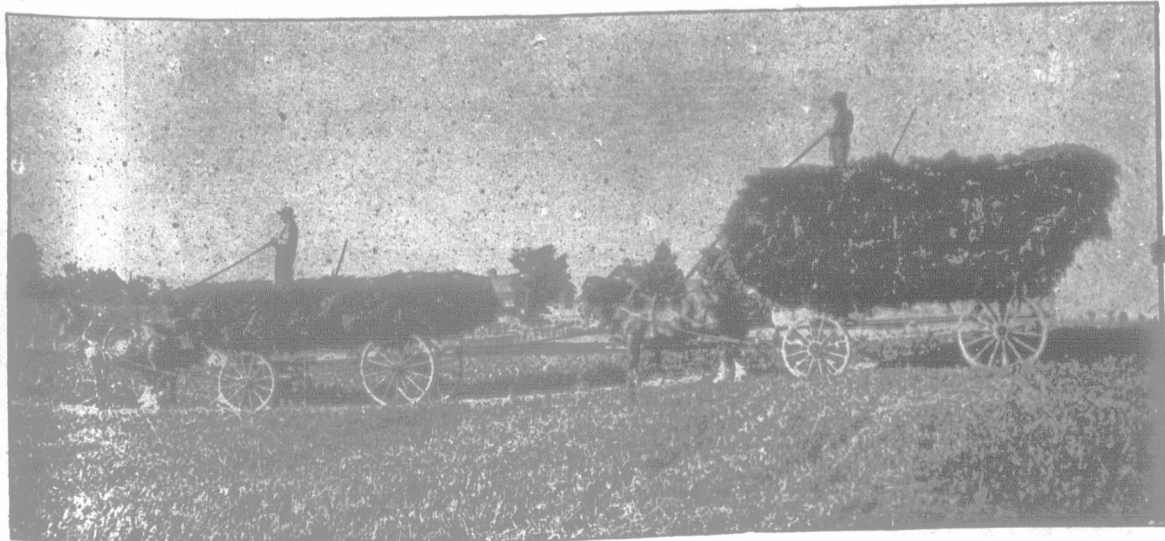
Last year an American dredge company, in contract with the municipality, cleared out and deepened the canal system, throwing the slop on the other side from that on which the roads run. The aim is to keep the water in the canal about eight feet lower than the lake.

The principal crops grown on this drained land are corn, tobacco and potatoes, with oats, wheat and hay interspersed. Onions were tried by several farmers last season and large yields secured. It is the boast of the Pelee Islanders that they can grow anything on the island.

Besides the "big marsh," there are some smaller marshes that are also drained artificially, the whole pumping outfit, whether the power be derived from windmill or steam engine, being owned and operated by the individual farmer, to whom the marsh belongs.

Point Pelee is a long, tapering cape, extending twelve miles straight out into Lake Erie from the Essex shore. A passage of eight miles in width separates the extreme end of the point from Pelee Island, which lies in a southwesterly direction. About three miles of the base of the point is of low-lying clay land, a few feet above the level of the lake. The outer end is sandy, covered with red cedar, and for a distance of about three miles back from the tip is dry from side to side, though quite low. But the balance of the whole cape was originally but a vast marsh or shallow lagoon, bounded on either side by a low sand ridge of varying width, which the waves and winds had cast up.

The greater part of this is unreclaimed marsh



Clover Wins.

These two wagons contain yields of oats from adjoining plots of uniform size. That to the left is the crop after grass; yield, 34 bushels 13 lbs. per acre. The other is the crop after grass mixture, containing clover; yield, 46 bushels 4 lbs. per acre.

still. But the late A. McKay, with other associates, was promoter of a scheme by which a drainage canal was dredged out across the point through the marsh, from west to east, and making a turn when near the east shore, was extended some miles in a northerly direction parallel with the beach. The area of marshy ground, included between this canal and the higher ground at the base of the point and benefited by the drainage thus made possible, was about 3,300 acres. The length of the canal was six miles, the width 32 feet, and the depth, on an average, 8 feet. The original cost was about \$14,000, met by municipal debentures, which are being paid by tax on the lands affected. The earth dredged out was deposited on the outward side—that is, toward the south and toward the east. Outside of this bank, the marsh is marsh still, growing thick with tall water grass, through which it is difficult to push a boat, even where there is water enough to float it, and towards its southern end, especially, having open ponds of deep water occurring. Inwards from the canal are fertile farms of deep black soil, the buildings showing that the farms have but recently been settled upon, but they are rapidly improving.

The canal was first pumped out eighteen years ago. The two steam-power pumps installed at first have been increased to four, each guaranteed to throw forty thousand gallons per minute, though not coming up to that in ordinary work. The water is raised from five to eight feet. The annual cost of operating has varied from thirty to eighty cents per acre. The taxes are levied on the basis of benefits derived and liability to damage. Though the outlay has been large, the increased value of the land has more than compensated for it.

The depth of black muck is, on the average, much greater than on Pelee Island, running from two to six feet generally, and in some spots to a much greater depth. Besides onions, which, as noted in "The Farmer's Advocate" of Jan. 30th, are the chief specialty of "the marsh," potatoes are also grown largely. Wide corn fields may be seen as well and other forage crops, but as yet there seems to be more fodder than stock to consume it or barns to house the stock.

A dredge is at work digging out a new canal, which, when finished, will enclose and reclaim five or six hundred acres more of the marsh. This, however, is a private undertaking, and but just begun. There is little doubt that more and more of this great paradise for wild water-fowl will be reclaimed as time passes, and made to rival Holland itself for fertility and prosperity.

"There is no manufacturing business that has its machinery standing idle so much of the time as has farming," said Professor H. C. Price, Dean of the College of Agriculture, Ohio State University, in a recent lecture. He pointed out the case of the binder, which is an expensive machine, yet it is needed only a few days in the year. "The average life of farm machinery is ten years," said Professor Price, "and counting depreciation and interest, it costs each year about 16 per cent. of the original investment to keep it on the farm. The way some machinery is cared for it will cost more than this. Where it is possible to do so, it is more economical to rent machinery than to own it, on the smaller farms." The fact that the machinery is such an expensive part of the farm equipment, indicates that better care of this machinery is an economical feature of successful farm management.

THE DAIRY.

A Phenomenal Three-year-old Holstein.

Short-time official tests of dairy cattle do not always show a cow's ability to produce large quantities of milk and butter for full milking period of ordinary length. The objection, however, hardly holds good in the case of De Kol Mutual Countess, a Junior three-year-old Holstein heifer owned by G. A. Brethen, Peterborough Co., Ont.

About six weeks after freshening she was given an official test making in seven consecutive days 590 lbs. milk and 24.31 butter, 80 % fat, milking up to 89.3 lbs. in one day. Entered in the Yearly Record of Performance test she produced 18,100 lbs. milk and 600 lbs. fat (or 750 lbs. butter, 80 % fat) in her first ten months. Two hundred and ninety-five days after freshening and when over five months bred she was again officially tested for seven days, making 415.8 lbs. milk and 15.382 lbs. fat. In fourteen days she recorded officially 816 lbs. milk, the last three days of above test totalling 181.7 lbs. milk and 6.85 lbs. fat.

Her seven-day production exceeds that of any heifer of her age, bred or unbred, tested by either Canadian or American Holstein Friesian Associations last year in the 8-months-after-freshening division by over 54 pounds milk and nearly 3 pounds butter; while no Holstein heifer under five years of age in the world

(according to last year's official Report to hand) exceeded her week's production of both milk and fat.

Only three cows, any age, tested 8 months or more after freshening in the official tests of 1911-12, exceeded the milk-and-fat production of this Canadian heifer in her second lactation period, two of these being Banostine Belle De Kol champion butter cow of the world, and High Lawn Hartog De Kol, the second highest in butter production brought out last year. (Both mature cows).

The breeding and individuality of Countess are sure indications of her production, as she is from families that have produced at least 50 % of the world's greatest producers of milk and butter, while she possesses all the essential points of a great and economical producer of the products of the dairy.



De Kol Mutual Countess.

The dam of this heifer, a junior five-year-old (Countess being her first daughter in milk) has produced over 18,000 lbs. milk in less than 9½ months, after giving birth to a splendid pair of bull calves.

On February 11, she had 19,000 lbs. milk, and a correspondingly large amount of fat to her credit, and is still averaging close to 50 lbs. per day, with about 6 weeks in which to complete her official year. Todate she is much in advance of any second-calf heifer in Canada, and, barring accident, should have quite a margin over the best Record for 1 year made by any junior 3-year-old in the world.

GARDEN & ORCHARD.

Mr. Krouse Details His Methods.

I was reading in your January 16th edition about Mr. Krouse making \$425 on one acre.

I have two and a half acres which were in

buckwheat last year. This year I thought of planting early peas, white beans, and cucumbers I have had no experience, and would be much obliged if you would advise me as to what would give the best returns. And also what commercial fertilizer to use on them.

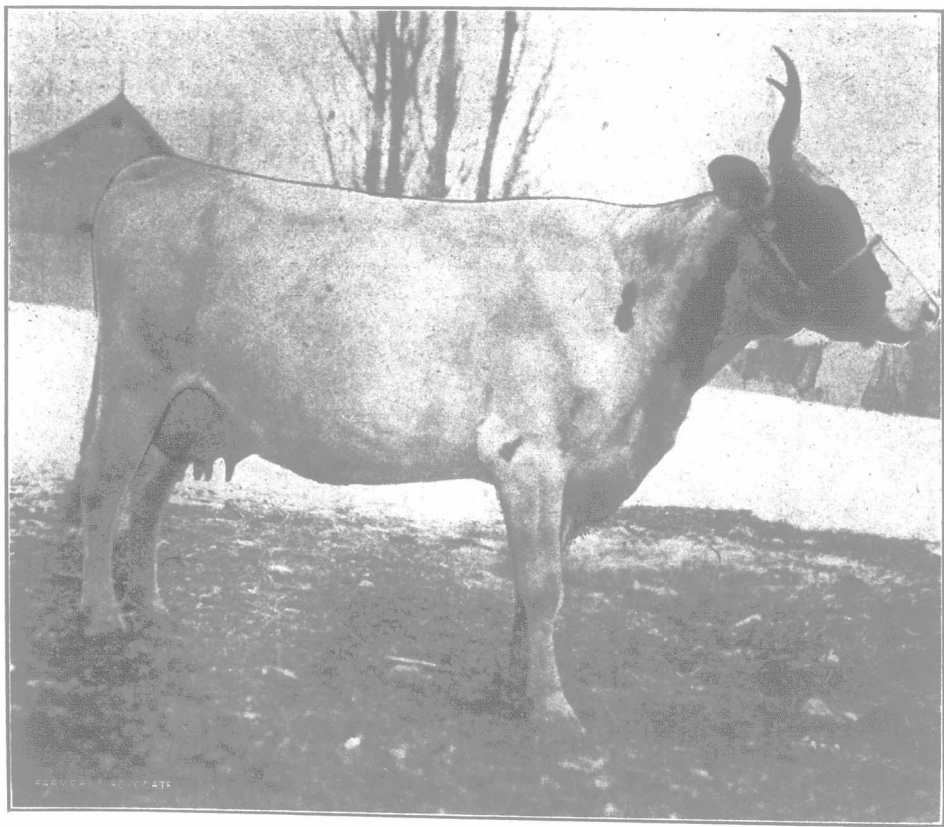
Mr. Krouse does not say what he grew on his one acre the first year. F. B.

[By way of reply to these questions the Editor asks me to give an outline of the work done on my land for four years.

I started with one acre. In the fall I gave it a heavy dressing of slaughter-house manure, and plowed it down. Then through the winter I drew enough manure for summer use, which I put in a pile and used it for hot-beds in which I sowed radish seed. About the first of March I put in three frames 6 feet by 12 feet. As soon as the first crop was finished I put two and two-third frames in radishes again, and one-third of a frame in tomatoes, celery, cauliflower and early cabbage. These I transplanted as soon as the radishes were done the second time, and as soon as they were ready I sold them, using a few for myself. In this way I made \$20.00 per frame out of radishes, \$40.00 for plants, or \$100.00 in all for these three frames. My soil is a heavy loam—not clay—with a gravel bottom. And just as soon as I could get on the land in the spring I top-cultivated it thoroughly, especially for onions. I sowed about half of an acre of the Yellow Globe Danvers and Prize-taker varieties.

The other half I put into early carrots and beets for bunching, a small patch of early potatoes and a few cauliflowers, and as soon as the potatoes were dug I put that ground into cabbage and celery. Now from all of this I had a profit of \$425.00, besides keeping my house and paying for manure.

Seeing the possibilities there were in a small place if well worked, I bought another acre and a half, which should give me greater returns. I built myself a thirty-foot by ten-foot chicken house, and stocked same with Barred Rocks, White and Silver-laced Wyandottes, and bought two colonies of bees. In my second year I worked my land practically on the same plan as the first year, only on a larger scale. With the exception that I put in about half an acre of strawberries, planting Williams, Clyde and Haviland varieties, and a small patch of Cuthbert raspberries. This was one of my best moves.



Violet of Hillview.

Winner of the three-year-old class for Ayr shires at the Ottawa Winter Show. Exhibited by N. Dyment, Clappison's Corners, Ont.

as the strawberries were great money-makers. My second year wasn't so good, as the land I bought was in bad condition. I had in all clear \$800.00. In my third year I built another 90 foot chicken house, and went into more breeds, as I saw there was a chance to make some money in showing birds and selling eggs for hatching. This was another good move, for with what eggs I sold and prizes I won on my birds I cleared \$400.00 out of poultry. I planted 8,000 asparagus roots, which are now among my best money-makers. We had increased our bees to eleven colonies, bought thirty-two colonies of bees and had \$200.00 worth of honey from them, and increased to eighty-five colonies. We had good crops from our land, making in all \$1,600.00.

In our fourth year we did better on our poultry making \$800.00 clear, and we had \$1,000.00 worth of honey. We had good crops from the land, making \$2,750.00 in all. We have been working our land on the same principle as we did in our first year, using abundance of manure and working the land well. Remember one thing we are within one mile of Guelph market, and our stuff is good and we get top prices for it. Without this one would not do so well, as you wouldn't have the market to cater to.

We worked on this plan for about ten years then I decided to buy more land, and I bought seven and a half acres making in all ten, I find this was a mistake as I am not getting as good results, and my expenses are a great deal more. I have decided to sell half my land, and go back to the small way again, as I know it is best. I might say I have dropped the strawberries and the small vegetables as we have increased our bees to 250 colonies, and the most important time of each comes together. I have increased our asparagus to 25,000 roots, as the most important time for asparagus comes in before the busy time with the bees. I have 135 Montmorancy cherry trees and 230 Black Champion currant bushes. I find these good money-makers. The manure costs me \$1.25 per team load hauled to my place, and I get as much as I need from the one man.

In conclusion I would emphasize working the land well, using plenty of manure and being prepared for work when it is ready; also proximity to a good market.

Wellington Co., Ont.

F. W. KROUSE.

Western Hints on Apple Marketing.

"During the past few months," says "The Farmer's Advocate and Home Journal," of Winnipeg, "many complaints have been raised all over the Prairie Provinces because of the high prices demanded for apples. Similar complaints have been raised almost every day during the last decade or more. Westerners, as a rule, do not object to paying fancy figures for many of the real necessities of life or for luxuries. They do, however, dislike an exorbitant charge when they find out that the man who produced the article in question got only a mere pittance for his part in supplying our needs.

"When a person considers last season's apple crop in Canada, the prices charged in parts of Canada in which apples cannot be grown are astounding. Both in British Columbia and Ontario apples rotted in the orchards. The writer visited British Columbia fruit districts last October, and saw apples sold by growers at forty to eighty cents a box. Within a couple of weeks the 'newsy' on a railway train in Alberta offered him apples not as good as '10 cents each; two for 15 cents.' Ontario growers received around the dollar mark for good apples. In October and November Ontario Spys were displayed in store windows in Winnipeg, and offered at \$6.00 or more a barrel. Later these same stores priced apples of a similar grade, and from the same localities at as low as \$4.75. This is a handsome reduction.

"The Dominion Government has promised to investigate the apple business. This should at least bring to light the fact that too many middlemen are getting more than their share. The Western consumer is willing to pay a price that will give the producer all he should get, but he does not care to turn over to middlemen any more than should go that way.

"If we are to have apples at more reasonable prices in Alberta, Saskatchewan and Manitoba, consumers must get closer to producers or vice versa. In rural sections the organized farmers have made a good start by bringing carloads direct from fruit growers' associations in Ontario. In this way they have saved a dollar or two on each barrel without netting lower figures to the men who grew the apples.

"But orchardists in British Columbia and Ontario cannot make the most out of their opportunities for markets in these provinces, if they

depend altogether on business arrangements between their associations who supply the fruit and our associations who need it. There is another part of our population that cannot be supplied through Western organizations. It is necessary, therefore, for the fruit growers to have properly managed distributing and storage houses, so that they can keep in touch with Western demands in season and out of season. The grocer buys his fruit from a source that will be able to fill his order at any time, and without undue delay. This is one factor that contributed to the bringing in of so much American fruit last season, while the Canadian fruit rotted in the orchard."

Co-operation in Growing Vegetables.

The annual meeting of the Ontario Vegetable Growers' Association was held in the Parliament Buildings, Toronto, on Feb. 7th, at 10 a. m. The President, Thos. Delworth, was in the chair.

This was the largest annual meeting yet held by the Association. Representatives from all the branches in the province were present. The chief topic of discussion was the co-operative buying and selling of the supplies and products of the different branches of the Association. One branch of this Association shipped last year 900 tons of produce co-operatively, valued at \$22,331. In 1911 this branch shipped 540 tons, and in 1910, 320 tons. This gives some idea of the possibilities of co-operation in vegetables.

The following resolutions were carried unanimously:—

"We believe it to be in the best interest of the members of the Ontario Vegetable Growers' Association that we should be able to secure good, reliable seed of proved varieties direct from the growers where possible, and we last year succeeded in securing a quantity of such seed, greatly to our financial benefit. We have learned that certain seed dealers in Ontario have endeavored to restrain such trade. Therefore, we, the members of the Ontario Vegetable Growers' Association hereby protest against any such interference with what we believe to be our reasonable rights, and claim that such interference is a species of combine in restraint of trade.

The election of officers for 1913 resulted as follows:—President, C. W. Baker, Tambling's; First Vice-President, W. J. Kerr, Woodroffe; Second Vice-President, F. F. Reeves, Humber Bay; Secretary-Treasurer and Editor, J. Lockie Wilson, Toronto; Executive Committee, C. W. Baker, Tambling's; Thos. Delworth, Weston; F. F. Reeves, Humber Bay; Jas. Dandridge, Humber Bay, and J. Lockie Wilson, Toronto; Representative to Canadian National Exhibition, Thos. Delworth; Representatives to Ontario Horticultural Show, W. J. Rush, F. F. Reeves, Thos. Delworth, and Jas. Dandridge.

Starting an Orchard—I.

[Note.—The series of articles commenced in this issue are written from the British Columbia fruit-growers' point of view. They will, however, be instructive reading for Eastern growers.—Editor.]

LOCATION.

During the long evenings of winter there is a splendid opportunity for careful planning of next season's work. Some may be considering the advisability of setting out a few acres of fruit trees, and a discussion of the conditions that tend to success may be welcomed.

Where there are various lots that may be chosen, or where the purchase of fruit land is contemplated, some of the conditions that tend toward success or against it will not come amiss.

Winds knock off the fruit. This, then, must be considered. In the West it is not such a serious problem, as the winds are fairly constant and the apples learn how to hang on (at least, this seems the best way to explain it). Still, even here, unnecessary chances need not be taken. Trees, clumps of wood, hedges, hills, bluffs, and other obstructions, tend to break up the force of the winds, and the more of these there are between the orchard and prevailing winds the better. Certain localities are subject to gusts of wind at particular seasons of the year. One place comes to mind where every year the orchardist makes it a point to have his McIntosh reds picked by October 1st, for almost invariably a heavy wind strikes his and his neighbor's places during the first week of October. A sheltering bluff is a splendid asset. There are six orchards close together, three of them on a "bench" (a flat stretch of land raised above another flat

stretch, with precipitous sides), about 70 feet below the other. Many times three of the orchards on the higher bench will be thrashing about in the winds, while the lower orchards, sheltered by this upper bench, will be practically quiet and the loss of the windfalls comparatively small.

Winter killing is a common cause of loss. It appears in two forms—"top killing" and "root killing." A knowledge of its causes may prevent locating in a poor place.

Top killing has two causes—a very severe winter and trees going into winter with the wood improperly ripened. In irrigation districts the latter can be controlled to a great extent by stopping the irrigation early in the season, and also by discontinuing the cultivation of the trees. Location here again has some influence—a low spot draws the early-fall, and late-spring frosts, but as it is the fall frosts that are generally responsible for top-killing, it is these we must consider. Trees that have not been ripened early in the season are very susceptible to the sharp early frosts, and it is to these that we should look for the cause of top-killing, rather than the hard winter frosts.

If the ground is in such a location that it is liable to be well saturated in the fall, and where the air is likely to be more or less calm, unless strong winds prevail, we can expect to notice the effects of early frosts. Soil, too, has considerable influence on the growth of trees and quality of fruit. Rich bottom land tends toward an excessive wood growth and always favors wood rather than fruit. Very light soil or gravel, with shallow surface soil, is a risk in some locations. Now, as to the influence of these on winter killing, the soil and its condition has most to do with root killing, and in selecting a location for an orchard, it is well to know the way these soils act on the trees.

In heavy bottom land, or on a deep surface soil, there is little root killing as a rule, because root killing is caused by thawing out and freezing. A deep soil or bottom land holds the moisture, and hence is not quickly thawed by a short warm spell in winter, and it is the mid-winter thaw that is responsible for most root killing. Trees, to winter well, must be dried off early in the fall to allow the wood to ripen, and then just as the hard frosts are about to set in, the ground should be moistened well to protect the roots. In irrigation lands this can be controlled; in rainy districts, to ripen the trees, cover crops, and cessation of cultivation must be resorted to in order that the trees may ripen, and then heavy land will hold the late fall rains, thus keeping the roots protected.

When it is a case of buying a fruit farm, climatic conditions must be considered, such as rains (for excessive rains give a large, but insipid, undercolored fruit), amount of sunshine and cloudy weather. Sunshine has a market value when it comes to coloring fruit. Distance from markets, conditions of the roads, marketing associations, etc., all have their influence.

British Columbia. WALTER M. WRIGHT.

POULTRY.

A Year's Poultry Profit.

Editor "The Farmer's Advocate":

On January 1st, 1912, to find out how much profit there was in the poultry business, I decided to keep a record of all receipts and expenditures. I had on hand 104 hens. We ship to Toronto every Friday evening, and keep account of the checks.

Total receipts for eggs.....	\$254 97
Poultry sold	19 50
Pullets raised (125 at 60c. each)	75 00
	\$349 47
Feed for hens	88 50
	\$260 97

The following is the method of feeding and caring for the poultry:

Morning feed.—Corn meal mixed with butter-milk or sour milk, but I prefer butter-milk mixed in a stiff porridge, with a sprinkling of prepared poultry food.

Evening feed.—All the hard wheat they can eat before going to roost.

Oyster shell is kept always in the hopper, summer and winter; also a fresh supply of cold water every day.

For green feed, I sow two or three rows of cabbage, and take them up in the fall by the roots and put them in the root cellar, and give one or two a day.

My hen-house and hog-pen are cement 18 x 42, one end for hogs, the other for hens. The hens run all through the hog-pen for scratching and picking; then there is a door between the hen-

house and the cattle stable. After I get my morning feeding done, I open this door and let the hens run through the stable to scratch and pick in the litter. Hens must have exercise, and this is just where they get it.

The breed of fowl I keep is Brown Leghorns. They are a very hardy, ambitious bird; they are not very large for table fowl, but as profitable as a larger fowl with less eggs.

Victoria Co., Ont. JAS. CORNISH.

(Note.—We agree that hens must have exercise, but the pig-pen and the cattle stables do not seem to be the proper place to allow them to "scratch." It would be more advisable to keep the hen-house well supplied with chaffy litter and feed the whole grain in it, and to let the hens out in the farmyard on warm, sunny days. Hens raise too much dust if allowed to run in the cattle and other stables.—Editor.)

THE FARM BULLETIN.

Nature's Diary.

By A. B. Klugh, M. A.

Last week we dealt with woodpeckers in general and with the Arctic Woodpecker and Pileated Woodpecker in particular.

There are three other species of woodpeckers which are extremely important, economically. These are the Hairy Woodpecker, the Downy Woodpecker and the Yellow-bellied Sapsucker.

The Yellow-bellied Sapsucker is the only member of the Woodpecker family (Picidae) in Eastern Canada which is injurious. It is the species which drills the rows of round holes in tree-trunks and which strips off patches of bark to feed on the soft cambium layer beneath. The holes are drilled mostly in spring, and the sapsucker drinks the sap which collects in them, returning again and again as more sap collects. Occasionally these holes are drilled so close together that the tree is "girdled" and dies. These numerous holes and the larger wounds made when the bark is stripped off in patches afford a very favorable place for the development of the spores of Fungi, which penetrate the tree and greatly lower its vitality, or perhaps cause its death.

But it is not the number of trees killed by the Sapsucker which constitute the chief damage done by this species, it is the defects in timber which are caused by its work. These defects consist of distortion of the grain, formation of knotty growths and cavities in the wood, extensive staining and resin deposits. Defects due to Sapsucker work have been found in the timber of a great number of species of trees and in many cases unfit the wood for use except for fuel or coarse construction work.

Thus we see that the Yellow-bellied Sapsucker is not entitled to protection, but we cannot too strongly impress upon anyone shooting these birds, that they should be POSITIVE that they have the whole crown red and a black patch on the breast, thus being sure that they are Sapsuckers and not the extremely beneficial Hairy or Downy woodpeckers.

While the bill, feet, and tail of the Yellow-bellied Sapsucker are the same as found in other woodpeckers, the tongue has undergone much modification from the true woodpecker type, as it is not extensive, and instead of being pointed and barbed at the tip it has a little brush at the end.

In the spring of 1909 there was a remarkable migration of Yellow-bellied Sapsuckers at Kingston. On the morning of April 17th the city was literally alive with these birds. In the city park there were from one to four in every tree, each tree along the streets had from one to seven Sapsuckers on it, and even on Princess Street, the main business street, they were perched on the telegraph poles and on the woodwork of the door and windows of the stores. They were very common for a few days and the "wave" had not completely disappeared until April 24th. The probable cause of this influx was a strong gale from the north which blew on the night of April 16th, the birds apparently dropping as soon as they had crossed the lake.

The Yellow-bellied Sapsucker is a common breeder in the northern parts of Ontario and fairly common as a breeder and very common as a migrant in Southern Ontario. It makes its nest-hole in live trees, usually at from 20 to 40 feet from the ground.

The Hairy Woodpecker is a fairly common resident throughout Canada. It feeds on "borers," ants and on insects which hibernate beneath the loose bark of trees. It is an early breeder, excavating its nest-hole in a tree in April and hatching out the young early in May. The nest-hole is usually placed at from thirty to fifty feet from the ground.

This species is from nine to ten inches in length and the males can be distinguished from the females by the possession of a scarlet patch on the nape of the neck.

The Downy Woodpecker is a common resident throughout Canada. It is from six to seven inches long and the males have a scarlet patch on the nape. It is an extremely beneficial species, and is frequently to be found in the orchard where it destroys "borers" and many other insect-pests of trees. It is one of the most

efficient enemies of the Codling Moth, as it not only eats the larvae but extracts the pupæ (the resting condition of the insects) from beneath the loose bark.

The Downy in common with the Hairy and other Woodpeckers has the habit of selecting a resonant dead limb, and on this drumming out a rolling tattoo. It also has a sharp "peck" note which it utters most frequently when in flight.

The Downy Woodpecker breeds late in May, the nest-hole being made in a dead tree. The eggs are from four to six in number and pure white.

The Chipmunk, Birds and Other Things.

Editor "The Farmer's Advocate":

Having read with much interest A. B. Klugh's "Nature's Diary" article on the squirrel, let me say a word for the little chipmunk or striped squirrel. It is smaller, bolder and more easily tamed. The chipmunk will soon learn to visit the veranda or door step if fed and treated kindly, for the little harm they do they will repay a thousandfold, but this I only learned of late. They sometimes live in an old decayed log or stump, but they always have a retreat in the ground which goes deep under a stone pile or tree, like a ground-hog they have more than one entrance and can be coaxed out by the gentle tapping of small stones or a low soft whistle. I used to think them very destructive, for they will run off with a head of wheat if it is shocked near their domain. One day I took shelter in our sugar bush from a heavy rain-storm. To my surprise I saw all my chipmunks out in the drenching rain jumping around the big maples much faster than usual, but I never regret the drenching I got for what I learned. The heavy rain had forced thousands of wire worms, beetles, cloaks, and many other insects out of their hiding places under the rough bark. The industrious little chipmunks were having their harvest in the midst of a heavy storm.

Now just a few words for the birds. I read in the "Farmer's Advocate", where some one found tame bees in a bee-bird (or king-bird), so named because they will fight a sparrow, crow, or hawk. Spare the king-bird because they only eat the dead bees which lay around the hive and not the living tame bees as our friend believed.

My way of destroying sparrows, without frightening our own timid native birds, is to use a 22-calibre rifle. B. B. caps make no noise and will not frighten the robin, thrush, swallow or any of our useful birds. You can kill more sparrows, too, because it does not frighten them either. It also makes good marksmen of our boys and young men; they only cost a few dollars; the shots are 20 cents per 100. I use a rifle often advertised in the "Farmer's Advocate". Now don't get discouraged if you cannot hit a sparrow every time, at first. Keep your rifle clean and it will last a lifetime.

Try soft or rain water to grind axes and tools, it will do the work in half the time.

Send the "Farmer's Advocate" to some friend as a gift each year. It's a cheap present and the best favor you can do a friend. He may do the same for some one else the next year. By so doing you will get a premium which is another present for yourself. I have received four premium knives and am sending for another today. I work 270 acres, but can always find time to read the "Farmer's Advocate" from cover to cover, and get well paid for my time. In making my will I provided that the "Farmer's Advocate" should be furnished to each of my sons until they were 21 years old. The trouble is, the fellow who really needs the good instruction the paper contains is the very fellow who says he cannot afford to subscribe.

Wentworth Co., Ont. J. T. COSTELLO.

Impostor at Large.

Editor "The Farmer's Advocate":

I feel it my duty to inform your readers about a faker who is going the rounds just now and imposing on the public, claiming to be in the employ of the Government as a surveyor. He is carrying a field-glass and a telescope, is a small man with straight dark hair beginning to turn grey and parted in the center, and wearing a dark mustache. While in Carrick Township, Wellington County, Ontario, he called himself D. A. Smith, a son of D. A. Smith near Guelph, and a nephew of J. J. Hill, the railroad magnate. In Culross he called himself D. A. Adamson, a son of D. Adamson, Kamloops, and a nephew of my own, I hope he will get run to close quarters as he is a complete faker. He may be related to Mr. Hill but he is certainly nothing to me or to my brother in Kamloops. He is well educated and uses a lot of flowery language, but if he tries to inflict his presence on any of your readers, who have good strong shoes on, I hope they will not spare the toe.

Wellington Co., Ont.

A. ADAMSON,

Prince Edward Co. Fruit Growers at a recent meeting passed a resolution asking the government for inspection at point of shipment. This they believed would improve the pack; and no bad apples could then leave the district where grown.

Agriculture and the Schools.

Editor "The Farmer's Advocate":

I am reminded that some time ago, I promised I would express my views re the teaching of agriculture in rural schools.—For a number of years I have read article after article, and listened to many addresses on that important subject "How to keep the young people on the farm." I believe that a great deal of good has been done by these articles and addresses, but principally along the line of encouraging the introduction of modern conveniences, such as telephone, daily rural mail, the partnership idea between father and son, etc.; but it has always seemed to me that there was one thing lacking, not only in the articles but in the actual solution of the problem which the rural school should supply, I well remember (not many years ago) when I was a boy at school, there was nothing in the curriculum from beginning to end that had a tendency to encourage me to remain on the farm, to take an interest in it, or to send me back when vacation came, with an ambition to produce a better animal, or to make two blades of grass grow where only one grew before. Yet it was on the farm I was born, it was there I had to live. I went home with a positive loathing for what seemed to me to be undesirable drudgery of farm work. There was nothing in that course of study, as I remember it, that inspired me to look with favor on the farm or the farmer yet that was the impressionable time of my life. It seemed to have a tendency to point one away from the farm. I have talked with many of my school-mates who felt the same. We lived in that school and we left it with the feeling that the farm was no place for a boy of ambition and brains. The rural school or education which produces such results as that is dangerous, is wrong and a damage. The man who can successfully manage a farm is deserving of respect and should hold his head just as high as the manager of any other business. That farming is not only an occupation, but a calling, a business and a science, one that demands the expenditure of brains as well as muscle. That is the idea we want to bring home to the consciousness of the boys and the girls, and nowhere can it be done so successfully as in the rural schools. Instead of wrestling with subjects and facts that are forgotten in six months after they leave school, and in the higher grades with languages that have been dead for centuries, why should they not be steeped in the beauty, the dignity and rewards of intensive agriculture? I think I am safe in saying that nine-tenths of the young people of rural communities commence and end their education in the public school. The one-tenth will pass on through the High School, Universities, etc., become teachers, lawyers, physicians and such like. Three out of the nine will probably become mechanics, and unskilled laborers. The other six will remain on the farm. In my own country there are at least five High Schools. These Schools are continued with the help of the Government and county, the county being laible for the maintenance and ordinary repairs according to the number of pupils in attendance from the county.

In other words the six go back to the farm (from the public school) and year after year contribute in their taxes to the upkeep of a school to educate the one-tenth who are to be teachers, lawyers or something similar. Does it not seem that the whole system is one of education away from the farm instead of Back to the Farm. Now, Sir, I am not arguing against the maintenance of the High School, but rather for the necessity and the right of adequate provision being made for the education of the six-tenths, as well as the one-tenth. We appreciate the wise action of the Government in establishing a Department of Agriculture in connection with one of our high schools. Already the good work is being felt in the surrounding country, and last winter over fifty young men (some married) took the short course in a riculture put on there. This all goes to show the necessity of greater action, and greater effort along this line.

We should not be satisfied until every public school, aside from the great centres of population, is teaching agriculture as it should be taught, and in every county there ought to be at least one High School of Agriculture (supported and encouraged by the Government, just as liberally as the other High Schools are) where the boys who are going to spend their life upon the farm can receive a training and standing in Agriculture equal in comparison to the present High Schools to the universities.

W. E. TUMMON,

Hastings Co., Ont.

The National Live-stock Exchange, of Chicago, has conceived a plan to increase beef production by conserving the females. Several state legislatures are to be asked to enact legislation prohibiting the slaughter of certain grades of heifer calves, and other females for a period of ten years. The State veterinarian is to have charge, and a penalty of \$25 per head is to be imposed for violations. There is some question as to the constitutionality of such legislation, and there are many scrub heifers which owners would prefer to sacrifice at birth rather than mature at a loss.

Matters Before Parliament.

By Peter McArthur.

At first glance the Hon. Mr. Burrell's "Agricultural Act" seems indefinite as to its purposes, but perhaps that is its chief merit. Everyone will agree that "great permanent benefit will result through education, instruction and demonstration, carried on along lines well advised and of a continuous nature"; but it is doubtful if any two persons would agree in details as to what the lines should be. To avoid this conflict the purpose of the bill seems to be to stimulate the work now going on in the various provinces without stipulating just what that work shall be. This is much better than if a comprehensive scheme of agricultural instruction had been planned and handed down to the provinces. Work that is now going on can be promoted to a healthy growth. Most provincial institutions for agricultural education are kept from developing properly by lack of funds, and the millions that are being granted should put them on a sound footing, so that they can do their best. This means that agricultural education in the provinces will grow from the ground up, the natural way. No doubt Mr. Burrell and Mr. James, to whom the Minister gave full credit for his assistance when introducing the bill in the house, have considered the expenditure of the money in detail, and already have an idea how the scheme should work out. Mr. Burrell's appeal to both parties to assist in putting the bill through suggests that there is to be no partisanship in the expenditure of the money. That being the case I am slightly at a loss to understand the meaning and purpose of clause 7, which reads as follows:—

"The Governor in Council may make such regulations as are deemed advisable for giving to the objects and purposes of this Act, and, notwithstanding anything in this Act, the Minister, with the approval of the Governor in Council, and with the consent of the Lieutenant Governor in Council of any Province, and upon such terms and conditions as are prescribed by the Governor in Council, may expend in any such Province, in any year, the whole or any part of the grant provided for such Province under this Act, for the purposes set forth in the preamble of this Act."

I freely confess that I am never sure that I am getting all the nourishment that was intended out of legal language of this kind, but it looks to me as if the bed-rock meaning of this is, that in case the Federal Government does not find itself in agreement with a Provincial Government, it may go right ahead and spend the grant to that particular province according to its own sweet will. As some of the Provincial Governments may be of a different political faith to the Federal Government, it is almost inevitable that there will be friction, and then the party in power can go right ahead and spend the money without letting the objectionable Provincial Government have any say in the matter. Whatever may have been the intention of the framers of the bill, it looks to me as if the effect of this clause would be to keep the expenditure of the money entirely within party lines. If a case arises where a province gets into conflict with the Federal Government about the use of this money, the result will inevitably be that the educational affairs of that province will be thrown into confusion. However, I do not mean these remarks so much as a criticism of the bill as a criticism of the party system which so often stands in the way of the greatest good to the country.

It is interesting to note that instead of the word Education, the framers of the bill have used the word Instruction to suggest their purposes. Now I find that this word has a very wide meaning. To instruct, means to build, erect, construct, set in order, prepare or furnish, as well as teach. If they had in mind the full significance of the term they used, they have "a charter wide as the wind." They can do practically anything that will help the cause of agriculture, from teaching a man how to buy a farm to showing him how he should invest his profits after he has learned how to produce the best crops, and harvest and market them. If wisely used this freedom will be a great advantage, and I am hopeful that an important part

of the instruction will deal with the marketing of farm produce. That is where the biggest leak is at the present time.

In considering this bill and the appropriation that goes with it, it is amusing to think how carefully the expenditure of every dollar will be followed and criticized. It does not seem as if there would be much trouble in getting the lump sum voted by Parliament, but Mr. Burrell and Mr. James will have their hands full in trying to expend the money so that everyone will be satisfied. It is entirely different with all the other grants made by Parliament. If thirty-five millions should be voted as a naval contribution no one will ever know the details of the expenditure, or be in a position to criticize the cost of the varnish used on the officers quarters, or the wisdom of having open plumbing on a dreadnought. If the money is voted we will give it in a lump, talk about it in a lump, and probably forget it in a lump. It is the same with most of the other things done in Parliament. They vote permission to some corporation to increase its capital stock, and when the vote goes through no one will ever think of asking how much of this stock will be water, or who will have to lose the money that is to pay dividends on it. There is hardly a session of Parliament when they do not pass private bills carrying privileges that aggregate many times the ten million dollars now being voted for agriculture, and no one except a public spirited anarchist here and there ever tries to point out the harm that is being done. As has been pointed out on various occasions, the watered stock in our big corporations represents so much high-handed robbery of the producers and consumers of the country, but who cares? It is a different matter, however, when ten millions are being voted to aid the producers, and at the same time help the consumers. We shall have to watch just where every dollar goes, and see that "our party" has its finger in the pie all the time, or we'll make Rome howl. Of course it would not do to allow all this money to be spent without due criticism, but I do wish that some of the surplus critical energy could be directed towards some of the other bills that are much more in need of it.

At the present writing the Bank Act is still being debated in Parliament, and there have been some interesting fireworks without many indications of anything important being done. Having said my say on this question last summer I do not feel inclined to trouble people with anything more. Everything that could be done should have been done long since, and if you were not convinced in the past discussion of the measure it would be useless to trespass on your patience just now. If you were convinced that there is need of a more rigid control of our banking system, and a thorough system of inspection you can still help by writing to your member of parliament, no matter whether you supported him or not, and making clear to him your position on the question. I am glad to see by the papers that so many people have written to their members, that their influence is being felt. This is the only thing that can now be done. If you have not written to your member giving your views, why not do so at once? There is still time to bring pressure enough to bear to force a reform of the Bank Act, but everything depends on the individual voter. Further discussion of the matter either in the press or on the platform is now useless, but even a postcard to your representative might help to work wonders. If the act, as presented to Parliament, does not suit you, you need never blame anyone but yourselves if it is allowed to pass into a law in its present form. Write to-day.

Ontario Veterinary Association.

At the 23rd annual meeting of the Ontario Veterinary Association, held at the Ontario Veterinary College last week, a proposal was discussed to form a national organization devoted to the interests of the profession throughout Canada, to be known as the Dominion Veterinary Association. It was referred to the executive committee. A profitable session was held. Officers elected were: Hon. President, E. A. A. Grange, V. S. M. Sc.; President, W. J. R. Fowler, V. S., B. V.Sc.; First Vice-President, C. Elliott, V. S.; Second Vice-President, W. J. Willson, V. S.; Directors, J. H. Engel, V. S.; Robert Barnes, V. S.; C. S. MacDonald, V. S.; R. A. Milne, V.S.; A. D. Stewart, V. S.; W. Nichol, V. S.; W. F. Clark, V. S.; Executive Committee, E. A. A. Grange, W. J. R. Fowler, W. Cowan, V. S., L. A. Willson, H. E. Hurd, V. S.; Auditors, C. Elliott, F. G. Hutton, V. S.; Secretary-Treasurer, L. A. Willson, V. S., 45 Riverdale Avenue, Toronto.

Comment and Query.

Editor "The Farmer's Advocate.":

An effective force of more than passing significance is the pen of Peter McArthur. These articles certainly sustain, if they do not surpass, the general high level of "The Farmer's Advocate." Some of the quotations also have particularly impressed me, of special note the following: "In the search for truth, every faculty should be awake. Humor should bear a torch; wit should give it sudden light; reason should winnow the grain; judgment should carry the scales, and memory, with a miser's care, should keep and guard the mental gold."

Does not Mr. McArthur himself fulfil the conditions here set forth, for he is not merely awake, but is helping to keep the rest of us so? With us farmers, there is more or less proneness to lethargy during the stormy days and long nights of winter. We need mental stimulus.

Apropos of the suggestion to "search for truth," do not some of the positions even of science need re-adjustment, re-statement, or elucidation? For example, on a dark night a building or a straw stack is "on fire." If there are no obstructions to the view, the entire body of fire or flame is plainly, luridly visible over a large area, it may be some miles radius. Now the query is: Since the space is for the most part dark between the fire or source of light and the eye of the spectator, how does he see the fire;—in other words, how do the rays of light from the fire make a distinct and vivid impression through the intervening darkness?

Another query: What is the cause or causes of the periodical January thaw?—Why not occur in the previous or succeeding month?

W. J. WAY.

Kent Co., Ont.

[Note: We pass these questions along to our versatile contributor, merely remarking that we have seen thaws in every month of the year.—Editor]

Gain Knowledge from Schools and Reading.

Education, as a factor in the making of farmers, until recent years, received little or no attention. While education has advanced rapidly these last few years, we must admit that it does not receive the consideration in the farm home to-day that it is so well worthy of. Lack of education is one of the greatest drawbacks farmers can have. Until very recently the idea of a special agricultural training was scoffed at by the rural population. Even a public school education was considered out of the question. As soon as the boy was big enough to work he was allowed to remain home. Indeed, we see considerable of this in our country homes to-day. Why should it be so? Schools are within reach of all, and it is the duty of every parent to see that the youth receive, at least, a public school education. Ignorance is sure to keep us from going forward, and it is the man who has a trained brain and knows how to use it who is going to go ahead by leaps and bounds. In the days of our forefathers muscle was considered the important factor, but it doesn't hold such a prominent place to-day. With so many branches of farm work to attend to, we are apt to make unnecessary expenditure that could otherwise be avoided if we had the proper training. We also lack education in carrying on political affairs. We are living in a country where agricultural interests should receive first consideration, and how can it get the proper attention when politics are in the hands of men engaged in other professions? We should have our own representative farmers in Parliament, and they should be men of sound judgment and able to hold their own against others. These things can only be brought out by education. Give every boy an education. If you cannot see the way clear to send him to an agricultural College, see that he is well supplied with good agricultural literature. These long winter evenings afford an excellent opportunity to add to our store of knowledge. Farming to-day is a science, and if you are to be successful you must keep in contact with the most improved methods. A wisely chosen magazine and a journal devoted to the specialities of farming and farm life, in addition to the daily newspapers, are not expensive luxuries, and can be afforded by all farmers. As a reader of "The Farmer's Advocate" I feel justified in saying, so far as my judgment goes, it has few equals as an agricultural journal. The useful information and suggestions it contains, from week to week, will many times pay the subscription fee of one dollar and fifty cents. And since reading matter has come to be regarded as an essential of modern farm life, the points to be considered in the selection of literature are quality and suitability to circumstances.

Halton County.

RUSSEL LINN.

Lambton County Co-operative Fruit Growers' Association shipped, during the past year, 934 cars of products valued at \$27,806. This is only a small part of the production of the members of the Association, as large quantities were disposed of locally. The management is now urging specialization in early potatoes, tomatoes and onions. A central packing plant is also contemplated.

Believes in Using Skimmers.

Editor "The Farmer's Advocate":

I have just received a letter, with a stamped and addressed envelope, wishing information in regard to the best skimmer plow; and as it does not do to single out any certain manufacturer in your journal, and for the information of your readers who may have been interested in my letter of December 5th, I have concluded to send you a letter on "my experience on plows and plowing."

Having experienced the many changes of tillage since the opening up of the wilds of the southern part of Bruce County, when stumps, snags, chips and logs interrupted oxen and plow hundreds of times a day, to the time when level stoneless fields gave plenty of scope to the desire of the young plowman, to win prizes at our township or county plowing matches, I feel that I have more knowledge of plowing.

The first year or two after the timber had been burned off, it was a difficult task to scuffle enough soil to cover the few seeds scattered amongst the stumps. The old Ancaster No. 4 (I think it was) was much used, and being so short from the cross-bar of the handles to the coulter, the remark was often made, that the plowman could reach to the coulter and clean any obstruction, brush or sticks away, without leaving his position between the handles. It was true, nevertheless, that long plows could not be pulled back easily, nor swung round, so close together were the stumps. The shovel plow was admired by some, but never used after getting rid of the roots, unless to dig potatoes. Plows were used then that would not be tolerated today, any more than would the three-cornered drag with which we used to harrow the soil. This harrow had the teeth slanting back so that they would slip over roots and past stumps. The plows changed with the altered conditions, although not always, for the better, as was in the case of the old Grey sod plow. This was a long, narrow, tilted-shared plow, which was a fad for many years, and took most of the prizes at our plowing matches. The inner side of the furrow would be six or seven inches deep and the outer part about two, but what a beautiful job it made. Judges and all were delighted, and there was little wonder that all the young men pretending to plow had to have a long, narrow, high-cut sod plow; but the crops following did not prove it valuable, and a few years sufficed for a lesson, and many very expensive plows were laid aside in a fence corner, never to be used again. Hill's patent was probably the most useful plow, taking a wide and deep furrow.

A long, narrow plow is thought by many to be easier drawn. This is a mistake; so also is the idea of the wide skimmer plow being hard to draw. The long, narrow plow, with a long-pointed share, is looked upon as a wedge opening up the soil, and the wide plow as a blunt wedge.

In the long point, we find a large amount of power lost before there is any motion of the soil. The share, too, is shoving into the soil, also, and still no lifting of the earth. It may be looked upon as a wedge, but a wedge does not become effective until the two sides begin to open, and if a tough log, the wedge may be driven to the head if not thick enough to burst it open.

With the skimmer plow, the skimmer is taking a thin strip off, just about the point of the share (probably two inches deep). This lessens the power required to move the earth from the furrow, and this is being moved almost from the first contact of the share. In the other case, we see a long point shoved into the earth, also the coulter, making at least nine inches of penetration before there is a movement from the furrow. This is not all, for we see in the wide plow, a furrow perhaps ten inches deep and a foot wide, and in the high cut six or seven inches deep and nine inches wide. So that, in comparing drafts, there will be three times as much soil moved with the skimmer plow as with the high cut.

A few years ago I visited my native home in Scotland, and took note of the system of agriculture there. Amongst the farms visited, was one on the banks of the river Clyde, six miles from Glasgow. Amongst the many things that attracted my attention on this farm, was a skimmer plow of the same make as the ones I had used for many years in Canada; and the conversation between the tenant and myself for a time was in praise of the skimmer plow, and he claimed, as I did, that, for work done, it was easier than any other plow to draw, and he gave me figures then of the draft required to draw different kinds of plows, taken from actual work on the fields by a spring gauge to test the various

pulls, and the skimmer plow, such as he had, required much the least force to pull it.

I may say that this gentleman farmer paid a rental of \$12.50 an acre for 400 acres, making the yearly rent \$5,000.

Since learning the use of this spring balance in testing power required to draw our farming implements, such as plows, binders, mowers, manure spreaders, wagons, etc., I have concluded that it would pay any of the manufacturers to give tests of all machinery drawn by horses, for no one can calculate the amount of wasted power resulting from improperly built machinery. With the sulky plow coming into general use, this test would soon bring upon the market the easiest drawing plow that science can devise.

Bruce Co., Ont.

WM. WELSH.

Quebec Stockmen in Session.

At the annual meeting of the General Stock Breeders' Association of the Province of Quebec, recently held in Montreal, the following officers were elected:—Pres., Hon. N. Garneau, Quebec; First Vice-Pres., A. Denis, St. Norbert; Second Vice-Pres., James Bryson, Brysonville; Sec., Dr. J. A. Couture, Quebec. The board of Directors is composed of the Presidents of branches of the General Association, viz., Horse Breeders' Society, Joseph Deland; Sheep Breeders' Association, N. Lachapelle; Swine Breeders' Society, L. Lavallee; Cattle Breeders' Society, A. Denis. Hon. Martin Burrell, Minister of Agriculture for the Dominion, and Hon. J. E. Caron, Minister of Agriculture for Quebec, were the chief speakers. The attendance was large, and the interest shown indicative of a coming live-stock progress such as Quebec has never known.

"Good Intentions."

Editor "The Farmer's Advocate":

For the most part, nearly everyone intends to do something worth while. The past has slipped beyond our grasp, and the present—well, conditions are not just right. In short, the opportune moment has not yet come. But the future—the glorious future—what stores of opportunities offered, what ideals realized. In fact, the golden glow of fortune and success lie just beyond, like the proverbial pot of gold at the end of the rainbow.

I do not, by any means, wish to make light of good intentions, for they are absolutely necessary and quite right in their place. But is it not too often the case that, with many of us, we never get any further than just "I intend to do this or that." How many little improvements and labor-saving devices around the farm would be made if only "good intentions" could be carried out—and why not? "Oh," we say, "we are too busy just now—other things are more pressing at present; but just as soon as I can get time, why these things will be attended to without delay."

Now, has it ever occurred to you that when we say "we haven't time," we are, in a measure, deceiving ourselves? The farmer is a busy man, as everyone knows, especially in these days when the scarcity of farm help is felt so keenly. But, yet, is this very thing not used too often as a cloak to shield us from the idea that we are careless of off-putting?

Now, there are farmers personally known to you; all, no doubt, who always find time to do what they have planned for. And, again, there are others who seem to work equally as hard, but fail to realize the fulfilment of their plans. This is rather a puzzle to some of us, especially if we belong to the latter class, who think they have tried as hard as it was possible to do.

The question then naturally arises: Why, where does the trouble come in? In the great majority of cases it lies in not taking advantage of the present moment. There is no time more opportune for any who have a work to do, or a duty to perform, than the present. It is surprising how a few minutes here and a half hour there runs away with our time. And it is just here that many people fail to accomplish the little extras which count so much. It is said that "it is the busy person who finds time for the extra duties of life." The time has come when the farmers of Canada must work to advantage if they wish to keep abreast with the growing prosperity of our country. And if we want to do this, we must do it now. It is true that everything cannot be done at once, and that the old phrase, "There's another day coming," should not be overlooked by many of us. But, for all, that does not cast any reflection upon the importance of the present as the time to be thoroughly utilized. How often do we find in the spring—which, by the way, is not so far distant—the advantage of having everything in readiness to start the seeding operations without delay. They are perhaps only little things, but if left to the last, mean perhaps a delay of two

or three days, and who can tell just what the loss shall be? This is only one illustration, but by no means all that could be drawn from the three hundred and sixty-five days of the year in which we make or lose just in proportion as we do our best to make each day tell. And while we may make plans for the future, do not let us forget our obligations to the duties at hand.

The days are going swiftly,
One by one;
Good intentions mostly,
But so little done.

Moments, precious moments,
Fleeting fast away;
With them opportunities
That will never stay.

Experience teaches, sadly,
That life is not its best,
Unless we take up gladly
Each duty with a zest.

Huron Co., Ont.

COLIN CAMPBELL.

Sport in the Country.

Editor "The Farmer's Advocate":

We live in the isolated Province of Prince Edward Island, at a village called St. Peters, which has a scattered population of about one hundred families. We are a hard-working people, being mostly "tillers of the soil," and we have few, if any, idlers in our midst. Thus when we get a few hours for recreation, they are highly appreciated. Our village extends on both sides of a bay which juts inland nine miles from the coast line, and in the winter months, when an occasional thaw followed by frost makes skating possible, everyone who can use skates takes advantage of the good ice.

A number of young people were coming home from church one evening during a snowfall, and were watching the ice, on which we had been having some good fun for a day or so previous, being rapidly covered up by the snow. A remark was made that it was a pity we could not have skating all winter, and that we had to depend on a thaw to give us a day or so of this amusement, probably all we would get that winter. Someone suggested that we build a rink, which was at first laughed at as a joke. Then it was proposed seriously that we build a temporary rink on the bay, which we could take down in the spring, and the expense we would pay between us. This was the beginning.

Let me digress a little to say that previous to this undertaking we have a born reputation, together with other country villages in this part of the world, for proposing and organizing some progressive movement, and then getting discouraged and dropping it. Thus when we advanced our proposition a few laughed and said that we would not succeed, and that our undertaking would end as had all others of a similar nature around here by dying a natural death.

We met for organization at a neighbor's house on December 19th, 1911, and formed a club, which we called the St. Peters Sporting Club. We appointed a president and secretary-treasurer, and enrolled about thirty members who paid an initiation fee of one dollar each. We then made a declaration which was accepted unanimously, that we would stick together and would allow no dissension to enter our club, that should any disagreement arise as to management, we would arbitrate the matter peacefully among ourselves. Thus we pledged ourselves to do our best, and to preserve amicability in our club, and if you follow me a little further you will see how well we succeeded.

We secured the commercial sample rooms of the village for a temporary meeting place, and arranged for a meeting two nights of each week. The second sitting we had we discarded the plan of building on the ice, and determined to build a good substantial rink on the ground. We had no funds except the few dollars realized from the initiation fees, and our first move towards the execution of the plan was the discussion of raising funds. One of the members suggested holding a basket social, which was finally agreed upon after other suggestions had been considered. A concert committee was appointed who were to proceed with the arrangements of the social. This done we talked and planned how we would go about building. One of our local blacksmiths offered to give us the land back of his forge, enough to accommodate the building. This has a heavy brick-clay soil, which holds water almost as well as cement. We accepted this offer, and our first difficulty was over. We then appointed a committee to go and locate some standing timber, which could be bought reasonably. This was done, and we bought as far as our funds lasted. Then on an appointed day, all the boys of the club with their teams and axes went to the woods and cut and yarded the timber, and hauled it to the mill. Our miller

had some timber of his own, and he donated a quantity on the stump, which we also cut and hauled that day. This made up over two-thirds of the required amount of timber.

The rest of that winter was spent in getting out the balance of the frame wherever we could buy it, in hauling the sawed stuff from the mill to the site, and in preparing and carrying out our social program. You must remember that we did all this work after our day's work was done, except two or three days that we took off the first month that we were cutting the timber. Our social was a complete success. We had a stormy night, but had a good big crowd, and realized the sum of \$105.00. Then a week later we took our concert crew over to a neighboring town or village and played there, and realized ninety dollars.

By the time spring had arrived we had all the lumber on the spot, and after this we let matters drop till June, when we held a meeting and appointed a day for grading and excavating on the site. The appointed day saw a crowd of our boys arrived on the scene each with his team, and they set to work with such a will that the job was done in a day.

Having some funds on hand now we put carpenters to work, and, at the same time, made preparations for a Dominion Day tea party. The carpenters rushed ahead with their work, and on the day we held our tea party we had framing enough done to show that we meant to carry this undertaking to a successful issue. The tea party was also a grand success, and we cleared something over \$700.00. This we estimated would finance our scheme to a finish.

The work went on, and now our rink is an established institution. We have great ice on the ground floor, and a jolly crowd of men and women, as well as boys and girls, enjoying a skate three evenings of each week. We have had a great many difficulties to overcome since the start. Being short of time we hauled lumber at night till one o'clock in the morning during zero weather, time after time. Then when all the construction work was completed our water supply ran out. The two wells to which we have pipes connected ran dry. We turned out again and carried water in large puncheons. We baled all the wells in the surrounding village dry, and yet it looked pitifully small on the floor of the rink. Then we had a big thaw, and we were lamenting among ourselves the fact that our hard work would go for naught, as the ice which had hardly caught over the top would thaw and the water all run out. However, when we went to view the remains the next morning after the deluge, a very, very pleasing surprise was in store for us. The weather had turned cold during the night, and the water from the hill above had found its way into the rink, and lay a perfect sheet, as glib as glass. This we recognized as truly a gift of Providence, and it taught us a lesson, if we do our part to the very best of our ability in any worthy enterprise, even so insignificant as the building of a boys' skating rink in a country village, the gentle hand of the Father will give us a help along towards success.

We have been discouraged time and again, by some in the spirit of antagonism, to be found the world over, by others in a spirit of pity engendered by the supposition that we were expending energy on a scheme which would never materialize. We listened to none of these sentiments, which acted rather as a spur than a damper, but went right ahead and boosted all the time. We also received a lot of encouragement from the few older heads who believed in us, and it did not do us any harm for sure. Our rink is now a recognized success, and is a self-supporting institution, as everyone pays for his skating, members and all. Our village is more united, and has a name for pluck and enterprise throughout the province.

Who would exchange the delightful life in the country, where we have abundance of fresh air, a pure clean social intercourse, and good healthful amusement, for the overcrowded, cramped, artificial existence in the city? It strikes as a very true saying that "God made the country, and man the city." Here we are just as busy in one sense, that is we have just as much work to accomplish as they have in any city, our time is, if anything, more fully occupied with work, but we are all the time in close touch with nature and things as God made them, and before they have been disfigured by man's superficial attempts at improvement. What we want, and what we can get if we try is a better social life, to keep our young people at home. It must needs be that some of our strong country-bred bone and brain and brawn, go to the city, otherwise the country would be overcrowded and the city starved, but there is no need for the excessive migration of our sons and daughters from the country to the city as soon as they reach maturity. The cause of it in the past has been largely due to the lack of social life in the country, and the mistaken idea that they have lots of such life in the city. But already the sentiment is changing. We are just beginning to

realize that if we stay at home and work as hard improving our farms or whatever business which claims our attention in the country, we will be much better situated than we would be working for a hard boss in any occupation in the city, and having for our home the four narrow walls of our boarding-house bedroom.

Our skating rink is only one idea, and there are many others which might be made just as successful by the expenditure of a little effort, and the very attaining of which though strenuous is pleasant.

P. E. Island.

C. C. P.

Seven Miles of Corn.

Seven miles of exhibition ears of corn! Such in a nutshell was the display at the Ontario Corn Growers' Show, held in Windsor, Ont., last week. Not that we ran a tape over all the ears, but a little estimation justifies the statement. Secretary W. E. J. Edwards, B. S. A., District Agricultural Representative in Essex County, informs us that of the 650 exhibitors entered, the great majority appeared with an average of six or seven entries apiece, many containing ten ears per entry. Allowing for bushel lots, the total number of ears would be something like forty thousand ears. And it was some corn—"corn that will grow." Approaching ideality in type and displaying high finish in point of maturity, it furnished impressive and convincing evidence that Southwestern Ontario can grow number one corn in abundance to supply the demands of ensilage corn planters in sections of Canada farther east and north.

The County of Essex styles itself "the Sun Parlor of Canada," and Windsor is at the front door. Situated at the head of the Detroit River,

number of strains, exhibiting much diversity of characteristics. Then comes Bailey, a most excellent yellow dent variety, which has long been grown here, and which Prof. R. A. Moore, of Wisconsin, paid the very highest ecomiums, declaring that with a little good breeding work put upon it, it would rank as one of the best corns in America, and probably the very best yellow dent corn for Southwestern Ontario to unite upon and make itself famous for. Early Learning was also considerably in evidence, as well as Coatsworth's Hybrid of the Reids' Yellow Dent, which latter variety is not so much heard of as it was a few years ago. Among the flints, Longfellow, Compton's Early and North Dakota ranked in about order of mention.

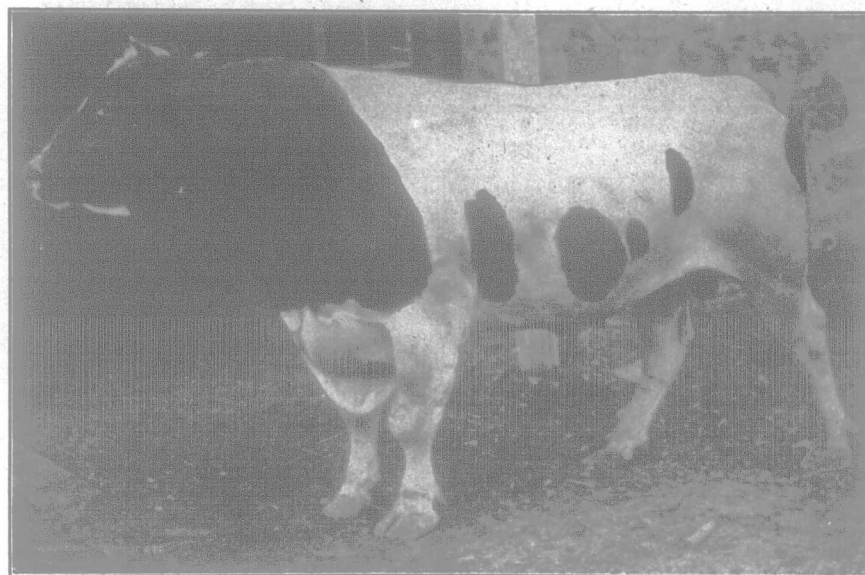
But these kinds enumerated were by no means all. There was red corn, black corn, smut corn, sweet corn, pop corn, and dear knows how many other kinds. Then there were novel and educational exhibits of notable character. Kent County's "endless supply of corn" was visualized by a Niagara Falls of shelled kernels, operated by a concealed gasoline engine, while within a glass show-case two pairs of pigs established the economic relation between corn and hogs. This exhibit was put up by the Fletcher Farmers' Club of Tilbury and Raleigh. The Tilbury East Farmers' Club had a striking Ferris wheel of corn, which occupied the center of the floor. The Essex farm of the Walker Company, whose extensive farm enterprises are managed by T. S. Biggar, had a very attractive exhibit of corn, fringed with alfalfa; while Progress versus Obstinate Stagnation was amusingly depicted by a companion exhibit showing on one side a member of the Corn Growers' Association, with a well-ordered farm, producing first-class corn of one or two kinds; while on the other was a "way-back," who had never been at a corn show before. He had his old snake rail fences, poor weedy fields, and a mongrel lot of corn which resembled Joseph's coat of many colors.

Then there was a very well-contested junior department, under charge of J. H. Smith, Public School Inspector for West Kent. In this department were prizes for exhibits of corn by boys and girls under sixteen, and also trophies for juvenile teams of corn judges.

Who says a corn show can't be made interesting? The crowds which thronged the Windsor Armories found much to observe, and when one attends the judging classes held in connection with the show, and gets down to a minute study of the desirable points of an ear of corn, a great field of study opens out before him. He sees new points in the exhibits and learns to discern "brains" in an ear of well-bred corn—the brains of the man who bred it.

Endless opportunities are still open to introduce novel and educative exhibits, such as comparisons showing shelling percentage of different strains and varieties, chemical composition as denoted by exterior appearance, and so on. A natural corn country is the peninsula of Southwestern Ontario. "Sun parlor" conditions of summer temperature and a late autumn favor the growth of this great hot-weather plant, producing in the seed corn grown here a perfection of finish seldom attained with dent varieties in other parts of Canada. Other counties can grow great corn for ensilage, and can often produce ears which, with care, will make seed, but, as a rule, the ears are inclined to be loose and flimsy, twisting easily in the hand, in contrast to the well-filled, hard, close-set kernels of Essex and Kent corn, which makes an ear of it almost as rigid as a club. The level nature of the county, too, facilitates cultivation. From Chatham to Windsor, for instance, is a forty-five mile stretch of country more level than many prairie districts. Drainage is secured by big ditches or "young canals" crossing the railroad to Lake St. Clair, on the north. In summer great fields of corn reach away on either side, while at this season occasional fields of shocks or unharvested stalks proclaim the need of silos.

The importance of the corn crop in Ontario agriculture is rapidly growing. As Dr. G. C. Creelman brought out at one of the meetings held in connection with the show, there were more bushels of shelled corn produced in the Province than of wheat or of potatoes. The corn crop of



Sir Belle Abbekerk De Kol No. 4390.

This bull's dam's R.O.P. for one year, is 15,454 lbs. milk, and 685 lbs. butter-fat. Sire of many of the good ones to be sold at A. H. Teeple's sale, Woodstock, March 11th.

it is connected by ferry with the great and growing city of Detroit, which seems but a stone's throw distant, though really we believe the river is something like half or three-quarters of a mile across. Windsor, like so many other of our frontier towns, has long been regarded as a mere suburb of the neighboring American city, but this is changing. Windsor, of late, has been growing rapidly—the most rapidly, real estate agents claim, of any city in Canada. The population is locally rated at twenty thousand.

A progressive city like this should have been able to do great things for the Corn Show, which as a real estate advertisement, might have been turned to magnificent account. Instead, the civic officials neglected the show till the last minute, failing to prepare the Armories, as expected, and the officers of the Corn Growers' Association worked until two or three o'clock in the morning to get the exhibits in shape. Members were emphatic in condemnation of the treatment received from the Mayor and Aldermen in charge, and stoutly declared they would never bring the show back to Windsor. Certainly Windsor did not improve her slim geographical chances of becoming the seat of the district winter fair which is being mooted, and to investigate the feasibility of which a committee representing six counties was appointed at the annual meeting of the Ontario Corn Growers' Association.

Predominant in point of numbers was that comparatively recent introduction—Wisconsin No. 7—which has only been grown commercially in Essex for three or four years, but has won high favor as a strong-growing, leafy-stalked, high-yielding variety of good corn. Next to it stood White Cap Yellow Dent, that excellent old stand-by, of which, however, there is an endless

Ontario is worth more than the horses and more than the hogs and poultry put together. We used to have a phrase "As good as the wheat." We shall have to revise it and say instead, "As good as the corn."

BUSINESS MEETING

The annual meeting of the Corn Growers' Association on Thursday evening lasted until 1.30 Friday morning. The secretary read a letter from J. M. McCallum, written to a member of the association, complaining of unsatisfactory seed corn that had been received from a certain Essex grower. Lengthy discussion arose out of this letter. It was suggested that one or more organizations be developed for the marketing of seed corn, using registered labels or trade marks. The difficulty of guaranteeing that all the members using the label would send out seed corn strictly up to the mark and various other obstacles deterred action along these lines. It was suggested that Eastern Ontario farmers be encouraged to buy their seed corn on the ear, and some suggested that they ought to purchase in the fall. There are some good reliable men shipping corn out of Essex County, while some others are at a loss to market good corn at seed prices. Again, there are others apparently quite unscrupulous, sending out anything at all. One member told of having seen a carload of corn taken out of a creek and shipped for seed. Another had learned of a local elevator company being instructed to fill orders for four different varieties out of the one general run of Yellow Dent corn.

A resolution was presented in favor of establishing a station for the testing of different strains and varieties of corn, with a view partly to determining and uniting upon a uniform type of each variety. The members, however, felt that as there are so many men working out types and strains of their own, it would be well to let matters take their course for the present, and the resolution was not adopted.

Several hours were spent over the proposition to enlarge the annual corn show by adding other grains and fat stock, making it an all-round winter fair. Some proposed to go easy by adding a few things only at first, such as beans and tobacco. Others wanted to launch out at once on a broader scale. A committee representing six counties was finally appointed to interview the Government and also see what could be done with the various towns and cities within and adjacent to the corn-growing territory. The committee comprises: Edgar M. Zavitz, T. S. Biggar, J. H. Williams, H. F. Groff, L. D. Hankinson and Dr. Fairbanks.

New officers elected are: President—Byron Robinson, Wheatley; First Vice-President—Robt. Knister, Comber; Second Vice-President—Lester Gregory, Chatham; Secretary—W. E. J. Edwards, Essex; Treasurer—J. H. Coatsworth, Ruthven.

The review of the lecture program we shall reserve for subsequent articles. Just a few important points from the Wednesday evening addresses.

Hon. J. O. Reaume, Minister of Public Works for Ontario, announced that it was the intention of the Provincial Government to vote, "at least," millions in order to assist in making roads.

Hon. Jas. S. Duff, Provincial Minister of Agriculture, in a vigorous address, urged that no other province or state in America had such opportunities for diversification of agricultural industries as Ontario. The problem for each individual farmer to solve for himself is, "What is the best line or lines of farming for me to follow under my particular conditions?" Mr. Duff paid a graceful tribute to the district representative, Mr. Edwards, who has so well carried on the work commenced by Mr. McKenney.

Dr. G. C. Creelman, President of the Ontario Agricultural College, completely discredited the idea of local demonstration farms. The immediate neighbors would take less stock in such farms than would men at a distance.

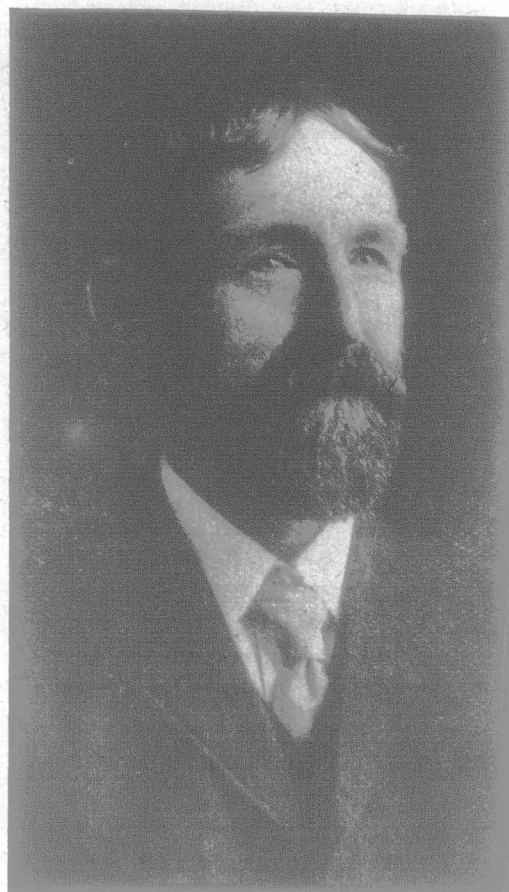
In his final address, Prof. A. E. Chamberlain, an old Essex County boy, now in Minneapolis as Development Commissioner of the Great Northern Railway, tendered a piece of advice applicable to more than Essex County. He said: "Any son of England or Canada who lets a Yankee come into Essex or Kent and Lambton and buy his farm is a sucker, because there isn't any other place in the world where he could do as well." Look to the development of the skill of the boys and girls, and Ontario will lead the world.

An address on tile drainage was delivered by Prof. Wm. H. Day, and at the same session a resolution was unanimously carried to the effect that: "Whereas tile drainage is an absolute necessity for the proper development of the low-lying lands of Ontario, without which it is impossible to obtain the full advantage of the vast amount of money expended in constructing large drainage outlets and owing to the scarcity of labor the work has to be carried on by expensive tile drainage machinery, be it resolved that the

Ontario Corn Growers' Association go on record endorsing the resolution before the House of Commons praying for the removal of import duties on tile-drainage machinery and parts thereto."

Ayrshire Breeders make Progress.

A large number of enthusiastic Ayrshire breeders were in attendance at the annual meeting of their association in Montreal, February 12th. The past year has been, according to the secretary, the best year in the history of the Ayrshire breed in Canada. Breeding and feeding are ac-



Byron Robinson, Wheatley, Ont.
President Ontario Corn-growers' Association

complishing steady progress. The balance in the treasury reaches the handsome sum of \$4,735. There were 424 more registrations in 1912 than in 1911, and the increase in assets was \$1,514.20.

After considerable discussion on the matter of a National Exhibition, a committee consisting of John McKee, Norwich, Ont.; Alex. Hume, Menie, Ont., and H. C. Hamill, Box Grove, Ont., were appointed to confer with the other breed associations on the matter.

A resolution was passed recommending that

the secretary of the Dominion Cattle Breeders' Association ask the railway companies to pay more attention to the transport of stock to and from exhibitions, especially to dairy cattle, and that they grant a half-rate fare from one exhibition to another, where it does not now exist.

The Provincial and Federal Ministers of Agriculture are again to be memorialized regarding the matter of legislation leading to the paying for milk in proportion to the food value it actually contains.

The grants to dairy tests at Amherst, Guelph and Ottawa Winter Fairs were set at \$200 each, and if the champion of any of the classes—viz., mature cow, three-year-old, and two-year-old heifer is an Ayrshire, \$50 to be added to each class.

The following grants to exhibitions were made: Toronto, \$150; London, \$50; Sherbrooke and Ottawa, \$75 each; Quebec, Fredericton, Halifax, Charlottetown, Winnipeg, Regina, Calgary, Edmonton and New Westminster, \$50 each, and Saskatoon, Red Deer, Victoria and Chatham, \$25 each.

The new President is Wm. Stewart, Menie, Ont.; Vice-President—G. C. P. McIntyre, Sussex, N.B.; Secretary—W. F. Stephen, Huntingdon, Que.; Eastern Directors—R. R. Ness, Howick, Que.; G. C. P. McIntyre; P. D. McArthur, North Georgetown, Que.; M. St. Marie, Moe's River, Que.; Hon. Wm. Owens, Montreal; Hector Gordon, Howick, Que., and James Bryson, Brysonville, Que.

(Note.—The gist of the President's address and a short account of the breeders' trip to Macdonald College will appear next week.—Editor.)

The average of prices received by producers of the United States for staple crops increased 1.5 per cent. from January 1st to February 1st, which compares with an increase of 4.7 per cent. in the same period a year ago, and an average increase of 2.6 per cent. during January of the past five years. On February 1st prices of staple crops averaged about 19.7 per cent. lower than on like date of 1912, 6.0 per cent. lower than in 1911, 18.7 per cent. lower than 1910, and 6.5 per cent. lower than 1909, on like date.

Favorable reception was given in the House of Commons last week by Hon. W. T. White, Finance Minister, to a proposal of Thos Meighen, M.P., of Portage la Prairie, Man., for the introduction in Canada of a better and cheaper system of agricultural credit banks, a subject reviewed editorially in "The Farmer's Advocate" of January 9th. A general Act may be framed at an early date.

The article, "Shall Farmers Keep Bees?" appearing in the Apiary Department of "The Farmer's Advocate" of February 13th, was written by J. L. Byer, of York County, Ont., whose name should have been appended.

The annual meeting of the Canadian Seed Growers' Association has been fixed to be held at Ottawa on March 6th and 7th. L. H. Newman, Canadian Building, is the secretary.



Part of the Ontario Corn Exhibition in the Armories at Windsor, Ont.

MARKETS.

Toronto.

REVIEW OF LAST WEEK'S MARKETS
At West Toronto, on Monday, Feb. 17th, receipts of live stock numbered 87 cars, comprising 1,515 cattle, 772 hogs, 265 sheep, 36 calves, and 45 horses; no business was being transacted. It looked like firm prices for sheep, lambs, calves, and hogs. One dealer stated that hogs would be \$9.25, fed and watered, and \$8.90 f. o. b.

Receipts of live stock at the City and Union Stock-yards last week were as follows:

	City.	Union.	Total.
Cars	18	296	314
Cattle	380	3,697	4,077
Hogs	229	8,040	8,269
Sheep	189	819	1,008
Calves	79	424	503
Horses		74	74

The total receipts at the two markets for the corresponding week of 1912 were as follows:

	City.	Union.	Total.
Cars	120	163	283
Cattle	1,374	2,017	3,391
Hogs	4,454	2,957	7,411
Sheep	1,226	592	1,818
Calves	221	22	243
Horses		25	25

The combined receipts of live stock at the two markets, show an increase of 31 carloads, 686 cattle, 858 hogs, 260 calves, and 49 horses; but a decrease of 810 sheep, compared with the corresponding week of 1912.

Receipts of live stock at the two Toronto markets last week were light, in comparison with late deliveries. The cattle trade was inclined to be slow, as there were few outside buyers, and prices ruled barely steady; in fact, for those of export weights and quality, they were 10c. to 15c. per cwt. lower than for the previous week.

Exporters.—There were none bought for export, but there were about 120 cattle, weighing from 1,140 to 1,300 lbs., that sold from \$6.90 to \$7, all of which were taken by the local abattoirs.

Butchers.—Choice butchers' cattle sold at \$6.40 to \$6.75; loads of good, \$5.85 to \$6.25; medium, \$5.40 to \$5.70; common, \$4.50 to \$5.25; cows, \$3.50 to \$5.25, and a few choice, heavy cows, sold at \$5.40 to \$5.75; bulls, \$3.75 to \$5.25, and a few of extra weight and quality sold up to \$5.50 and \$5.75.

Stockers and Feeders.—Stockers, 650 to 750 and 800 lbs., sold from \$4.75 to \$5; feeders, 850 to 950 lbs., at \$5.25 to \$5.50 per cwt.

Milkers and Springers.—Few good ones in either class were offered, in fact, receipts of milkers and springers were light, prices ruled about steady, the bulk going at \$45 to \$65, with a very few of the good to choice, at \$70 to \$75 each.

Calves.—The demand was greater than the supply, and prices were very firm. Rough, heavy calves, sold from \$4 to \$6 per cwt.; veal calves, 150 to 200 lbs., were in excellent demand, selling up to \$10, and even \$10.50 per cwt. The bulk of calves sold from \$7 to \$9 per cwt.

Sheep and Lambs.—Sheep and lambs, especially the latter, were scarce, not nearly enough to meet the demand, and prices were higher. Sheep—Ewes sold at \$5.25 to \$6.25 per cwt.; rams, \$4.25 to \$5 per cwt. Lambs sold from \$8.50 to \$9.50, and a few sold at \$9.65 per cwt.

Hogs.—The demand for hogs was far in excess of the supply, and prices started on Tuesday at \$9 per cwt., fed and watered, instead of \$8.75, as quoted by the packers. On Wednesday, another 25c. per cwt. advance took place, the market closing on that day at \$9.25, for hogs fed and watered. The market on Thursday closed firm, at \$9.25 per cwt., fed and watered.

Horses.—Dealers who have been attending sales at all the different sale-stables in the city, report trade in horses as being very quiet, in fact, the quietest week of the season thus far. Prices were reported as being about steady, with those in our previous report.

BREADSTUFFS.

Wheat.—Ontario, No. 2 red, white or mixed, 95c. to 96c., outside; inferior grades, down to 70c.; Manitoba, No. 1 northern, 96½c.; No. 2 northern, 94c.,

track, lake ports; feed wheat, 66½c., lake ports. Oats—Ontario oats, No. 2, 83c. to 84c., outside; 88c., track, Toronto; Manitoba oats, No. 2, 41½c.; No. 3, 40c., lake ports. Rye—No. 2, 68c. to 70c., outside. Peas—No. 2, \$1.15 to \$1.20, outside. Buckwheat—51c. to 52c., outside. Barley—For malting, 58c. to 60c.; for feed, 40c. to 50c., outside. Corn—No. 3 American, 57c., Toronto, all-rail shipment. Flour—Ontario, ninety-per-cent, winter-wheat flour, \$3.95 to \$4.05. Manitoba flour—Prices at Toronto are: First patents, \$5.30; second patents, \$4.80; in cotton, 10c. more; strong bakers', \$4.60, in jute.

HAY AND MILLFEED.

Hay.—Baled, car lots, track, Toronto, \$13.50 to \$14 per ton, for No. 1; No. 2 hay, \$11 to \$12 per ton.

Straw.—Baled, car lots, track, Toronto, \$9 to \$10 per ton.

Bran.—Manitoba bran, \$19 to \$20 per ton; shorts, \$22 to \$23; Ontario bran, \$19 to \$20, in bags; shorts, \$22 to \$23, car lots, track, Toronto.

TORONTO SEED MARKET.

Alsike No. 1, per bushel, \$11.50 to \$12.50; alsike No. 2, per bushel, \$10.50 to \$11; alsike No. 3, per bushel, \$9.50 to \$10; red-clover seed, Ontario-grown, \$7 to \$9 per bushel; timothy No. 1, per bushel, \$1.90 to \$2.25; timothy No. 2, per bushel, \$1.25 to \$1.60.

COUNTRY PRODUCE.

Butter.—Market a little firmer for some grades. Creamery pound rolls, 32c. to 34c.; creamery solids, 28c. to 29c.; separator dairy, 28c. to 30c.; store lots, 22c. to 24c.

Eggs.—New-laid, owing to cold weather, receipts have fallen off, and prices are firmer, at 30c. per dozen for case lots. Cold-storage eggs, 20c. On the farmers' market, eggs are selling at 35c. per dozen, retail.

Cheese.—Large, 14c.; twins, 15c. per lb. Honey.—Extracted, 12½c. per lb.; combs, per dozen, \$2.75 to \$3.

Potatoes.—Market a little firmer; Ontario potatoes, in car lots, track, Toronto, 65c.; New Brunswick Delawares, 80c. per bag, in car lots, track, Toronto.

Poultry.—Receipts moderate, and prices firm. Prices for dressed are as follows: Turkeys, 24c. to 25c.; geese, 18c.; ducks, 20c. to 22c.; chickens, 18c. to 20c.; fowl, 14c. to 16c.

Beans.—Primes, \$2.50, and hand-picked, \$2.60.

HIDES AND SKINS.

No. 1 inspected steers and cows, 13½c.; No. 2 inspected steers and cows, 12½c.; No. 3 inspected steers, cows and bulls, 11½c.; country hides, cured, 11c.; country hides, green, 10c.; calf skins, per lb., 14c.; lamb skins, \$1.10 to \$1.50; horse hides, No. 1, \$3.50 each; horse hair, per lb., 37c.; tallow, No. 1, per lb., 5½c. to 6½c.

FRUITS AND VEGETABLES.

Apples—Spies, No. 1, per barrel, \$4; No. 2 Spies, \$3 per barrel; Greenings, No. 1, \$3 per barrel; No. 2 Greenings, \$1.75 to \$2 per barrel; Kings, \$3 per barrel; cabbage, \$1 per barrel; onions, 75c. to \$1 per bag; carrots, 50c. to 60c. per bag; parsnips, 60c. to 70c. per bag; turnips, 40c. per bag; Florida strawberries, 40c. to 50c. per quart basket.

Buffalo.

Cattle.—Prime steers, \$8 to \$8.50; butcher grades, \$4 to \$7.90.

Veals.—\$4 to \$12.

Hogs.—Heavy, \$8.50 to \$8.60; mixed, \$8.55 to \$8.60; Yorkers and pigs, \$8.60 to \$8.65; roughs, \$7.60 to \$7.75; stags, \$6 to \$7; dairies, \$8.40 to \$8.60.

Sheep and Lambs.—Lambs, \$6 to \$9.25; yearlings, \$5 to \$8.50; wethers, \$6.25 to \$7; ewes, \$3.50 to \$6.50. Sheep—Mixed, \$6.25 to \$6.50.

Chicago.

Cattle.—Beeves, \$6.65 to \$9.15; Texas steers, \$5 to \$5.85; stockers and feeders, \$4.75 to \$7.65; cows and heifers, \$3.10 to \$7.50; calves, \$6.75 to \$10.25.

Hogs.—Light, \$8.05 to \$8.35; mixed, \$8 to \$8.35; heavy, \$7.85 to \$8.30; rough, \$7.85 to \$8; pigs, \$6.50 to \$8.15.

Sheep and Lambs.—Sheep, native, \$5 to \$6.50; yearlings, \$6.75 to \$8. Lambs—Native, \$7 to \$9.10.

Montreal.

Live Stock.—Owing to the colder weather being experienced of late, prices of cattle showed a firmer tendency, and sales were made at somewhat higher prices. Really choice cattle were scarce, and as a result sales took place at 6½c. to 7½c. per lb., according to quality. Fine stock sold at around 6c. per lb.; good at 5½c. to 5½c. per lb., and medium ranged from 4½c. to 5c. per lb. Common stock ranged all the way down to 3½c. per lb. Offerings of sheep and lambs showed very little change. Quality was fair, and prices ranged from 4½c. to 5c. for sheep, and from 7½c. to 7½c. per lb. for lambs. Calves were in good demand, and ranged from \$5 to \$12 each. Hogs were firm in tone, and prices ranged around 9½c. to 9½c. per lb. for selects, weighed off cars, while a few sold at 10c. per lb.

Horses.—Dealers reported a steady market for horses. Prices showed no change, being as follows: Heavy draft horses, weighing from 1,500 to 1,700 lbs., \$300 to \$400; light draft, 1,400 to 1,500 lbs., \$225 to \$300; light horses, 1,000 to 1,100 lbs., \$125 to \$200; broken-down animals, \$75 to \$125, while choice saddle or carriage animals sold at \$350 to \$500 each.

Poultry.—Supplies of poultry were on the light side. Choice turkeys sold at 21c. to 22c. per lb.; ducks and chickens, 14c. to 17c. per lb.; geese, 18c. to 14c., and fowl at 11c. to 13c. per lb.

Dressed Hogs.—The market for dressed hogs was steady to firm, in sympathy with that for live. Prices ranged from 13½c. to 13½c. per lb. for abattoir fresh-killed stock, and 13c. to 13½c. per lb. for country-dressed, light weights, and 12½c. to 12½c. for heavy.

Potatoes.—Supplies were quite large, and as a result prices were a shade lower, it being possible to purchase Green Mountains, carloads, on track, at 72c. to 73c. per 90 lbs., while Quebec potatoes were about 5c. under these figures. For smaller lots, add 25c.

Eggs.—Quite a few have been brought in from across the border, and more are likely to follow. On the whole, the market was rather firmer, owing to the colder weather. Fresh eggs were quoted at 35c. to 37c.; selects held at 25c., and No. 1 held at 22c.

Syrup and Honey.—The market for honey was unchanged, at 16c. to 17c. per lb. for white-clover comb, and 14c. to 15½c. for dark; 11½c. to 12c. for white extracted, and 8c. to 9c. for dark. Syrup sold at 7c. to 8c. per lb. in wood, and 8c. to 10c. per lb. in tins; or, rather, it was quoted at those figures. There was little or none to be had.

Grain.—There was very little new in the market for oats. No. 2 Canadian Western sold at 41c. per bushel, in car lots, and extra No. 1 feed at 40c. per bushel, ex track.

Flour.—The market for Manitoba was steady. First patents sold at \$5.40 per barrel, in bags; seconds, \$4.90; strong bakers', \$4.70. Ontario winter-wheat patents were quiet, at \$5.25 per barrel, in wood, and straight rollers, \$4.85 to \$4.90.

Millfeed.—There was very little new in the millfeed market. Bran still sold at \$20 per ton, in bags, and shorts at \$22, while middlings were \$27 per ton, including bags. The market for mouille was steady, at \$35 to \$36 per ton for pure, and \$30 to \$33 for mixed.

Hay.—Dealers still reported No. 1 hay at \$14 to \$14.50 per ton, carloads, track, for pressed hay; No. 2, \$13 to \$13.50 per ton, and \$12 to \$12.50 for No. 2 ordinary; No. 3 hay, and clover, sold at around \$10 to \$12 per ton.

Hides.—Save for a falling off in quality, the market was steady. Prices were 12½c., 13½c. and 14½c. per lb., for Nos. 3, 2 and 1 beef hides; 14c. and 16c. for Nos. 2 and 1 calf skins; \$1 to \$1.10 each for lamb skins; \$1.75 and \$2.50 each for horse hides; 6c. to 6½c. per lb. for tallow, refined, and 1½c. to 3c. per lb. for rough.

Trade Topic.

Choice ensilage seed corn that will grow, of the Mammoth White, Improved Leaming, and Yellow Dent, in car lots, is advertised by the well-known growers, E. R. Ulrich & Sons, Springfield, Ill., whose 1912 crop is described as very choice.

Gossip.

Inadvertently, the footnote under the cut of a Leicester sheep, in our issue of Feb. 13th, read a "shearling ram," whereas it should have read a "shearling ewe," first in her class at Toronto and London, and champion ewe at both places, shown by A. & W. Whitlaw, Guelph, Ont.

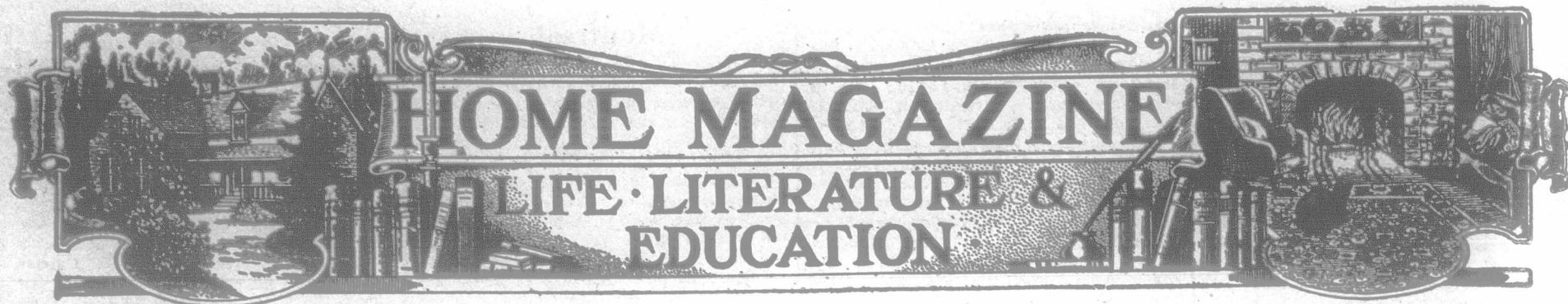
J. T. Gibson, of Denfield, Middlesex County, Ont., well known as a breeder of high-class Shorthorns, writes: I must change my advertisement and stop enquiries for bulls. I never had so many enquiries for bulls as in the last few months; am sold out up to May bull calves; have two good ones of that age; have no trouble to sell when enquirers see my stock bull, and the calves he is getting. See change of advertisement, and fuller notes in next week's issue.

To settle an estate, a stock farm of 107 acres, in Beverly township, 10 miles east from the prosperous town of Galt, Ont., on a county stone road, is advertised for sale on another page. Two bank barns joined, a large modern dwelling house, a never-failing spring creek, school within quarter of a mile, telephone and rural mail delivery, are among the attractions of this property, situated in one of the very best farming districts in Ontario.

SALE DATES CLAIMED.

- Feb. 25th.—Monro & Lawless, Thorold, Ont.; Holsteins.
- Feb. 25th and 26th.—Union Stock-yard Co., Ltd., Toronto; Clydesdales and Percherons.
- Feb. 25th.—J. & E. Chinnick, Chatham, Ont.; Shorthorns.
- March 4th.—M. Regan, Lemonville, Ont.; Clydesdales and dairy cattle.
- March 5th.—Annual Contribution Sale of pure-bred cattle, at Guelph, Ont.
- March 6th.—James Cowan, Seaforth, Ont.; Shorthorns.
- March 7th.—Executors, Thos. Weir, Scarborough, Ont.; Jerseys and Oxford Downs.
- March 11th.—A. H. Teeples, Currie's Crossing, Ont.; Holsteins, Sale at Woodstock.
- March 12th.—John McKenzie, Willowdale, Ont.; Holsteins and Tamworths.
- March 19th.—Oxford District; Holsteins.

Monro & Lawless, Thorold, Ont., whose great sale of high-class Holstein cattle is to take place Feb. 25th, write: "In offering our Holsteins to the public, as advertised, we do so with the firm conviction that this is the best lot of dairy cattle, from more than one point of view, that was ever offered to the dairy-men of Canada, and we fully believe that they will appreciate this opportunity to augment their herds with these choice animals. Such is our confidence in their judgment, that we are offering cattle we never priced privately, for we believe that there is no fairer way to set the value of high-class stock than the auction sale. Our cattle average younger than are usually offered, which means the purchaser will buy cattle that will largely increase in value for him, and give the largest possible returns for his investment, as most of them have all their years of usefulness ahead of them. As individuals, they are a splendid lot, large, straight, and handsome, but showing good dairy capacity, and strong constitutions. Those in milk carry beautiful, well-balanced udders, with well-placed teats of good size. As producers, they are also well above the average, and while we lay no claims to having world-beaters, we believe that for average production there are few herds in Canada that will equal them. The breeding of these animals is also superior. Never before was there an opportunity to set one's own price on so much of the blood of the world's best producers. There are more granddaughters of Hengerveld De Kol, Pietertje Hengerveld's Count De Kol, De Kol 2nd's Butter Boy 8rd, Johanna Rue 4th's Lad, King of the Pontiacs, and King Segis, than was ever offered in one sale before. We have not, since our last sale, bought a cheap or inferior animal; we have been careful in the selection of our herd bulls; we have reared our calves well, and the result we are offering to the public. These cattle have been subjected to the tuberculin test, and the buyer of each animal over six months of age will receive a certificate to that effect without extra expense.



The Detroit Museum of Art.

(By W. T.)

To a lover of the beautiful and the historic, a visit to the Detroit Museum of Art is one of the pleasures of a lifetime. Whatever else in this bright, animated American city may attract the visitor, the turreted building of sedate brown stone on Jefferson avenue, deserves first place. Should any reader of these notes chance to have overlooked it before, let not the charm of its many well-lighted galleries escape you again, for in them beauty is always holding a free "at home" to the appreciative observer. The art of a people is an expression of their gifts and sympathies, graces and ideals. It flowers not today to perish to-morrow. The appeal of the art in a picture is universal and perennial. In a collective sense, art is a growth, a species of creative evolution. Those who have the honor to bring into existence these museums, need the all-seeing eye of the artist, and the collective instinct. Like great artists—they are born—not made.

The history of the Detroit Museum of Art is of particular interest, in that it suggests to other communities the duty of preserving the curious and the artistic achievements of past and present, to perpetuate a wholesome public spirit. Something like this should be doing in every sizable Canadian town. In the year 1883 a great loan exhibition of pictures was held in Detroit, backed by the guarantee of generous citizens to provide against possible shortage, but so well was the event sustained, that there was a surplus of some \$4,000, which became the nucleus of a fund to found a permanent collection. With patient efforts the work began; paintings, rare prints, etc., were added, and the city in time came to discern with pride the beauty and the use of its art home. In mere dollars, three-quarters of a million would be a moderate valuation of the Museum now; and plans are under way for a superb new palace of art on Woodward avenue, which will probably cost a couple of millions when completed.

Through the untiring devotion and research of the late Frederick Stearns, a fine collection of natural history, ethnology, mineralogy, archaeology, and oriental material was brought together, and has been so shown as to be of immense service to public and private schools. The court of sculpture contains many representative casts of famous statues, and some original marbles. The institution has constantly had the enthusiastic support and co-operation of loyal friends. Many of its rarest and best art treasures have come through individual generosity, or the united effort of persons in securing pictures of undoubted repute, in addition to those secured by purchase of the management. More than twenty-two years ago, the institution, which had been incorporated in 1885, was fortunate in enlisting the resourceful genius of A. H. Griffith as Director, who has since made its development his life work, and to the success of which it is a splendid monument. Over two hundred paintings of a strictly classical order, permanently adorn the walls for the pleasure of visitors and connoisseurs, and the benefit of art students. Thus to assemble for the instruction and inspiration of the people a collection of pictures so varied and

withal so pleasing, representing the work of more than 170 of the world's greatest artists, is an achievement the magnitude and merit of which is simply beyond praise. How much it reveals the world and humanity! From time to time, there are loan exhibitions from artists, art organizations, and other art museums. At the time of the writer's visit, there was a charming collection of contemporary American pictures, mostly landscapes in oils, from the National Arts Club of New York. An illustrated bulletin, issued quarterly, and the city press, keep the people acquainted with what is being done at the Museum. A specialty has been made of the educational side of the work by means of photographs and lantern slides, and other material freely loaned, and by information furnished enquirers. The efforts of the management have been greatly furthered in that respect through the admirable photographs and art prints produced by the Detroit Publishing Co., to

her husband, with 15 additional masterpieces. (By old masters are meant pictures appearing before the 19th century.) Then, there are over 100 of the very choicest of modern paintings. A recently-exhibited picture of note is "The Buccaneers," which attracted attention at the Canadian National Exhibition, Toronto, in 1911. A special interest just now attaches to "The Wreck," a powerful picture, the gift to the Museum of E. Chandler Walker, because of the lately-reported discovery of a painting somewhat similar in general character, depicting a Normandy coast-scene, said to be by the same distinguished artist (Eugene Louis Gabriel Isabey, of France), unearthed in a London, Ontario, where it was left years ago by an eccentric French physician, Dr. Agnew. The Museum pictures reproduced in this issue, are "The Young Artist," by Ellen Kendall Baker (Mrs. Harry Thompson), a Paris Salon picture of 1885, in which the baby is being shown the rude



The Young Artist.

Painting by Ellen Kendall Baker (Mrs. H. Thompson), in Detroit Museum of Art. "Thistle" Print, Copr. Detroit Publishing Co.

whom we are indebted for the use of the five pictures illustrating this article. In a subsequent number, readers will have the pleasure of seeing several others.

The first masterpiece secured was a 16th Century Italian painting, "The Spiritual Bethrothal of St. Catherine of Alexandria with the Infant Jesus," the gift to the Museum of Pope Leo XIII. The late James E. Scripps, a Detroit journalist of affluence, spent some four years in Europe acquiring a unique collection of old masters' paintings, which in 1889, to the number of about 70, he presented to the Museum, and this, in 1909, was generously supplemented by Mrs. Harriet E. Scripps, in memory of

drawing of her sister; "The Wedding," a Dutch church scene, by Gari. J. Melchers, a native of Detroit, who has achieved distinguished honors in the world of art; "The Return of the Flock," by Constant Troyon, one of the most famous of French animal painters; "Memories of Japan," by Hiroshi Yoshida, a Japanese, who studied with an Italian-trained teacher, and subsequently painted in America. This picture is one of lovely color and good composition, representing children playing under a cherry tree at sundown. A most striking picture is "The Misers," by Quentin Massys, of the Flemish school, a replica of the picture in Windsor Castle. It relates its own story.

The Roundabout Club

Study II--The [Greatest Movement in the World To-day.

THE WAR BETWEEN CAPITAL AND LABOR.

(A prize essay.)

["Dufferinite," Dufferin Co., Ont., considers the war between capital and labor to be the greatest movement in the world to-day. Here are his ideas on the subject.]

Probably the greatest movement in the world to-day is the war between capital and labor. This is the greatest war the world has ever seen. It is not a war of a few years, but of centuries; it is not confined to one country, but its influence is felt over the whole world.

This strife is one feature of the great struggle between good and evil that has ever been in progress. Every year the struggle deepens, the chasm between the rich and poor grows larger. The rich are becoming exceedingly rich.

The word millionaire has given place to multi-millionaire, and the incomes of these modern princes of finance are so great that they cannot be computed. There are now thousands of millionaires in the United States, and several whose yearly income is over a million dollars, acquired chiefly through oppression of the poor.

The middle classes, upon whom the prosperity of the country depends, are being wiped out, and if conditions keep on as they are now, there will soon be no middle class, but all will be very rich or very poor. Nothing shows this more clearly than the growth of departmental stores, and the failures of small business concerns.

The decrease in the rural population is another big factor. Young men and women leave the farm for the city, and there become the slaves of the great corporations, such as the railroads, large stores, etc. This throws into the labor ranks many men of good ability, and with such men at their head, the laboring people have become so well organized that they are feared, even by the great concerns.

One result of this organization of labor is the prevalence of strikes. Wealthy monopolies reduce wages to the lowest amount possible, and when they become so low that the employees can scarcely live, the labor union calls a strike, many times accompanied by destruction of life and property. The baneful effects of most strikes is seen in the recent "dynamite conspiracy" trial at Indianapolis. In 1905, the Ironworkers' Union called a strike that spread all over the United States, until violence was resorted to, which ended in the blowing up of the Times building at Los Angeles, and the death of 21 persons. A short time ago the trial was finished, resulting in the sentencing of 38 labor-union officials to federal prison for long terms.

We thus see that a resort to violence will not correct the evils that exist. If the wrongs of the workingman are not soon righted, we will have a reign of anarchy, which would be the worst evil that could befall this or any other country. Anarchy is the abolition of all rights of property. It means the overthrow of all law and order, when every man will be a law unto himself. If anarchists gained control, they would turn and fight among themselves, and the future state of the workingman would be worse than the present.

At present, the outlook for any improvement in the condition of affairs

seems very dark. The accumulation of vast sums of money has always been a bad thing for society. A few very rich men, and a large number of very poor men, is what gave the world the French Revolution. We see a condition of affairs very much the same in the present day. Never before in the history of the country has there been so much money in the banks and so little in the pockets of the people, and when this is true, something is wrong, and the only remedy seems to be for the men who own the money to right that wrong, for it lies in their power,—not with the poor man.

DUFFERINITE.
Dufferin Co., Ont.

Dufferinite's essay will, of course, at once suggest the questions: Is it true that never before in the history of the world was the gap between rich and poor so great as at the present time? Does such a condition obtain, generally, the world over? Is it true that the middle and lower classes are being rapidly enslaved by a few men, trust and corporation magnates, and shareholders?

Without further comment, we quote below the opinion of a number of eminent men who have been making a study of sociological problems:

.....

"Never before has wealth accumulated to such a degree at the top of the social ladder, or poverty taken on so foul and extensive an aspect at the bottom."—Sir Alfred Russel Wallace.

.....

"Let us watch that we do not fall into the hands of a few corporations. It is dangerous to true democracy when one man can be named by his initials and everybody knows who is meant. We are in danger of seeing far too many of our resources gobbled up by a few corporations. It is getting to be that private members of Parliament are enjoying less and less influence, and becoming ciphers or voting machines. If they cannot get the Cabinet to endorse their proposals, they are scarcely given a hearing."—Ven. Archdeacon Cuddy, at the Canadian Credit Men's Association, Jan. 16th.

.....

"It is true that Socialism has yet made little progress in Japan, but the seeds are there; and they are being sowed every day by men heartbroken by the sight of the sufferings of the poor, the daily increase in the cost of living, and the daily sinking of the population into worse poverty. Even the people in the country districts are finding it hard to make a living, and are selling their lands. Strikes are becoming common; in fact, Nature is avenging herself." . . . Meantime, "all over the country there are immense new developments; great mines are opened; the Japanese flag floats over innumerable vessels, and compete successfully with the most powerful companies of England and Germany; and luxury has become common, and even ostentatious. Rolling by in their splendid equipages, the nouveaux riches pass through the streets of the capital."—T. P. O'Connor, in "T. P.'s Weekly."

.....

A portion of the testimony given by the financier, Mr. Geo. F. Baker, of New York, before the Pujo Committee. The question under consideration was the concentration of the control of credit, the so-called "money trust."

Q.—You think it would be dangerous to go farther?

A.—It might not be dangerous, but still it has gone about far enough. In good hands, I do not see that it would do any harm. If it got into bad hands, it would be very bad.

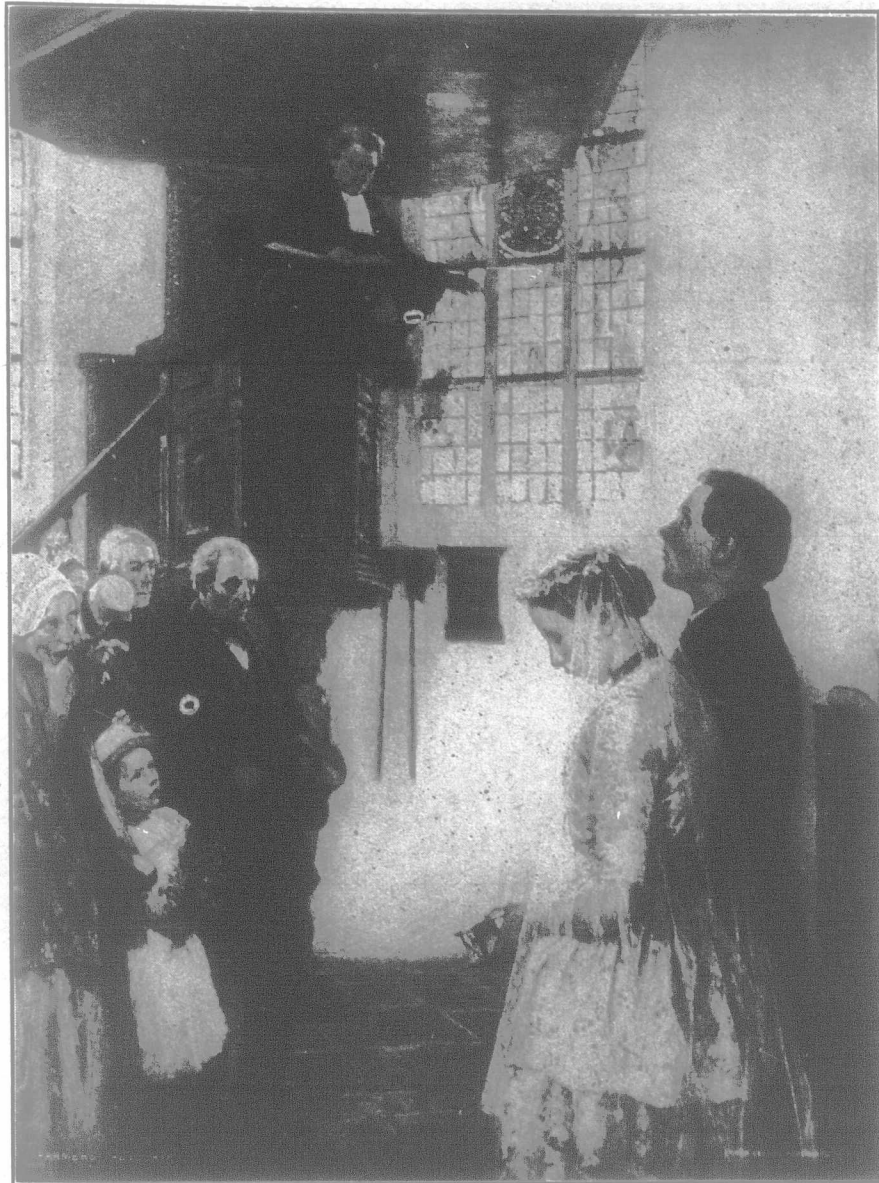
Q.—If it got into bad hands it would wreck the country?

A.—Yes; but I do not believe it could get into bad hands.

Q.—You admit that if this concentration, to the point to which it has gone, were by any action to get into bad hands, it would wreck the country?

A.—I cannot imagine such a condition. I said I thought it would be bad, but I do not think it would wreck the country. I do not think bad hands could manage it. They could not retain the deposits nor the securities.

Q.—We are speaking of this concentration which has come about, and the power that it brings with it, getting into the hands of very ambitious men,



The Wedding.

Painting by Gari J. Melchers, Detroit Museum of Art.
"Thistle" Print, Copr. Detroit Publishing Co.

perhaps not over-scrupulous. You see a peril in that, do you not?

A.—Yes.

Q.—So that the safety, if you think there is safety in the situation, really lies in the personnel of the men?

A.—Very much.

Q.—Do you think that is a comfortable situation for a great country to be in?

A.—Not entirely.

.....

Do reckless and ruthless men ever pic-

ture to themselves the power of the General Will?

Do they ever find time to read the story of the reckless and ruthless men of other days? Do they ever think why it is, that greed and egoism of the monstrous sort leave no enduring achievements?

Alexander and Cæsar, the Italian despots, and Philip of Spain, the Stuart kings and the Bourbon monarch, who declared he was the State, Robespierre and Napoleon, were not smaller men than Tweed and Murphy, than Aldrich and Mellen, than Ettore and Haywood. Yet the reckless and ruthless men of to-day go about their ambitious undertakings with the world-old self-confidence that has led the fatuous of all generations to disaster.

The general will is like the giant forces of nature. It is diffused and intangible, elusive and hidden. It lets men play with it, and seemingly defy it; but when they have defied too far, it kills like the lightning and wrecks like the tempest.

The men who built up the slave power in America thought that they were safe. The men who have been building up the capitalistic power have believed that they were safe. Perhaps some of them still think that they are safe. The men who are devising a power of violence and destruction in the hope of overturning organized society and devastating civilization, will cherish for a time the delusion that they are safe. They have learned nothing from the past; they have no power to analyze the present. They will move straight on to their destiny.

And so will the general will. In its own time, and in its own way, the general will will crush them. Through ages of slow progress, the general will has created social order. It will maintain civilization; it will broaden opportunity; it will establish justice. Not many men will understand it, but every man will heed it. Every man will learn to work with it and through it for the achievement of general human ends, or he will be broken and thrown to the scrap heap by it.—The Independent.

"Oh, be humble, my brother, in your prosperity; be gentle with those who are less lucky if not more deserving; think what right have you to be scornful, whose virtue is a deficiency of temptation, whose success may be a chance, whose rank may be an ancestor's accident, whose prosperity is very likely a satire."—Thackeray.



Return of the Flock.

"Thistle" Print, Copr. Detroit Publishing Co.

Painting by Constant Troyon, Detroit Museum of Art.

The Heroes of the Antarctic.

"Dying in the trenches there,
Snow-cold, in snow."

So wrote a poet of those who heroically, yet wretchedly, met death of exposure in one of the campaigns of the last century when war was considered a nobler thing than it is to-day. To-day, we realize a deeper heroism than even that of the soldier. The man who risks his life in the cause of science that, somehow, benefit may accrue to the race, the physician who works with deadly microbes in the secret of his laboratory, willing to tamper with death if haply thereby the lives of millions of his fellow-creatures may be saved, the engineer who bids his family a solemn farewell at each parting, knowing that the public service may one day occasion his sacrifice, the man who plunges through broken ice to rescue a human from the horrible death below,—such as these prove that were war forever of the past, the race of heroes must still live on, better, truer heroes, who seek to save life and happiness rather than to kill.

It has never been quite clear to the lay mind why so much suffering should be endured, and so many brave lives sacrificed in the long effort to reach the poles. Captain Roald Amundsen, the discoverer of the South Pole, speaking in Toronto recently, expressed an opinion that those bleak polar regions can never be of great service to humanity. Coal there is, he says, referring especially to the Antarctic lands, and perhaps other minerals, but workmen could not endure the conditions there, nor, if they could, would it be possible to carry on the exportation of the natural resources to any appreciable extent. In short, the sole harvest of these expeditions seems to have been the collecting of "valuable scientific information," with which definition folk who are not scientists must, for the time, be content. It is to be hoped, however, that the fruit of these last expeditions, of Peary, Amundsen, and Scott, may have been such that no more will it be necessary for brave men to tempt grim Death at the ends of the earth, and that the bleak plains of ice and snow may henceforth be left to the white bears and walrus which alone can rejoice in their desolation.

"Dying there—snow-cold, in snow."—So, in a little tent in the midst of a howling waste of ice and drifting snow, died Captain Robert Scott, R. N., and



The Misers.

Painting by Quentin Massys, Detroit Museum of Art.
"Thistle" Print, Copr. Detroit Publishing Co.

his companions, Dr. E. A. Wilson, and Lieut. H. R. Bowers, on the 29th of March of last year. So, in February, of that same fatal year, at the foot of the Beardmore glacier, died Edgar Evans, after a heroic effort not to retard the progress of the ill-fated party; and so on March 17th, died Lieut. Lawrence Edward Oates, who, ill, with both feet frozen, knowing that to remain with him must mean certain death to the others, walked out of Captain Scott's tent to

meet death in the raging blizzard. "In all the pages of heroism which brighten the history of Britain," it has been well said, "none is finer than the tale of the death of Lieut. Lawrence Edward Oates." Yet the "brightness" is one with a terrible shadow. Britain's page may have one more resplendent galaxy to her credit, yet the individuals have suffered untold agony. The horrors of war, the horrors of death amid polar ice,—where the human heart that must not long

that all such horrors were past forever? In all the pathetic annals of the world, there is none, perhaps, filled with a greater pathos than that last record written by Captain Scott within the thin canvas walls of that tent-grave. It is simply told.—"We have reached the pole; Amundsen had arrived there a month before. We are dying. We have failed, but circumstances were against us. We leave our families to the nation."—This is the gist of that quiet record. No hysteria—no bombast—the words of a brave man facing death.

And already the nation has responded. The Admiralty, the Government, have both taken steps, and a fund has been started in Canada, to provide for those dependent upon the five who have gone. "Dying there, snow-cold, in snow."

Hope's Quiet Hour

God's "Thank You."

His lord said unto him, Well done.—S. Matt. xxv.: 23.

One day a little four-year-old boy was sent into a field by his cousin—a boy of sixteen—to do some weeding. The big boy sat down comfortably to read a story, while the little one toiled in the heat until his fingers were sore. Then he went into the house and said to his auntie: "I've been kind to Jack, worked drestly hard for him, and he never said thank you to me." The little lips were quivering, and the blue eyes were tearful. That night, after he had said his prayers and climbed into bed, he said: "Auntie, this morning I was sorry I pulled the weeds, but now I'm not sorry."

"How is that?" asked his aunt. "Has Jack thanked you?"

"No, he hasn't; but I've a nice feeling inside. It always comes when I've been kind to anyone, and I've found out what it is. It's God's thank you."

Do you know what, it feels like to have God's "Thank you" whispered in your heart? It is like sunshine, making the everyday work a delight. It is like the perfume of hidden violets—violets which came from your dearest friend. I know someone who is even now rejoicing in the "Well done!" of her Lord. I don't know her name—that is a secret between her and God. Yesterday I received a letter from her, as follows:

"A lonely farm-house,
Jan., 1913.

"Dear Miss Farncomb,—Enclosed please find \$2.00, which I wish you to use, in some way, for the furtherance of God's work in this world. . . . Would you kindly, through the 'Quiet Hour,' give the names of any parties or places to which one could send reading matter? Papers and magazines pile up, and they contain such lots of good reading that it is a pity to destroy them, when such reading matter would be most welcome to others. Your sincere well-wisher,
A COUNTRY WOMAN."

I wish to add my "thank you" to the one you have already received from God, dear "Country Woman." The money is lying on my desk, waiting until I decide whether it had better go to a family in need, with sickness in the house; or to a young girl who has been working too hard and must stop work for a few days. I will let you know soon how it has been spent. Do any of our readers know of a good place to send the papers and magazines? If so, please let me know promptly. Letters can be sent to me, in care of the Wm. Weld Co., London, Ont.

There are men from India in Christendom who say they hope before long to drive out Christ before their god, Buddha. They don't know how the Living JESUS is controlling the thoughts and lives of multitudes of men and women in country, town, and city. What if Christianity could be killed? Then the world would be poorer by millions of little unnoticed acts of kindness. Only our Master Himself knows how many "cups of cold water" are held up to Him every day. He never forgets to thank the giver, and the gift prompted by love is treasured by Him for ever. His treasury is glowing with heaps of precious



Memories of Japan.

"Thistle" Print, Copr. Detroit Publishing Co.

Painting by Hiroshi Yoshida, Detroit Museum of Art.



**Let's make a Jelly Roll—
With FIVE ROSES flour.**

It. Strength and Fineness hold your batter together in the long well-greased pan.

Bakes evenly.

Smooth Texture—soft, golden Crumb, spongy, porous, yielding.

No holes, nor lumps to vex you.

And when you turn it out on the damp napkin hot and savory, and you spread the under side with "jell"—

It doesn't get soggy nor crumbly.

Roll it gently, carefully.

Not a crack—not a break.

Perfect Smoothness—a Perfect Roll—Yours.

Bake anything, make anything.

Use FIVE ROSES—bread and pastry.

Melting puff paste—flaky pie crust—crinkly fritters—

tooth some rolls.

FIVE ROSES for anything—everything.

Be flourwise.

Five Roses Flour

Not Bleached



Not Blended

LAKE OF THE WOODS MILLING COMPANY, LIMITED, MONTREAL

jewels, gifts which may long ago have been forgotten by the givers.

Think of the way some mothers are piling up acts and words of kindness in the King's treasury. He will not forget one "cup of cold water" which is held to a fretful child's lips by the weary, smiling mother, in the dead of night. He never fails to notice when she lays aside her work to join in a game of play, or to go off on some little outing to please the children. He smiles His "Thank you" when she takes time to make herself "look nice" before tea, when she is in the rush of house-cleaning.

He is disappointed, too, when she fails to seize the opportunity of doing a kindness: when she thinks that the credit of being considered "a hard worker," or "a first-class housekeeper," is of more importance than the chance of getting into warm, uplifting, personal touch with her own family or neighbors.

How often we spoil our "cups of cold water" by being so eager to have our kindness noticed and appreciated by our fellow-servants. We are so greedy for approbation that our Master's "Thank you" does not always satisfy us. Let us try to obey His wise command: "When thou doest alms, let not thy left hand know what thy right hand doeth: that thine alms may be in secret." Then the Father, Who seeth in secret, will be able to accept our offerings. How can he accept anything which is not freely given, but is only sold for admiration and praise?

John the Baptist might have sounded his own trumpet instead of being the herald of another. He was given the opportunity of receiving the honor due to the Messiah, but earnestly declared that he was not worthy to stoop down at the feet of his cousin from Nazareth and untie His shoes. The crowds came

BABY'S OWN SOAP

For Nursery Use

you cannot take chances on Soap. Four generations of Canadians have enjoyed the creamy, fragrant skin healing lather of Baby's Own Soap—the Standard in Canada for nursery use, on account of its known purity.

Baby's Own is Best for Baby—Best for You.

ALBERT SOAPS, LIMITED, Mfrs., - MONTREAL.



from far and near to listen to his burning eloquence, but he lost himself in the message God had told him to deliver. He did not care to be called "John, the famous prophet and preacher," but declared that he was only a "voice" preparing the way for One Who was coming. "I must decrease," he said, but that was no cause of disappointment to him, for the Light of the world would certainly "increase," shining more and more unto the perfect day. Why should

the candle placed in a cottage window, to light a returning prodigal home, be unhappy when the sun rose triumphantly and its flicker was lost in the glory?

A loyal servant of Christ is thinking about his Master's honor, and has no time or thought to waste on the question whether they would appreciate him as he deserves. How does he know what he deserves? Has he spent his whole life in serving men, as his Master did? If so, then let him remember that Christ

gave perfect love and perfect service to the people around Him, and was repaid by the scourge, the thorns, and the Cross of shame and agony. It is enough for the disciple to be as his Lord. The scorn of the world is only a short sorrow, and can be worn like a crown of glory if God's "Well done!" be ringing like music in the heart. The praise of the world can only give transient pleasure, and will be found worthless if the Master should be forced to say: "Depart from Me!"

We want to win God's golden word of appreciation when our fighting days are over. He is watching the fight each hour, and sometimes a secret victory of ours gives Him new joy. How often has He rejoiced over us to-day? How often will He be able to whisper "Well done!" to-morrow? Do we ever really offer Him a gift which no one else is likely to notice? If not, let us try to gain a new ambition—the ambition to please our King.

"He held the Lamp each Sabbath day
So low that none could miss the way,
And yet so high to bring in sight
That picture fair—of Christ, the Light—
That, gazing up—the Lamp between—
The hand that held it was not seen.

"He held the Pitcher, stooping low,
To lips of little ones below:
Then raised it to the weary saint
And bade him drink when sick and faint.
They drank:—the Pitcher thus between—
The hand that held it scarce was seen

"He blew the Trumpet, soft and clear,
That trembling sinners need not fear:
And then with louder note and bold,
To storm the walls of Satan's hold,
The Trumpet coming thus between,
The hand that held it was not seen.

The
Kitchen
Sink
Needs



The sink, the taps, the kitchen cutlery, the cooking utensils, the floors and the wood-work—all need Old Dutch Cleanser, if you wish them kept spotless and *hygienically* clean. Old Dutch Cleanser routs out the grease, grime, water stains and rust in a jiffy. Keeps the hands soft and white—free from kitchen stains.

Many Uses and Full Directions on Large Sifter Can—10c

That very early grain



CAMP

COFFEE

Made instantly—a child can make it. It has all the fragrance and delicious flavour of the finest coffee. There is no other 'just as good.'

Ask your grocer for it to-day, and be sure to say 'CAMP.'

R. PATERSON & SONS, COFFEE SPECIALISTS, GLASGOW

RENNIE'S SEEDS



NEW EARLY TOMATO

Rennie's "Ninety Day"

The earliest, smoothest, hardest and best early Tomato grown. In this New Variety we have very smooth deep fruits which are ready for market five to seven days earlier than Spark's Earliana.

This northern-grown strain of Tomato is undoubtedly the very best earliest scarlet-fruited Tomato.

Oz. 80c. ½ oz. 50c. Pkt. 15c.

RENNIE'S SEED CATALOGUE FOR 1913

Full of interesting and instructive information for the Farmer and Gardener. Tells what and how to plant. A bright book—profusely illustrated. Shall we send you a copy? If so, write to-day to nearest address.

Wm. RENNIE Co. LIMITED, TORONTO

190 MCGILL ST.
MONTREAL

394 PORTAGE AVE.
WINNIPEG

1138 HOMER ST.
VANCOUVER

"But when our Captain says: 'Well done, Thou good and faithful servant! Come! Lay down the Pitcher and the Lamp, Lay down the Trumpet, leave the Camp,'—Thy weary hands will then be seen Clasped in His pierced ones, naught between."

DORA FARNCOMB.

The Mending Basket

Finances on the Farm.

As I see by a recent issue of "The Farmer's Advocate" that you intend to make an end of that Mending Basket in some way (although I wonder how you can manage this, as my own never seems to get empty or come to an end), I would like to contribute a patch for it, chiefly about Finances on the Farm.

In our community, and this includes a large part of the county, we have a good market for any and all kinds of produce from the farm, so what I will contribute may not be so easily arranged where there is no cash system of buying, and selling as there is here; still it likely can be managed in some way mutually agreeable to both husband and wife.

When first married, an aunt of mine advised me to keep all money coming in on my side of supervision of farm work, namely, from dairy, garden-products, poultry, etc., for my own use.

I did not like this idea, for, I thought, are we not one now, with one aim in view, the paying for the farm? Why should we divide our interests? It, however, was not long until I found out the wisdom of my aunt's advice.

My husband is not at all niggardly. However, it often happened that when I needed money he had a payment to make on some implement, which was about due, or something like this, and then my request for money interfered with his plans, as he certainly did not have a great pile ready somewhere, so that he simply could reach out and get some more. Now, this did not suit me, as I felt that some of the products sold had passed through my hands, and had thereby increased in value (which they certainly should do by the extra amount of work expended on them), that my husband received the cash for them, and here was I needing some clothing, or whatever it might chance to be, and he could hardly arrange matters so that I could have some of the money.

Now, my aunt's suggestion again came to my mind, and I began to see why she had given me this advice, so I asked my husband whether he would agree to let me have all the money coming in from the dairy, poultry, garden, etc., to use at my own discretion, I to pay for hired girl if one was kept, buy groceries, clothing for the family (excepting suits and shoes for 'himself'), furnishings for the house if, in any way, any were needed. Husband finds potatoes, meat, flour, apples, pays for bread, etc. (which we, as well as nearly all farmers around here, buy). If any money is left after getting what I think we need, and paying expenses on my side of the business, I put it into the Savings Bank until fall, when I hand it over to my husband to use in paying taxes, insurance, or wherever he needs it most. I usually aim to have the tax-money ready also insurance, and, if possible, some more. There is a great deal of satisfaction and pleasure in realizing that you really are a helper.

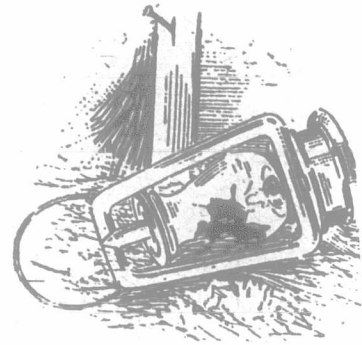
We still have one aim in view, having simply adopted another system by which to reach it. We are both well satisfied with this arrangement (which we have tried for nearly twenty years), and we do not interfere with each other's plans as we did before.

I have not yet seen anything of this nature suggested in your columns, so felt like contributing my "patch," in the hope that it may benefit someone. I have simply given our plan as an outline, and others may be able to adopt something more suitable for their situations, but please do give the wife a chance to show what she really can and will do.

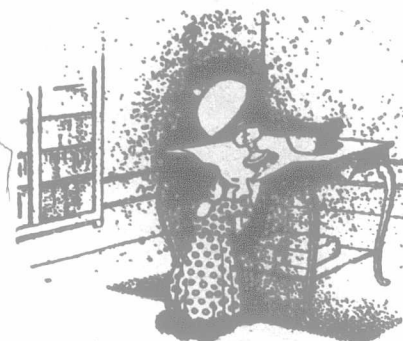
Another idea which I wish to give here will come a little more under the men's line of business. In spring, when the fat cattle are sold, and about all the returns of the year brought in, my husband always tries to leave some

FARMERS

WHY USE THAT DANGEROUS LANTERN IN YOUR BARN?



AND THOSE DANGEROUS AND FILTHY OIL LAMPS IN YOUR HOME?



WHEN YOU CAN LIGHT SO SAFELY, BEAUTIFULLY AND CHEAPLY



WITH A "DAVIS" LIGHTING SYSTEM.

Costs you no more than the value of a good horse to install one.

Drop us a card to-day and we will tell you all about this wonderful light.

Davis Company,
NIAGARA FALLS, ONTARIO

AGENTS WANTED.

Write to-day before they are all placed.

FACIAL BLEMISHES



The successful home treatment of Skin, Scalp, Hair and Complexional troubles has been a specialty with us for over 20 years. We treat Pimples, Blotches, Blackheads, Eczema, Freckles, Mothpatches, Discolorations, Ivy Poisoning, Ringworm, Rashes,

Red Nose, Wrinkles, Dandruff, Gray, Falling or Lifeless Hair, Alopecia, Goitre, Moles, Warts, Red Veins, Superfluous Hair, or any other non-contagious skin trouble. For Hairs on Face and Red Veins there is no reliable home remedy. Our method is assured satisfactory; consultation free and confidential at office or by mail. Our booklet "F" and sample of Toilet Cream mailed free if this paper is named.

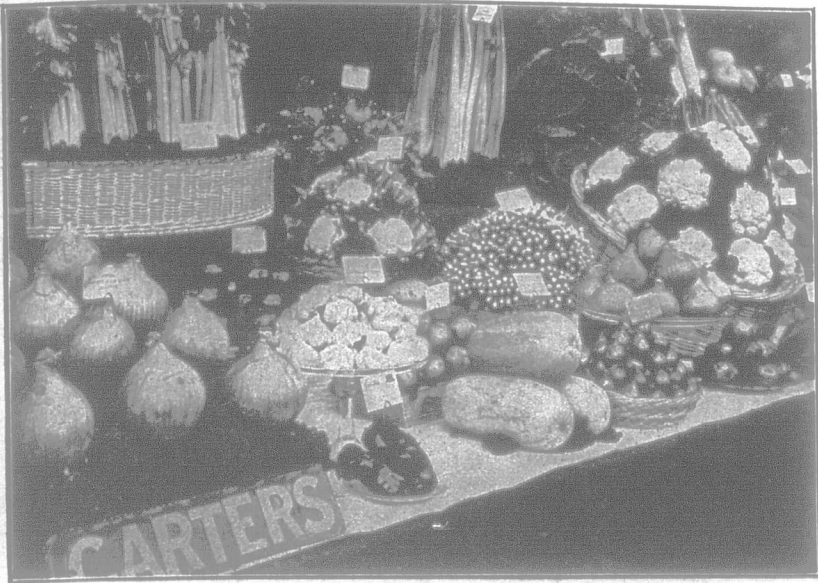
Hiscott Dermatological Institute,
61 College St., Toronto. Est. 1892

O. A. C. NO. 21 BARLEY

Another supply of beautiful seed now ready. We increased one pound to nine hundred bus. in three crops. Price 90 cents per bus. Also a supply of clean and pure improved Siberian Oats, the leading variety. Price fifty cents per bushel. Best cotton bags twenty seven cents.

Jno. Elder, Hensall, Ont.

You Can Grow These in Your Own Garden



BE SURE THE SEEDS YOU SOW ARE

CARTER'S TESTED ENGLISH SEEDS

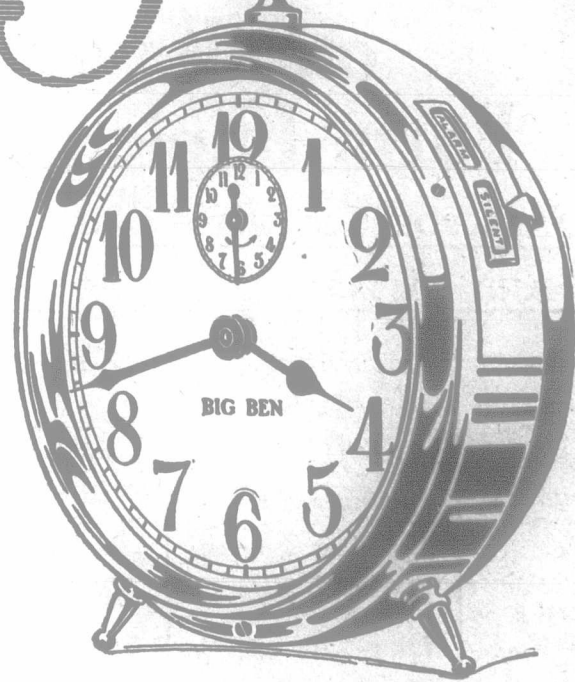
Selecting the right seed has much to do with the ultimate success of field crops and of garden vegetables. For large yield, extraordinary size, fine quality and hardness, scientific tests and general use in Canada have for many years proven the great superiority of Carter's Tested Seeds. They are known, sown and grown the world over and backed by 100 years of scientific production. Carter's Seeds doubly insure good results. Order from catalogue. Write for your copy at once.

OUR NEW 1913 CATALOGUE—SENT FREE

We have books and literature explaining all about Carter's Tested Seeds. Send us your name and address for free copies. Address:

DEPT. N, PATTERSON, WYLDE & COMPANY
SOLE AGENTS FOR CANADA
133 King St., East TORONTO, ONT.

Big Ben



Big Ben—Two Good Alarms in One

Take your choice in Big Ben. He rings either way you wish—five straight minutes or every other half minute for all of ten minutes unless you switch him off. He's two alarms in one.

If you're a light sleeper, turn on the half minute taps before you go to bed. If you sleep heavily, set the five minute call. You can slumber then without the get-up worry on your mind.

When morning comes, and it's announced by Big Ben's jolly bell, you can't help getting up at once, for Big Ben never fails to get you wide awake.

Big Ben is really three good clocks in one, two excellent alarms and a fine time-keeper to keep in any room and tell time all day by.

If you have got to get up bright and early, if you have to get your help in the field on time, ask for Big Ben at your dealer's and try him for a week. You'll never want to be without him afterwards.

Big Ben stands seven inches tall. He is triple nickel-plated and wears an inner vest of steel that insures him for life. His big, bold figures and hands are easy to read in the dim morning light. His large, comfortable keys almost wind themselves.

He rings five minutes steadily or ten intermittently. If he is oiled every other year, there is no telling how long he will last.

He's sold by 6,000 Canadian dealers. His price is \$3.00 anywhere. If you can't find him at your dealer's, a money order mailed to *Wessche La Salle, Illinois*, will send him anywhere you say duty charges prepaid.

money on hand at the local bank, where he can get it whenever needed, to pay cash for any labor or material which he may need through the summer to make the needed improvements which always turn up on every farm, where things are not allowed to deteriorate. This is much nicer than to feel that you owe almost every one you meet, and really do not exactly know how much you do owe. This allows us to feel as if we were on top of the pile instead of being almost buried in it, vainly trying to peep out somewhere.

As to the other subject of men doing women's work, or women doing men's, I will simply send in one verse of a good old German hymn, which I think about covers that ground:

"There is beauty all around
When there's love at home,
There is joy in every sound,
When there's love at home,
Peace and plenty here abide,
Smiling sweet on every side,
Time doth softly, sweetly glide,
When there's love at home."

Yes, love to our God, love for each other, and love for our neighbor, smooths the rough road, and brings peace and contentment to us.

A BELATED MENDER.

You quite misunderstood us, "Mender," in thinking that we intend to do away with "The Mending Basket." We referred only to that particular topic, "Men's Work About the House," which has brought forth so many ideas that practically every side of the question has been threshed out. We think that all who have followed this discussion must have come to these conclusions:

(1) That women should not be expected to do their housework and continuous out-of-doors work, also.

(2) That men should not be expected to do their own work and women's work, too.

(3) But that, in case of emergency, any man should be willing to help his wife through with her housework, just as, in case of emergency, any woman should be willing to help her husband through with his.

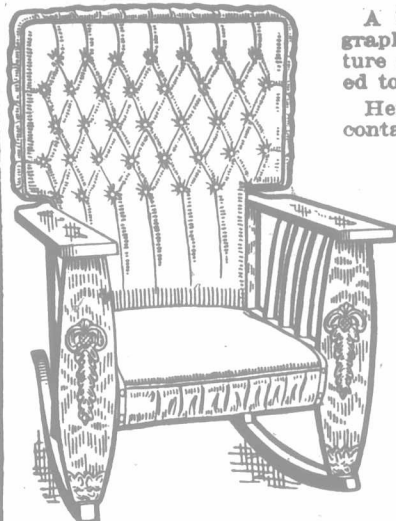
(4) That if the wife have sufficient love and respect for her husband, and the husband sufficient love and respect for his wife, there will be little cause for

bickering and hardness of feeling over any of the work done.

(5) That it harms no one to do a fair proportion of manual labor, but that this, on the contrary, is beneficial to both body and soul.

In our opinion, the letter of "Duskie," in a recent issue, whose conclusion is very much the same as yours, Mender, speaks about the last word that needs be said in this whole matter.—And now, "Mender," we heartily welcome your solution of the problem regarding "Finances on the Farm." It will be

WRITE FOR CATALOGUE 7



A large illustrated book showing photographic cuts of the biggest values in furniture and home things you ever had presented to you.

Here is one example of what Catalogue contains:—

**This Cosy \$6.95
Rocker only**

A splendid rocker, exactly as illustrated, has solid oak frame with nice carvings on front posts, comfortable deep spring seat, and with buttoned back, coverings of best grade imitation leather. Well worth \$10.00. Order to-day.

We Pay Freight Charges to any Station in Ontario.

THE ADAMS FURNITURE CO. LIMITED
TORONTO - - ONT.

interesting to hear what others have to say on this subject.

A SOLUTION OF ANOTHER PROBLEM ASKED FOR.

"Scottie," we are anxious to read some more of your interesting letters. Cannot you, "Scottie," give me some points on how to get the young people out to Epworth League? We get up a social, they come; next regular League night only a handful out. What can a person do? A FARMER'S DAUGHTER.
Prince Edward Co., Ont.

News of the Week.

CANADIAN.

The Legislatures of Nova Scotia and New Brunswick opened on Feb. 13th.

The largest shipment of silver ever made from Cobalt, amounting to \$187,665, was sent out last week.

BRITISH AND FOREIGN.

The Terra Nova, Captain Robert Scott's ship, has reached New Zealand, on her way home from the Antarctic Seas.

Germany wishes to establish a coaling station near the Panama Canal.

Andrew Carnegie, in a recent article in The Independent, calls Col. Goethals' estimate of 25,000 American soldiers as necessary to guard the Panama Canal, "madness."

Two doctors, Dr. Friedrich Friedmann, of Germany, and Dr. Heath, of St. Louis,



Is this Trademark on all your Farm Implements?

IT STANDS FOR THE VERY BEST THAT SKILL AND EXPERIENCE CAN PRODUCE.

- List of farm implements: Grain Binders, Reapers, Corn Harvesters, Mowers, Rakes, Side Delivery Rakes, Tedders, Hay Loaders, Cultivators, Seeders, Hoe Drills, Shoe Drills, Disc Drills, Fertilizer Drills, Fertilizer Sowers, Disc Harrows, Drag Harrows, Harrow Carts, Feed Cutters, Pulpers, Ensilage Cutters, Manure Spreaders, Cream Separators, Plows, Scufflers, Land Rollers, Packers, Wagons, Sleighs, Gasoline Engines, Etc.]

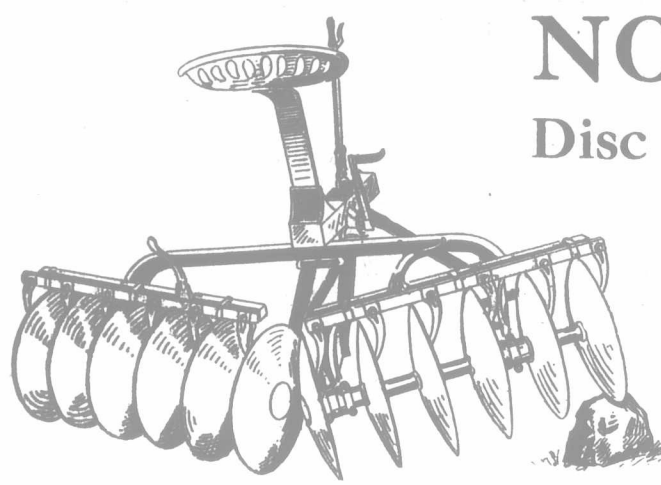
Massey-Harris Co., Limited.

Head Offices—TORONTO, CANADA.

Branches at

- MONTREAL, MONCTON, WINNIPEG, REGINA, SASKATOON, YORKTON, CALGARY, EDMONTON.

Agencies Everywhere



NOXON Disc Harrows

Made in three sizes

12, 14 & 16 plate

With or without Fore Carriage

WRITE FOR TERMS AND PRICES

THE NOXON CO., LIMITED

MANUFACTURERS OF

Binders, Mowers, Rakes, Hay Loaders, Drills, Cultivators, Disc and Lever Harrows, Pulpers and Sleighs

INGERSOLL, ONTARIO, CANADA



125-Egg Incubator and Brooder For \$13.75

If ordered together we send both machines for only \$13.75 and we pay all freight and duty charges to any R. R. station in Canada. We have branch warehouses in Winnipeg, Man. and Toronto, Ont. Orders shipped from nearest warehouse to your R. R. station. Hot water, double walls, dead-air space between, double glass doors, copper tanks and boilers, self-regulating. Nursery under egg tray. Especially adapted to Canadian climate. Incubator and Brooder shipped complete with thermometers, lamps, egg testers—ready to use when you get them. Five year guarantee—30 days trial. Incubators finished in natural colors showing the high grade California Redwood lumber used—not painted to cover inferior material. If you will compare our machines with others, we feel sure of your order. Don't buy until you do this—you'll save money—it pays to invest—before you buy. Remember our price of \$13.75 is for both Incubator and Brooder and covers freight and duty charges. Send for FREE catalog today, or send in your order and save time. Write us today. Don't delay. WISCONSIN INCUBATOR CO., Box 244, Racine, Wis., U. S. A.

FREIGHT AND DUTY PAID

U. S., claim to have found a serum for successfully treating tuberculosis.

For some months foreign airships have been flying over Great Britain. Accordingly, a law has been rushed through Parliament providing that, in future, such craft may be fired upon.

Turkey has appealed to the Powers to bring about peace in the Balkans. In the meantime, at time of writing, Adrianople is being bombarded, and is said to be, in parts, in flames.

A new alphabet, consisting of 42 characters, instead of 8,000, is being devised for China.

The City of Mexico has been the scene of vigorous conflict during the past week, the rebel leader, Felix Diaz, having obtained almost absolute control. President Madero has resigned, and will be succeeded provisionally by Senor De la Barra.

The Anglo-German "understanding" is said to provide that the ratio of sixteen British warships to ten German, shall obtain.

The Ingle Nook.

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

The other day, when coming down to the office, I noticed before me on the street a little teacher whom I knew, carrying two or three apparently heavy bundles. On relieving her of one of them, she informed me that that evening was to be "Mothers' Club Evening," and that the bundles contained cups and cake for the "tea."

"You know," she said, "there is a Mothers' Club in connection with every school in the city. We never used to have tea, but we wouldn't give it up now for anything. It promotes sociability so. Isn't it odd that people's tongues always seem to be loosened the very moment they begin to get ready for eating? I suppose it's the informality of it all that makes the difference."

On questioning a little further, I learned that these meetings are held at regular intervals, and that they were instituted with the sole object of giving the mothers and the teachers a better opportunity of getting acquainted with one another. In this way, it is hoped, sympathy is created, and misunderstandings prevented. The meetings are always held after four, when the children have gone. Once in a while some of the children are asked to remain to give a programme, the honors in this being "passed around."

I have not heard of any such organization being formed in any of the rural districts, but the idea seems rather good, don't you think? If there is a Mothers' Club in your section, won't you please write us about it, and tell us how it works out?

"Oh," said a young woman who has recently begun housekeeping, "I haven't any patience with those systematic people who must always have everything on time and everything in its place."

So far as keeping the law for everything on time is concerned, I could partially agree with her. Although I do believe in having certain times for doing certain things, and keeping them as far as possible, I never could see the sense in staying home from a pleasant outing on Monday simply because the washing had to be done that day. It could be done just as well on Tuesday. Such sticking to a time-table in housework, it seems to me, has a tendency to make one a slave to, rather than a master of, one's work. A time-table there should be, certainly, but it should be an elastic one, exercised with common sense.

But as to not keeping everything in its place, I could not agree with this little iconoclast at all. Could you?—To fail to keep everything in its place is, as most delinquents have found out, to pro-

NEW CENTURY LEADERSHIP



A railroad navy may be an honest soul and a worthy citizen, but that does not equip him for the position of general manager of the system.

It is the same with washing machines. Others may be honestly constructed, but the New Century maintains its paramount position by honesty PLUS.

The "plus" means patented and exclusive features found only in the New Century. It represents experience and brains applied to washing machine problems, and assures convenience and economy to New Century owners.

Your dealer can tell you the reasons for New Century leadership or we will send full information direct.



Cammer-Dowse Ltd., Hamilton, Ontario 100

We Buy and Sell FOR CASH

Hay, Wheat, Onions, Straw, Buckwheat, Beans, Corn, Bran, Peas, Oats, Shorts, Apples, Barley, Potatoes, Carrots.

Linseed Oil Cake Meal, Cotton Seed Meal, Gluten Feed, Etc. We make a specialty of Seed Grains and handle all kinds of Commercial Fertilizers.

We Manufacture

"Good Luck" Baby Chick Feed, Scratch Feed, Poultry Mash, Calf Meal, Dairy testing Feed, and carry a complete line of Poultry Supplies.

If it's anything for Stock or Poultry, we have it. WRITE TO-DAY for PRICES.

Crampsey and Kelly, Dovercourt Road - Toronto, Ont.

NEW TERM

now open. Students may enter any time. If you are interested in "Education That Pays" you should write to-day for a copy of our latest catalogue.

BRITISH AMERICAN BUSINESS COLLEGE

Y.M.C.A. Building, Toronto. T. M. WATSON, Principal

Commercial Courses

Complete instruction by mail given in Commercial Course (including Bookkeeping, Arithmetic, Business Correspondence, Commercial Law, Penmanship), Shorthand and Typewriting, Chartered Accountancy, Commercial Specialists. Ask for what interests you.

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

LEARN TO RUN AND REPAIR AUTOS

TWO COMPLETE COURSES FOR THE PRICE OF ONE. Standard Course and 1913 Advanced Course. TWO MODELS, Moving Pictures of Auto Engine—over 994 Pages, and 1713 Charts and Diagrams. Other schools ask more for one out-of-date course. We teach you at home to earn BIG MONEY. Diplomas issued and Graduates assisted to positions. Great demand for Auto Experts. Our 38-page book with employment plan & sample lessons FREE. Write for it now. PRACTICAL AUTO SCHOOL, 60 T. Bever St., New York, N. Y.

SHOEMAKER'S BOOK ON POULTRY

and Almanac for 1912 has 224 pages with many colored plates of fowls true to life. It tells all about chickens, their prices, their care, diseases and remedies. All about turkeys, their prices and their operation. All about poultry houses and how to build them. It's an encyclopedia of chickendom. You need it. Only 15c. S. C. SHOEMAKER, Box 950, Freeport, Ill.

A-Fortune in Chicks

One Man and His Son Made \$12,000 In One Year With Poultry

You will want to read his letter telling how it was done. And best of all any one who will follow the same simple practical rules will be sure to make big money with poultry. Every one who keeps poultry or who is thinking of starting in this business should have a copy of this big

112 Page Book--Free

Nothing like it has ever been published before. It is filled from cover to cover with splendid illustrations and bristles with money making--money saving facts. You will be interested in the articles by Prof. W. E. Graham of Guelph, Ontario, "Hatching and Rearing," and "The Automatic Henhouse." Other subjects discussed are: "How to Select Layers," "Which Breed is Best," "How to Treat Diseases," "Just think of it--75 of the 112 pages contain no advertising--just helpful information from the greatest authorities on poultry raising. This book will save you a thousand mistakes and make poultry raising profitable if you will follow the advice it gives.

Write Your Name on a Postal and mail to us at once. We will send the complete book free of postage. You will want to know about the new **PRAIRIE STATE INCUBATOR** with Sand Tray--also the **PRAIRIE STATE UNIVERSAL ROVER BROODERS** which you can make at home and save money. All leading agricultural colleges and experiment stations endorse Prairie State incubators because they produce chicks that live. Write for free book. Slip your copy to us and get highest market prices.

Gunn, Langlois & Co., Ltd.
Box 116 Montreal, Canada
Mention in Canada of the famous Prairie State incubator.

This FREE Book

"WHEN POULTRY PAYS"

is worth dollars to any farmer's wife in Canada.

How to succeed with poultry without capital. Plain talk, solid facts, proofs. Sent for the asking.

LEE MANUFACTURING CO., Ltd.
13 Pembroke Street, Pembroke, Ont.

Farm For Sale

Farm for sale consisting of 100 acres more or less, being the east half of lot 5 in the 10th concession of East Nissouri, clay loam, all tile drained; good garden and small fruits; also young apple orchard, 30 trees of best varieties. There is on the premises a cattle barn 55x60 ft, stabling cement throughout, water supply in every stall, will accommodate 40 head of cattle & 1,500 bushels of roots, silo 13x36, feed room conveniently arranged. Horse barn 30x40 feet, with water supply inside. Up-to-date hog-pen and henhouse 20x64 feet. Drive barn 18x24 feet. Storey and a half frame house with good cellar, main part 36x24 ft., kitchen 13x24 ft., woodshed and summer kitchen 20x30 ft., hard and soft water inside. The farm is situated on C.P. R. one and a half miles from a cheese factory and other conveniences. Telephone service and rural mail delivery and in line for Hydro-electric in the near future. This is one of the best farms in Oxford county and is a rare chance for anyone wanting up-to-date property.

W. I. HOGG, Proprietor,
Thamesford P. O. Ont.

Columbia Double Disc Records

DOUBLE VALUE FOR YOUR MONEY

duce "confusion worse confounded," and to invite a ceaseless waste of time--to say nothing of the ruffling of one's temper.

This morning, for instance, I looked in its accustomed place for my button-hook. It was not there. Then followed a mad scramble, drawers explored, tables and shelves searched, even the floor, until at last I found it, as might be expected, "at my nose," on the end of a box, where I had absent-mindedly laid it last night. As a result I came down to breakfast late, in a stew, ate too quickly, rushed off to the office in a hurry, and arrived later than I wished to.

Now, multiply that button-hook into a score or more articles, and set, say, each of a family of six at mislaying things,--boots not to be found here, a collar-button missing there, a thimble gone astray, all the papers in the cookery cupboard in a jumble so that one after another has to be opened until the right one is found. Can't you imagine it? Can't you imagine the confusion created by everyone "hunting" at once, "Where's this?" "Where's that?"--and the mother expected to respond to everyone's call! Yet this is exactly the condition that obtains in many a household.

No, no, I can't agree with this bright little friend who doesn't believe in "hoarding" about keeping everything in its place. As a rule, it does not take long to put things, after using them, just where they should go. That every member of the household, father included, be required to do this, is the only security there can be for order and harmony, and saving of time.

What! The father, too? Yes, why not? If he does not train himself to habits of orderliness in the house, you may be sure that he is not observing them out of it, and that he is wasting no small proportion of his time and energy rushing around looking for tools, and ropes, and straps--and blaming someone else for losing them.

Last evening I was in a house which has been enriched, recently, by two dainty little water-color paintings, by St. Thomas Smith. They had been bought at a little sacrifice, but with what pleasure they were exhibited! The buyers felt that they had become possessed, this time, of something of real worth and individuality. They might duplicate their two or three mahogany-veneered chairs a thousand times, but these two pictures--there were not two others exactly like them in the world, and never would be! Besides, they were "St. Thomas Smith's," every inch. Anyone who knew the work of that artist would recognize that at a glance.

These two young people are starting out with the idea of having less, perhaps, in their home than most people have to begin with, but having it better. Nothing is admitted that is not substantial, and "good," and artistic. They are getting things bit by bit, as they can afford them. They are willing to wait so that everything may be of the choicest. They are willing to take all sorts of time, first to find out what the choicest really is, and then to find it. They realize that one can't go in to town and find things enough to furnish a house, all good of line, and harmonious in coloring, in a day; and so keep watching, and reading house-furnishing articles, and consulting their own taste, and spreading the pleasure of furnishing their home out over the years instead of the weeks. They have the vision of what it will be, and gradually they are working towards that vision.

"We feel that these pictures are a real investment," said the lady, looking at them fondly. "Pictures increase so in value as time goes on--Isn't it a sad fact that they are worth just double as much on the death of the artist?--But then, you know, we never even dream of parting with these pictures. Their investment to us means the pleasure they will be to us."

The experience of others, among our readers, who have tried furnishing on this slow and sure plan might be interesting.

Rev. Byron H. Stauffer, of Toronto, who has done considerable research along social lines in Toronto, declared recently that the amount a girl must have nowadays, to live properly and

Eastlake Metallic Shingles

Economy

25% CHEAPER TO LAY

"EASTLAKE" METALLIC SHINGLES are economical not only on account of their service and long life, but in many other ways.

NO LEAKAGE

"EASTLAKE" METALLIC SHINGLES can be laid twenty-five per cent. cheaper than any other shingles on the market.

CAN BE BENT OVER HIP ROOF

Due to the special construction of "EASTLAKE" METALLIC SHINGLES it is impossible for water, snow or sleet to back-wash or seep through. This prevents rotting of the timbers underneath, and contents of building are never spoiled.

LIGHTNING PROTECTION

"EASTLAKE" METALLIC SHINGLE can be bent over the hip of the roof instead of having to be cut off and half the shingle wasted as with many others. This not only saves material, but saves a break in the roof, preventing a possible opening for leakage and damage.

INVESTIGATE

"EASTLAKE" METALLIC SHINGLE Roofs cost less than wooden shingle roofs equipped with lightning rods. With an "EASTLAKE" roof you do not need lightning rods, as they not only act as a lightning conductor, but are lightningproof and fireproof.

Before roofing your buildings, investigate carefully all kinds of roofing, including "EASTLAKE." The more closely you investigate, the stronger you will be in favor of



"EASTLAKE" METALLIC SHINGLES

If you want the best you will use "EASTLAKE."

Write for free booklet to-day

THE METALLIC ROOFING CO. LIMITED
MANUFACTURERS TORONTO & WINNIPEG



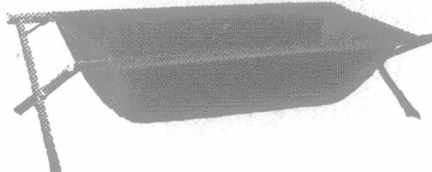
COMFORT and CONVENIENCE

without waterworks, sewage or plumbing. A perfectly sanitary, Odorless Closet that may be placed in any dwelling--in the bathroom, bedroom or down cellar.

Requires no burning out.

Write us for literature. It's free.

Earl Construction Co., Athens, Ont.



"CLEANLINESS IS NEXT TO GODLINESS"

Install a bath in your home for \$7.50, which will give you all the comforts enjoyed by your city friends. Our Folding Bath Tub is 5 ft. long, 2 ft. wide, 18 inches deep, and weighs 15 lbs. This tub is the same size as the standard bath tub, but has the advantage over same that it may be carried from one room to the other. It requires but two pails of water to give one a proper bath, being so constructed that it rests on the floor, permitting the water to come to the body. One minute empties the tub, when it may be rolled up and set away in the corner. Every Bath Tub carries a guarantee for five years. Address:

FOLDING BATH TUB CO., LIMITED
Gananoque, Ontario.
Ontario price of Tub, \$7.50 f.o.b. Gananoque.

Seed Peas and Beans

Being one of the largest growers of Seed Peas and Beans in Canada we are desirous of arranging with farmers in good pea growing sections to grow for us.

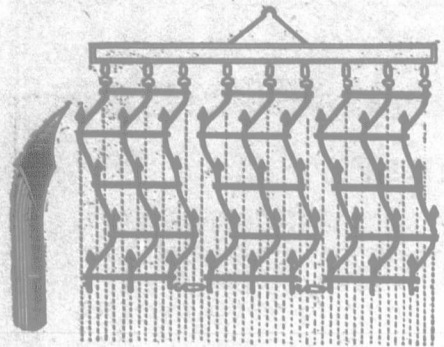
We supply the seed, freight paid to your station, and pay good prices for product, making it a remunerative business for farmers.

For further particulars address

W. P. NILES, LIMITED
Wellington, Ontario

Young Men

FOR ONTARIO FARMS
Arriving February, March, April. Apply:
BOYS' FARMER LEAGUE,
Drawer 126, Winona, Ont.



Eric Lance Tooth Harrow

Is the finest and most useful article that can be placed on a farm. The teeth are so shaped that they tear rough ground, and cultivate and make the finest seed bed possible. Once used on a farm, it will be the last implement parted with. Made strong and adapted to the roughest usage. 2-section set, \$10.00; 3-section set, \$15.00; 4-section set, \$20.00. Each section covers 3 feet of ground in width.

Eric Iron Works, Limited
MAKERS

St. Thomas, Ont.

STOCK FARM FOR SALE

Lot 24, Concession 9, Beverley Tp.,
10 miles east of Galt,

on county stone road. Best stock farm proposition in Ontario for sale to-day, but must be sold to settle estate. 107 acres, 2 bank barns joined, fine cement stables, cistern and silo, large modern dwelling house. Never-failing spring creek running near the buildings passes through farm from corner to corner. School within quarter mile, telephone, rural mail delivery at door. An ideal country estate for \$3850.00 Cash. Communicate with Evans G. Valens, 49 Homewood Ave. Hamilton, Ont.



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

BRONZE turkeys from prize stock. R. G. Rose, Glanworth, Ont.

BRED to lay. S. C. White Leghorn, (Cyphers Stock) eggs \$1 per 15, \$3 per 100, also baby chicks. Indian runner duck eggs \$2 per 15. C. S. Wilson, Tambling's Corners, London, Ont.

BARRED Rocks and White Wyandottes, single birds, pairs, trios or breeding pens; carefully mated. Prices low; satisfaction guaranteed. Write for particulars. John Fringle, London, Ont.

BARRED Plymouth Rocks, offering stock from my Toronto winners reasonable. Eggs on sale for hatching. Leslie Kerns, Freeman, Ont.

CHOICE RHODE ISLAND REDS, WHITE Wyandottes, S. C. Brown and White Leghorns. Wm. Bunn, Birr, Ont.

CANADIAN Ringlet Barred Plymouth Rocks—Winners International Laying Contest. Pedigreed cockerels, pullets, strong baby chicks. Large hatching eggs. Custom hatching. Alf. B. Wilson, St. Catharines, Ont.

CLARK'S Orpingtons, Buff and White, 40 C.I.'s good type and color, \$2 to \$5 each. 50 pullets and yearling hens, \$2 to \$4 each. Good laying strain. Eggs for hatching. Free illustrated catalogue for asking. J. W. Clark, Cainsville, Ont.

FOR SALE—Single-comb white Leghorn and single-comb black Minorca cockerels \$2 each. J. C. Collard, Southend, Ont.

GUILD'S bred-to-lay strains. New catalogue and matings. Send for one. L. R. Guild, Rockwood, Ont.

HEAVY pure-bred Toulouse geese \$3 each, large Pekin ducks \$2 each. L. Mullock, Waterdown, Ont.

WE again lead with the best egg-producing strain of Barred Rocks. A grand lot of cockerels for sale. Central Ontario Poultry Yards, Colborne, Ont.

WHITE Rocks, Guelph winners. Booklet free. John Pettit, Fruitland, Ont.

WHITE Wyandottes, "Martin and Russell Strains" cockerels and hens. Duncan McTavish, Chesley, Ont.

WHITE Wyandotte, Barred Rock and Black Minorca cockerels. Sunnyside Poultry Yds., Highgate, Ont.

WHITE Holland and Bronze Turkeys. W. H. Beattie, Wilton Grove, Ont.

WHITE WYANDOTTES, big vigorous. Stay White Cockerels from heavy laying strain, \$2, \$3 and \$5 each. Have won 36 out of 42 First Prizes at New York State Fair, in seven years. Eggs \$3 per 30, \$9 per 100. Free illustrated catalogue. John S. Martin, Drawer R., Port Dover, Ont.

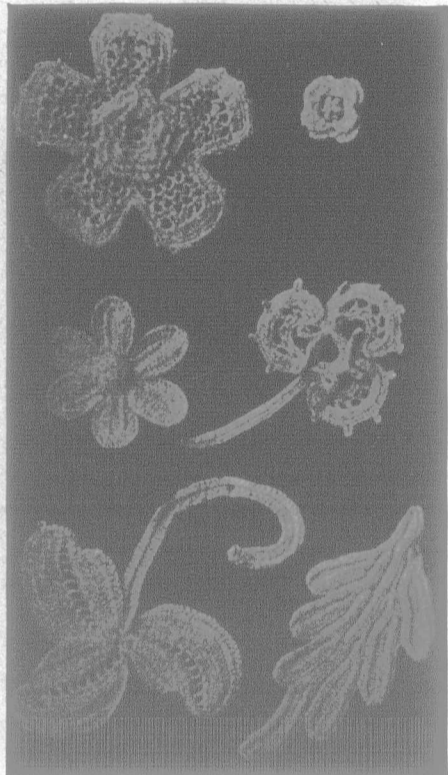
SWINE OF ALL BREEDS FOR SALE. Yorkshires, Tamworths, Berkshires, Hampshires, Chester Whites, Poland-Chinas, and Duroc-Jerseys. I have constantly on hand both sexes of all ages. Show stock a specialty. John Harvey, Frelightsburg, Que.

economically in a Canadian city, is \$486 a year. This is a statement which might well be taken into consideration by parents who intend letting their daughters go into the city to work.
JUNIA.

Irish Crochet Yoke -- Fondant.

(By permission of Corticelli Silk Co.)
IRISH CROCHET YOKE—FONDANT.

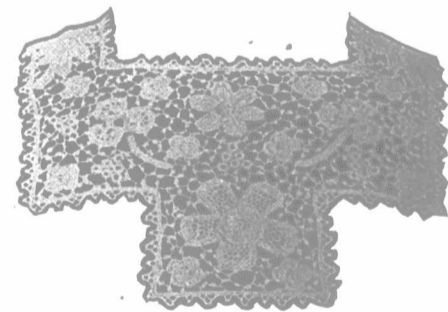
Dear Junia,—I have never written to you before, although I have thought of it for some time. I am very anxious to make an Irish crochet yoke for a white dress, and thought perhaps you could help me. I think I could copy it from an illustration. I am enclosing a recipe for fondant. Although the candy is difficult to make, I have had splendid success, and hope it will be of use to some of your readers.



Motifs for Irish Crochet.

(By courtesy of the Corticelli Silk Co.)

Fondant.—Three cups granulated sugar, one cup hot water, thirteen drops lemon juice (I used vinegar), more if water is hard or fondant grains; stir till it boils, and then boil till it makes a soft ball in cold water, put on a platter and beat until finger doesn't stick to it. Success will follow only if no crystals are allowed to form, either in the syrup or on



Irish Crochet Yoke.

the side of the pan. Have ready the water, sugar, a piece of cloth wrapped tightly about a fork, a bowl of water, a cup of cold water for testing the candy, and an oiled platter. As the candy boils gently, particles of syrup will spatter against the side and form crystals. These will drop down into the candy and cause the entire mass to sugar unless they are wiped off. Dip the swab, which is made by wrapping the cloth about the fork, into the bowl of water, squeeze out the extra moisture, and wipe down the sides of the vessel, being sure that the swab is brought beneath the surface of the syrup.

Be sure not to cook the candy too long. Occasionally half a spoonful of the syrup should be tested in the cup of cold water. The second that this mass can be formed into a soft ball, which will not stick to the fingers, the syrup should be poured on to the oiled plat-

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 out-ranking all others at the leading shows of America, showing conclusively that the best Stallions from the British Isles are to be found in our stables, and frequent importations guarantee at all times a large selection and satisfactory choice. Safest guarantee. Reasonable prices. Remember, that whether you want a Mare or a Stallion, Colt or matured animals, Cairnbrogie is to-day, and always has been, headquarters for the best. Champion Stallions of both breeds now in our stables.

GRAHAM BROS. Cairnbrogie, Claremont, Ont.

Extra Eggs Laid and **mean Extra Profits** **Extra Chicks Raised**

This statement requires no argument! Now plan your work to get more eggs, hatch more and better chicks, carry more chicks to maturity without additional equipment or labor. In other words, increase the efficiency of your entire plant. You can do it easily. This is the way:—Give

Pratt's Poultry Regulator to your breeding stock. It will invigorate the birds, bring more eggs with better fertility. That means bigger hatches of husky chicks. Put

Pratt's White Diarrhea Remedy in the drinking water for all broods to control this destructive disease and other bowel troubles. Then feed

Pratt's Baby Chick Food and watch the youngsters grow! It will raise every good chick, and a lot of the weak ones and make them husky and vigorous. Use this combination for better results. Remember "Your money back if it fails"

Prices: Regulator, 25c to \$9; 25-lb. Pails, \$2.50; White Diarrhea Remedy, 25c, 50c; Baby Chick Food, 25c up. Pratt's 100-page poultry book 10c by mail.

Our products are sold by dealers everywhere, or
PRATT FOOD CO. OF CANADA, Ltd., Toronto.

BARB WIRE BARGAINS

We have just purchased from one of the largest manufacturers in Canada their surplus stock of Barb Wire, Fencing and Wire Nails, at a big reduction off regular prices. All made of best galvanized steel wire. Some of the barbs are slightly loose in some reels. Our prices are 20% to 40% less than regular prices.
2,000 reels Barb Wire, about 100 lbs. per reel, 2c. per lb.
100 rolls No. 542 Farm Fencing, all No. 9 wire, spaced 6-12-12-12, 15c. per rod.
100 kegs new Wire nails, containing sizes 2-, 2½-, 3- & 4-inch, \$2.25 per keg of 100 lbs.
All delivered free to the cars here.
Send order at once, before stock is sold out. All orders filled promptly, and only in order as received. Also bargains in Belt- ing, Iron Piping, etc. Catalogue free.

IMPERIAL METAL CO.
20 Queen St. Montreal

FOR SALE—TWO VERY CHOICE
Imp. Clydesdale Stallions

Sire Baron's Pride; right in every way and sure getters of A1 stock.

WM. MEHARY, Russell, Ont.

The proprietor of Letters Patent No. 124614 relating to "Air Current Interruptors" desires to dispose of the Patent or to grant Licences to Interested Parties at reasonable terms with a view to the adequate working of the Patent in Canada. Inquiries to be addressed to the patentee **KNUT IVAR LINDSTROM, Nykvarn, Sweden.**

\$300. Buys a 13-horse-power Gasoline Engine mounted on truck and in good running order.
A. WATSON & SONS, St. Thomas, Ontario.

ter. Unless one works quickly, it is better to remove the candy from the fire while testing it. Do not try to pour out the last few spoonfuls of syrup if there is any sign of crystallization, for they will cause the entire mass to become granular. Allow the candy to cool until it feels only warm to the hand, then stir well with a wooden or silver spoon. It will soon become creamy. If it squeaks, the candy-maker is sure of success. After a few minutes, the mass will suddenly harden. Then it should be kneaded with the hands, and packed into a bowl for twenty-four hours or more. If the fondant is well covered it can be kept for two months, during which time portions may be taken out and used as desired. Always heat these pieces in a bowl over the kettle.

The uses of this fondant are numberless. Here are only a few: The fondant may be flavored as desired, and shaped into small pieces, which may be used to fill or cover stoned dates. Pieces of figs or nuts may be pressed into each separate piece. A part of the fondant may be melted with a few drops of hot water in a double boiler, and flavored with oil of peppermint or with oil of wintergreen. This liquid can then be dropped from the point of a spoon on oiled paper, and will then form wafers.

Chocolate may be melted and kneaded into the fondant. A layer of chocolate cream may be placed between two layers of the fondant flavored with vanilla alone, and then the ribbon candy may be cut from these three layers.

Chocolate creams can be made easily if one observes the precaution of placing the vanilla in the cream center, and not in the chocolate which is to form the coating. Melt the ordinary unsweetened chocolate in a double boiler, adding a few grains of salt. A teaspoonful of suet to a cake of chocolate will make a firmer coating. If vanilla or any liquid is added, the chocolate will set like a rock. The creams to be coated may be made from the fondant and dipped in this chocolate, drained a minute, and then placed on oiled paper. Lanark Co., Ont. "CRISSIE."

I do not think you will find the accompanying yoke pattern very difficult. Cut out a yoke of cambric, the shape you want it, whether round, square, or the shape in the illustration, but be sure it fits neatly. Make the motifs separately and baste on to the cambric wherever they seem to look best, but put them "upside down," then fill the spaces between with the Irish crochet knotted filling.

CELERY RELISH.

Dear Junia,—It is a long time since I dropped in for a chat in the Ingle Nook, but I am sending my recipe for celery relish. We all think it is delicious. In making it, I usually use the pieces which are not so nice for table use, and use the "hearts" on the table.

Celery Relish.—One quart vinegar, 6 celery heads, 1 ounce curry powder, ½ lb. mustard, ½ lb. sugar, 1½ tablespoons flour, and a dust of cayenne pepper. Put the vinegar on to heat. Mix all dry ingredients in a little cold water until smooth. When vinegar is hot, stir all in. Have celery chopped fine, then add it, and boil for about ten minutes.

This dressing poured over ordinary cucumber pickles makes a lovely mustard pickle, and it keeps for any length of time. I usually keep some on hand, and when I have a little boiled cabbage left over, I add some of the dressing and make a salad for tea.

I wonder does Jack's Wife take "The Farmer's Advocate" yet. If she does, I should like her to know how much help, and how many delicious dishes we have had by following a lot of recipes she gave in a letter some few years ago, written on the "Possibilities of Cheese." I have it tacked to my cupboard door, and find it very handy.

Where is "Wrinkles"? It is such a long time since she has written, telling of any new wrinkles she has discovered. AUNT MARJORIE. Wellington Co., Ont.

FRECKLE REMOVER.

Dear Junia,—I have never written to you before, but have been for several years a reader of Ingle Nook, and have

KEITH'S SEEDS

Herewith find prices for one week from date of issue of this paper. We pay freight in Ontario on orders of 180 lbs. or more, made up of Clovers and Timothy. Cotton bags 25c. each. See catalogue for prices of other seeds. We will be pleased to send samples of identical lots.

Lot.	Government Standard	Price per bus.	Lot.	Government Standard	Price per bus.
"Sun" Red Clover... No. 1	No. 1	\$16 00	"Gold" Alfalfa... No. 1	No. 1	\$12 00
"Mam. Clover... No. 1	No. 1	16 50	Northern grown, suitable for Canada.		
"Moon" Red Clover... No. 2	No. 2	14 50	No Canadian seed of required purity to be got.		
"Star" Red Clover... No. 3	No. 3	13 00	"Silver" Alfalfa... No. 1	No. 1	\$11 00
"Ocean" Alsylke... No. 1	No. 1	18 00	"Diamond" Timothy... No. 1	No. 1	3 25
"Sea" Alsylke... No. 2	No. 2	15 00	"Crescent" Timothy... No. 2	No. 2	2 75
"Lake" Alsylke... No. 3	No. 3	14 00			

DAUBENEY OATS.—Splendid sample, in 6-bush. lots or over, 95c. per bush. Bags free.

DAUBENEY OATS.—Not quite so good as above lot, 85c. per bush. Bags free.

OUR SEED CORN IS GOOD. We test before sending orders each lot for germination—they must show 85% or better. See our catalogue. Our prices are interesting.

GEO. KEITH & SONS, 124 King Street, East, Toronto
SEED MERCHANTS SINCE 1866

POTASH PROMOTES PROSPERITY

Your soil must contain an available supply of POTASH for the plants' requirements, otherwise you cannot hope to grow a maximum crop. POTASH increases quantity, improves quality, promotes maturity and produces profit. POTASH can be obtained from all reliable fertilizer dealers and seedsmen in the highly concentrated forms of

MURIATE OF POTASH AND SULPHATE OF POTASH

Secretaries of agricultural societies and farmers' clubs, who may be desirous of having one of our representatives address a meeting on the subject of fertilizing, are requested to communicate with us as soon as possible, so that date may be arranged.

Write us for free copies of our illustrated, educative bulletins, stating which of the following you require:

- "Artificial Fertilizers; Their Nature and Use."
- "Fertilizing Orchard and Garden."
- "Principal Potash Crops of Canada."
- "Farmer's Companion."
- "The Potato Crop in Canada."
- "A Farmer's Field Tests."
- "Fertilizing Fodder Crops."

German Potash Syndicate
1,106 Temple Bldg. TORONTO, 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.

ALL kinds of Farms—Fruit Farms a specialty. W. B. Calder, Grimsby.

EXPERIENCED man, 26, desires permanent situation on good farm, where he will have comfortable home; good with all stock. Address with full particulars, etc., to box X, Farmer's Advocate, London, Ont.

EXPERIENCED married man wants farm to work on shares. Box A, Farmer's Advocate, London, Ont.

EXPERIENCED MEN AND MARRIED couples require first class positions. Farm Employment, 140 Victoria, Toronto.

FOR SALE—Section of first class land, situated four miles from Edgley station, Sask., G. T. R., Section 28, township 19, range 14 west 2 mer. 550 acres under cultivation, balance pasture with running stream, abundance of well water, 400 acres to be cropped, this is all fenced in fields, large house well furnished, horse barn for 20 horses, cow barn, hog pen for 40 hogs, yards all fenced with pond for hogs, large poultry house, blacksmith shop with tool house, first class granary holds 8000 bus. R. telephone installed. Will sell at a bargain, for quick sale price \$30.00 an acre on easy terms. For further particulars write Wesley Boyle, Kinlough, Ont.

FOR SALE—2 foxhounds, 5 years old, exceptionally good workers; nicely marked, 3 colors. Price \$50.00. Apply to Box 87, Georgeville, Que.

FARM FOR SALE OR RENT—For sale or rent, 250 acres of land adjoining the village of Wintrop. Convenient to churches, school, stores, post office, etc., and suitable for either grazing or grain-growing. About 100 acres for crop, remainder hay and grass. There is a large modern bank barn, 60x82, with stone stabling underneath, a driving shed and an implement tank, a good spring well with windmill and house, a good spring well with windmill and house, a comfortable frame house, with telephone connection, orchard and vineyard. The farm is situated 5 miles south of Walton. The farm is situated 5 miles south of Walton. Signed has for sale, also a grist mill, 40x50, four stories high, and a frame barn, 30x80. These will be sold with or without farm. For further particulars apply to R. H. Govenlock, Wintrop, Ont.

FARM to rent or for sale. Fine stock farm, spring watered, 160 acres; fourteen miles from Hamilton, seven from Milton. E. Husband, Main St., Hamilton.

FARM FOR SALE—160 acres, New Ontario, 16 1/2 under cultivation, 7 acres slashed, good timber, no stones, small buildings, organized township 4 1/2 miles from Earlton Junction. Price twenty-five hundred. Box M., Farmer's Advocate, London, Ont.

FARM FOR SALE OR RENT, 130 acres or 180 acres well drained sandy loam and clay loam, well adapted for dairying or grain growing. Joseph Weld, Farmer's Advocate, London, Ont.

ONE HUNDRED ACRES FOR SALE in the township of Ancaster, County of Wentworth, ten miles west of Hamilton on stone road; half a mile, two stations. School, store, church, blacksmith shop, rural mail. Telephone and everything else up-to-date. Stanley Templar, Copetown, Ont.

TO RENT—Good dairy farm, 100 acres, 6 miles from Hamilton. E. Husband, Main St., Hamilton.

WANTED—An experienced single man for dairy farm; to engage by the year. Good wages for right man. M. H. Haley, Breeder of pure-bred Holsteins, Springfield, Ont.

WANTED handy reliable married man. Steady position, good wages to right person. Hull and Son, Central Nurseries, St. Catharines, Ont.

WANTED—Experienced farmer to work farm of 200 acres on shares, within three-miles of city limits, one with implements and stock preferred. Apply W. L. Symons, 15 Toronto St., Toronto, Ont.

WANTED—A capable working manager for dairy farm in New Ontario. Must know how to produce certified milk, also the handling of gasoline engines, milking machine and general farming. Graduate of dairy school preferred. Good wages. Special arrangement with man with wife and family who will undertake to do the milking. Apply by mail giving experience and references to box 460 Halleybury.

WANTED—Experienced man and wife, no family, for stock farm close to Toronto. Man good teamster, wife good cook and housekeeper. Apply Box 542, Whitby, Ont.

\$4,500 WILL BUY choice farm, forty acres, more or less, lot 6, con. 4, Delaware Township; ten acres of fruit trees, fine sugar bush, large brick house, fine fruit house, barn and drive house; over one hundred magnificent spruce trees along front and driveway. Address: Miss Doust, Lambeth P. O., or on the premises.

Farm for sale—To close an estate, 188 acres, six miles south from Hamilton, Wentworth Co., Glanford Tp. Loamy soil, no waste land, 35 acres timber, two good bank barns, flowing spring, frame house, near stone road. Address: ROBERT CALDER, Ancaster, Ont.

100 Acres in Huron County.

100 acres in Huron county, 1 1/4 miles from Seaford. Good clay loam, all under cultivation, bank barn, cement floors. Large frame house, newly painted; orchard; (one mile from country school and 1 1/4 from Collegiate Institute). Admirably adapted for dairying or grazing. An ideal home cheap. Apply Miss Susie Govenlock, Seaford, Ont.

FARM FOR SALE.

150 acres of good clay loam land, just outside Village of Princeton, in County of Oxford. Two-story frame house, 10 rooms, also woodshed. Good bank barn, 110x40; also hog-pen, sheep-pen, drive-shed, 25x80. Fifty apple trees, 16 acres fall wheat, 32 acres fall ploughed, balanced seeded and pasture and old meadow; good windmill, with meter to barn. Price, \$11,000.

BOX 18, PRINCETON, ONT.

"Big commission for Reliable Agents. Exclusive territory to be allotted for "The Everyday Vacuum Cleaner". Best hand power machine on the market. Will sell by hundreds this spring. Write London Specialty Co., 94 Fullarton St., London, Ont.

WANTED—CUSTOM TANNING—Send us your cattle and horse hides, and have them tanned and made into robes and coats. Deerskins tanned for buckskin, also made into mitts and gloves. We tan all kinds of hides, skins and furs. Send them to me and have them dressed right. S. F. BELL, DELHI, ONT.

For Sale—About 300 bush. O. A. C. No. 21 Barley, guaranteed free from weeds and true to variety; 90c. per bush; 80c. in 10-bushel lots. Bags extra. Cash with order. WM. ELLIOTT, Galt, R.R. No. 1.

Cream—Sweetest ever, bought at highest Toronto prices, at any point in Ontario. We furnish cans, pay promptly—haven't paid less than 32 cents for weeks. Write: TORONTO CREAMERY CO., Ltd., Toronto

SEED CORN—First-class Essex-grown varieties and prices: WALTER C. ANDERSON, Malden Centre P.O., Essex, Ont.

Choice Regenerated Banner Seed Oats from my prize field. Also O. A. C. No. 31 Barley. Oats 75c. per bush. Barley 90c. Bags extra. W. A. DOUGLAS, Tuscarora, Ont.

Swedish Select Oats For sale from prize winning field, also won second at Toronto and sixth at Ottawa for sheaf. Price 75c. per bushel, bags extra. JAS. W. EDGAR, Gorrie, Ont.

ATHELSTANE SHORTHORNS For sale: Five choice young bulls, sired by Roan Chief (imp.) =60685=. They are a choicely-bred lot, and will be priced right; also a few heifers. They are of good milking dams. WM. WALDIE, R. R. No. 2, Stratford, L.-D. 'phone.

received some valuable information, and am now going to ask you two questions myself. I have some freckles on my hands and face, and would like if you could help me to get them off. How long would it take to take them off? Also, how to knit a cap. Thanking you in return. JANET.

Glengarry Co., Ont. Freckles are natural to some skins, hence it is impossible to banish them so that they will not return. The persistent use of lemon juice, applied at night after washing, will, however, do much to lighten the color of the freckles. It will be necessary, also, to see that no glint of sunlight touches the skin, a possibility obviated, if one cares to take the trouble, by wearing broad-brimmed hats or blue "complexion veils," and gloves. The following lotion is also highly recommended for the removal of freckles: Grated horseradish root, 1 ounce; boiling water, 1 pint; borax, 2 drachms. Apply every night, after washing. I know very little about knitting, and

Shop by Mail at Scroggie's

We prepay transportation charges on all orders of \$5 and over in Quebec, Maritime Provinces and Ontario except north and west of Sudbury and Sault Ste. Marie.



A-Z-1—Fine Lawn Waists, Women's Waists, attractive, semi-tailored, style very popular just now; made of finest quality sheer white lawn; front has dainty embroidery and fastens with pretty round pearl buttons, front and back; has rows of tucking, linen collar and cuffs. Sizes 32 to 44. Our **98c** Low Price



A-Z-17
WOMEN'S
RAINCOATS

Special—A hand-some new style coat, and one of the best values we have seen this season, made of good quality Par-matta cloth. Colors: Fawn and tan. Close-fitting collar. Loose - fitting back. Sizes: 32 to 42. Our Low Price

\$4.98



A-Z-5
Exceptional
Value in Men's
Suits at \$9.95

Suits that are very dressy, and will give excel-lent wear and sat-isfaction. They are made from fine English Tweeds in the fashionable brown and grey mixture, showing faint thread shapes, cut in the latest single-breasted sack style, with nicely shaped shoulders and lapels, tailor-ed and finished in the very best possible manner; sizes, 34 to 42. Special value—

\$9.95

A-Z-3. — Women's Skirts — Made of good quality Pan-ama cloth. Col-ors or navy, at-tractive style. Waist band 23 to 29. Length, 36 to 43. **\$2.98**

A-Z-4.—Near Silk Petticoat—Splendid new style, made of fine quality near silk, shirred flounce, edged with pleat-ing, colors, black, navy, brown and green. Our low price.. **\$1.25**

A-Z-8
A BAG SPECIAL
A special purchase of 500 only of real leather hand bags in seal grain effect, hav-ing a nine-inch frame, silver plat-ed, nicely leather lined, small in-side purse and flexible handle, wonder-ful value **\$1.00** Only 500 in lot. Order early.

A-Z-9 Easter Footwear at Except-ionally Low Prices when Quality is Considered.



Ladies' Boots, made on the newest American lasts; style and fit perfect; in tan, calf, gun metal, patent colt, with plain toe and cravenette top, button and lace; styles Cuban heels; sizes 2½ to 7. Special .

\$2.98



A-Z-6 —Scroggie's Famous Glove Values the Wonder. Ladies' washable chamol-sette Gloves, 2 dome, in white and natural shades; sizes 5½ to 7½, for, per pair **25c**

A-Z-7— Scroggie's Famous Gloves for Easter, greatest value in Canada. Ladies' fine quality Kid Gloves, beautiful soft skins, with two handsome domes, and neatly stitched backs; good value for 79c. Special Easter **59c** Offer at All sizes; colors, tan, brown, white, black, etc.

Our New Spring Style Book will be ready for mailing soon. Copies will be sent free on request. Write for one. It's the greatest ever published.

W.H. Scroggie Limited Montreal

ORDER TO-DAY.

have no directions for knitting a card. So far, I have not been successful in finding any for you.

FASHION QUERIES—LEMON BISCUIT.

Dear Junia,—I have been an interested reader of "The Farmer's Advocate" for some time, so thought I would come to you for help.

Which will be the most fashionable for spring and summer, for a girl of twenty, a long coat, or a suit?

Could any of the readers send me a recipe for lemon biscuits
Parry Sound, Ont.

HYACINTH.
Both long coats and suits will be fashionable during the spring and summer. A long coat is the more service-able, as it can be worn with any dress. As a rule, the skirt of a suit is worn shabby while the coat is quite good, and one has the mortification of having a very wearable coat without a skirt to go with it.

Here is a recipe for lemon biscuits:— Three cups white sugar, 1 cup melted butter, 1 pint sweet 'milk, 2 eggs, 5 cents' worth oil of lemon, 1 ounce drug-gist's ammonia, pinch salt. Mix the ammonia with the milk. Add flour last of all to make a dough. Roll thin.

FRUIT COOKIES—CELERY RELISH.

Dear Ingle Nook Friends,—Have long been a reader of "The Farmer's Advo-cate," and enjoy it very much, especially Hope's Quiet Hour, and the Ingle Nook. I wanted to send a couple of recipes that were asked for.

Fruit Cookies.—One cup butter, 1½ cups white sugar, 3 eggs, 1½ tablespoons hot water, 1 teaspoon soda, ½ teaspoon salt, 1 teaspoon cinnamon, 1 cup chopped walnuts, ½ cup chopped raisins, ½ cup currants, ¾ cups flour. Drop on buttered tins.

Celery Relish.—One quart chopped celery, 1 quart chopped onions, 1 quart chopped cabbage, 1 head fine cauliflower, 2 green peppers or ½ teaspoon cayenne pepper, 1 teaspoon black pepper. Pour hot brine over all, and let stand 24 hours; drain, and add 4 cups brown sugar, ½ ounce mustard seed, 1 ounce celery seed. Scald or boil. Mix ¾ cup of flour, ¼ cup mustard, ¼ ounce tur-meric with vinegar, and add to the hot pickles. **MRS. J.**

Perth Co., Ont.

Rebecca of Sunnybrook Farm.

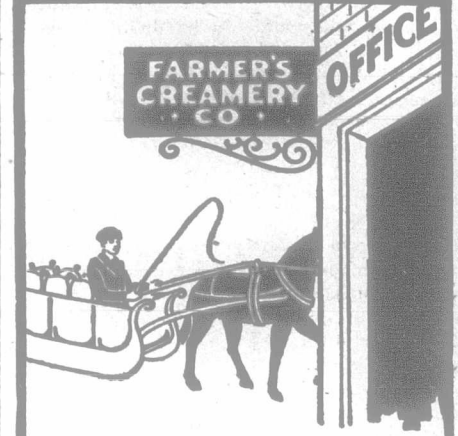
By Kate Douglas Wiggin.
[Serial rights secured from Houghton Mifflin Publishing Company, New York.]

XVIII
Rebecca Represents the Family

There was another milestone; it was more than that, it was an "event," an event that made a deep impression in several quarters and left a wake of smaller events in its train. This was the coming to Riverboro of the Reverend Amos Burch and wife, returned missionaries from Syria.

The Aid Society had called its meeting for a certain Wednesday in March of the year in which Rebecca ended her River-boro school days and began her studies at Wareham. It was a raw, blustering day, snow on the ground and a look in the sky of more to follow. Both Miranda and Jane had taken cold and decided that they could not leave the house in such weather, and this deflection from the path of duty worried Miranda, since she was an officer of the society. After making the break-fast table sufficiently uncomfortable and wishing plaintively that Jane wouldn't always insist on being sick at the time she was, she decided that Rebecca must go to the meeting in their stead. "You'll be better than nobody, Rebecca," she said flatteringly; "your aunt Jane shall write an excuse from afternoon school for you; you can wear your rubber boots and come home by the way of the meetin' house. This Mr. Burch, if I remember right, used to know your grandfather Sawyer, and stayed here once when he was candidatin'. He'll mebbe look for us there, and you must go and represent the family, an' give him our respects. Be careful how you behave. Bow your head in prayer; sing all the hymns, but not too loud and bold; ask after Mis' Strout's boy; tell everybody what awful colds

FREE **Fine BOOK FREE**
Yes, absolutely free. Tells all about Taxidermy and how to teach this fasci-nating and successful profession by mail. **LEARN BY MAIL TO**
STUFF BIRDS
and animals, tan hides, make rags, etc. Dec-ore your home with beautiful specimens. Make big profits during your spare time. Write now for our great taxidermy book. It is FREE.
Northwestern School of Taxidermy
8032 Rex Building Omaha, Nebraska



Ask a Hundred Creamery Men

what salt they use. Ninety-nine out of the hundred will tell you "WINDSOR DAIRY SALT". They have tried it out, under every possible condition, and they know that

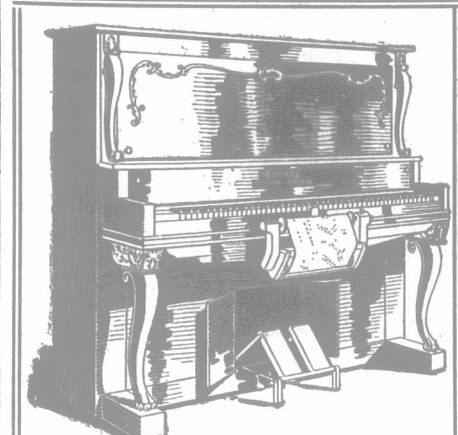
WINDSOR DAIRY SALT

gives the best results, every time.

It dissolves evenly, works in quickly, and blends perfectly with the butter, giving a delicious, appetizing flavor.

The prize butter-makers of Canada—without exception—use Windsor Dairy Salt.

68D



We can make any piano a perfect

88-note
Player Piano

Upright Players \$225
Grand Players \$300

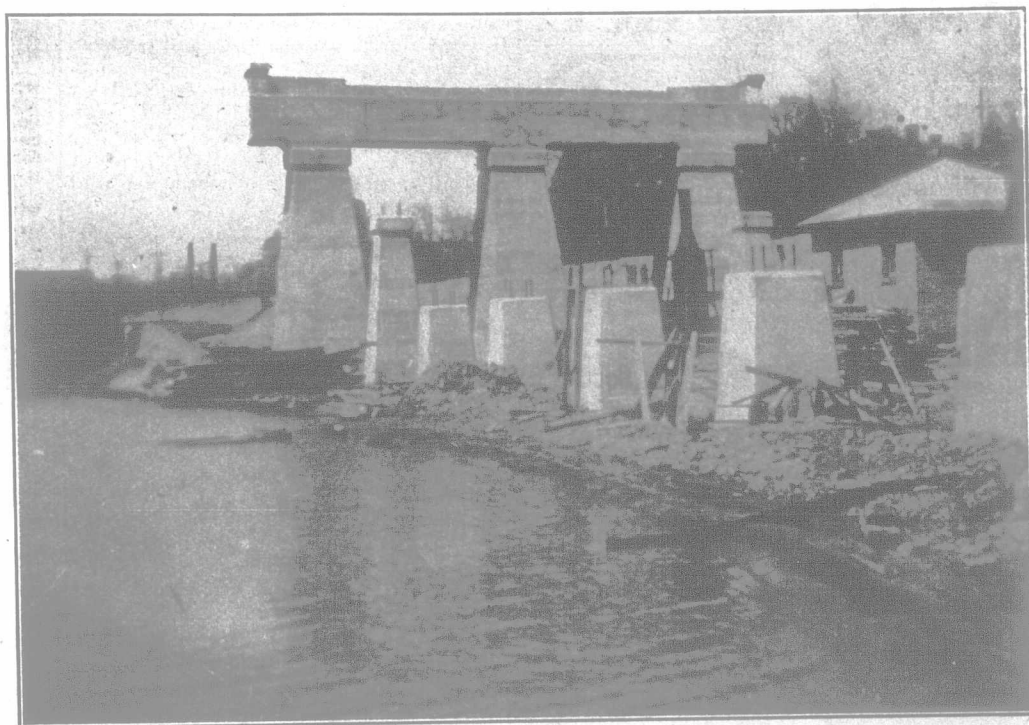
Write for illustrated booklet.

W. DOHERTY PIANO & ORGAN CO., LIMITED
Clinton, Ontario

PATENTS procured everywhere
EGERTON R. CASE,
Registered Attorney, Dept. E, Temple Building,
Toronto. Booklets on request, 20 years' experience.

Rogers' Portland Cement

is the highest-grade cement on the market. Our mills are well equipped and are a guarantee of uniform good quality.



Concrete piers recently completed for bridge over railroad at Sunnyside, Toronto, Ont.
Crushed stone and cement supplied by Alfred Rogers, Limited.

Throughout the entire manufacture of **Rogers' Portland Cement** every precaution is taken to keep the product at its high standard. The care exercised in this regard has produced a high grade that is dependably uniform.

A Few Reasons Why You Should Use Cement:

It is frost-proof and fire-proof.

It is cheaper than wood, brick or stone.

Everything you make of **Rogers' Portland Cement** is permanent.

You do not have to renew or repair good cement work. Therefore, if you use cement, the time which you have been spending in repairing buildings of wood would be free for other necessary work.

We have a handsome book containing 170 illustrations, which we will mail you on request. This book explains many other reasons why you should use cement, and gives you the reasons why you should use **Rogers' Cement**. Ask for the book, "Portland Cement on the Farm." In all your future building, no matter how small or how large, be sure and use cement. "Everything from a fence post to a silo."

ROGERS' CRUSHED STONE for Sidewalk, Concrete Road and Other Contracts

We can furnish crushed stone in all sizes, clean and free from dust, dirt and mould, and evenly graded. This is the best line for road and concrete work—thousands of tons used locally.

ALFRED ROGERS, LIMITED

28 King St., West

TORONTO, ONT.

ED 1866

FREE
tells all about
each this fasci-
culation by mail.
MAIL TO
BIRDS
rps, etc. Dec-
tal specimens
re time Write
It is FREE.
Army
Nebraska

OFFICE

ed
en

y-nine
ll you
LT".
every
know

OR
LT

y time.

rks in
y with
icious,

ers of
—use

68D



piano

no

oklet.

D &
TED
tario

erywhere
R. CASE,
le Building,
experience.

"Its Delicious Drawing Qualities"
 Are manifested in millions of Teapots daily
"SALADA"
 THE TEA OF STERLING WORTH
 BLACK, MIXED or GREEN—Sealed Packets Only
 FREE Sample Mailed on Enquiry Address: "SALADA," Toronto

The Anthony Fence



A fence that is tied with a perfect lock.
 A lock that is strong, neat and compact.
 A lock that will not loosen by expansion and contraction from heat and cold.
 A lock that won't come off.
 The Anthony Fence is made of all No. 9 wire, which is thoroughly galvanized.
 The Anthony Fence will not bend down at the top or roll up at the bottom, but will stand up straight when erected.

The Anthony Fence will stop anything from a pig to a bull.
 If you are interested in a fence like this, write for full descriptive catalogue. Live agents wanted in all unoccupied territory.
THE ANTHONY WIRE FENCE CO. OF CANADA, LIMITED
 WALKERVILLE, ONTARIO

THE IMPERIALLY RENOWNED
DOMINION PIANO
 IS USED WHEREVER FLOATS THE BRITISH FLAG

YOU want a piano to be all these things: Good reputation, beautiful tone, an ornament to your home, well made in every way, able to resist changes of time and climate. And you would be exceedingly pleased to find such a one not difficult to buy!

THE DOMINION PIANO is all these. It saves you \$100 or more, not taken off the quality, but through abandoning useless selling expenses. No extravagant warerooms are kept up, no presentation instruments are given to artists, schools, etc., for testimonials. The saving goes to purchasers.

Full and definite explanations will be given any inquiries you may wish to make about **DOMINION PIANOS**.

The DOMINION ORGAN & PIANO CO., Ltd.
 Manufacturers of Pianos, Organs and Piano Players
 FACTORY AT BOWMANVILLE, CANADA

we've got; if you see a good chance, take your pocket handkerchief and wipe the dust off the melodeon before the meetin' begins, and get twenty-five cents out of the sittin' room match-box in case there should be a collection."

Rebecca willingly assented. Anything interested her, even a village missionary meeting, and the idea of representing the family was rather intoxicating.

The service was held in the Sunday-school room, and although the Rev. Mr. Burch was on the platform when Rebecca entered, there were only a dozen persons present. Feeling a little shy and considerably too young for this assemblage, Rebecca sought the shelter of a friendly face, and seeing Mrs. Robinson in one of the side seats near the front, she walked up the aisle and sat beside her.

Both my aunts had had colds," she said softly, "and sent me to represent the family."

"That's Mrs. Burch on the platform with her husband," whispered Mrs. Robinson. "She's awful tanned up, ain't she? If you're goin' to save souls seems like you hev' to part with your complexion. Eudoxo Morton ain't come yet; I hope to the land she will, or Mis' Deacon Milliken'll pitch the tunes where we can't reach 'em with a ladder; can't you pitch, afore she gits her breath and clears her throat?"

Mrs. Burch was a slim, frail little woman with dark hair, a broad low forehead, and patient mouth. She was dressed in a well-worn black silk and looked so tired that Rebecca's heart went out to her.

"They're poor as Job's turkey," whispered Mrs. Robinson; "but if you give 'em anything they'd turn right round and give it to the heathen. His congregation up to Parsonfield clubbed together and give him that solid gold watch he carries; I s'pose he'd 'a' handed that over too, only heathens always tell time by the sun 'n' don't need watches. Eudoxo ain't comin'; now for massy's sake, Rebecca, do git ahead of Mis' Deacon Milliken and pitch real low."

The meeting began with prayer and then the Rev. Mr. Burch announced, to the tune of Mendon:—

"Church of our God! arise and shine,
 Bright with the beams of truth divine;
 Then shall thy radiance stream afar,
 Wide as the heathen nations are.
 "Gentiles and kings thy light shall view,
 And shall admire and love thee too;
 They come, like clouds across the sky,
 As doves that to their windows fly.

"Is there any one present who will assist us in the instrument?" he asked unexpectedly.

Everybody looked at everybody else, and nobody moved; then there came a voice out of a far corner saying informally, "Rebecca, why don't you?" It was Mrs. Cobb. Rebecca could have played Mendon in the dark, so she went to the melodeon and did so without any ado, no member of her family being present to give her self-consciousness.

The talk that ensued was much the usual sort of thing. Mr. Burch made impassioned appeals for the spreading of the gospel, and added his entreaties that all who were prevented from visiting in person the peoples who sat in darkness should contribute liberally to the support of others who could. But he did more than this. He was a pleasant earnest speaker, and he interwove his discourse with stories of life in a foreign land,—of the manners, the customs, the speech, the point of view; even giving glimpses of the daily round, the common task, of his own household, the work of his devoted helpmate and their little group of children, all born under Syrian skies.

Rebecca sat entranced, having been given the key of another world. Riverboro had faded; the Sunday-school room, with Mrs. Robinson's red plaid shawl, and Deacon Milliken's wig, on crooked, the bare benches and torn hymn-books, the hanging texts and maps, were no longer visible, and she saw blue skies and burning stars, white turbans and gay colors; Mr. Burch had not said so, but perhaps there were mosques and temples and minarets and date-palms. What stories they must know, those children born under Syrian skies! Then she was called upon to play "Jesus shall reign where'er the sun."

The contribution box was passed and Mr. Burch prayed. As he opened his eyes and gave out the last hymn he looked at the handful of people, at the scattered

THIS WASHER MUST PAY FOR ITSELF.

A MAN tried to sell me a horse once. He said it was a fine horse and had nothing the matter with it. I wanted a fine horse, but, I didn't know anything about horses much. And I didn't know the man very well either.

So I told him I wanted to try the horse for a month. He said "All right," but pay me first, and I'll give you back your money if the horse isn't all right."

Well, I didn't like that. I was afraid the horse was not "all right" and that I might have to whistle for my money if I once parted with it. So I didn't buy the horse, although I wanted it badly. Now, this set me thinking.

You see I make Washing Machines—the "1900 Gravity" Washer.

And I said to myself, lots of people may think about my Washing Machine as I thought about the horse, and about the man who owned it.

But I'd never know, because they wouldn't write and tell me. You see I sell my Washing Machines by mail. I have sold over half a million that way. So, thought I, it is only fair enough to let people try my Washing Machines for a month, before they pay for them, just as I wanted to try the horse.

Now, I know what our "1900 Gravity" Washer will do. I know it will wash the clothes, without wearing or tearing them, in less than half the time they can be washed by hand or by any other machine.

I know it will wash a tub full of very dirty clothes in Six Minutes. I know no other machine ever invented can do that, without wearing the clothes. Our "1900 Gravity" Washer does the work so easy that a child can run it almost as well as a strong woman, and it don't wear the clothes, fray the edges, nor break buttons, the way all other machines do.

It just drives soapy water clear through the fibres of the clothes like a force pump might.

So, said I to myself, I will do with my "1900 Gravity" Washer what I wanted the man to do with the horse. Only I won't wait for people to ask me. I'll offer first, and I'll make good the offer every time.

Let me send you a "1900 Gravity" Washer on a month's free trial. I'll pay the freight out of my own pocket, and if you don't want the machine after you've used it a month, I'll take it back and pay the freight, too. Surely that is fair enough, isn't it?

Doesn't it prove that the "1900 Gravity" Washer must be all that I say it is?

And you can pay me out of what it saves for you. It will save its whole cost in a few months in wear and tear on the clothes alone. And then it will save 50 to 75 cents a week over that in washwoman's wages. If you keep the machine after the month's trial, I'll let you pay for it out of what it saves you. If it saves you 60 cents a week, send me 50 cents a week 'till paid for. I'll take that cheerfully, and I'll wait for my money until the machine itself earns the balance.

Drop me a line to-day, and let me send you a book about the "1900 Gravity" Washer, that washes clothes in six minutes.

Address me personally:
 A. W. MORRIS, Manager 1900 Washer Co., 357 Yonge St., Toronto, Can.



Miss Miriam would be them at the always alive. The "res freedom of state, wh the aunts they have but it w audience, Sawyer m commonly else what heart?

Mr. Bur the invit it was offe ken to lea

If the l would hav to Deacon the throne very sligh Mrs. Perki petitions ones too, of scriptu gether. I ways ende with the God of B like Christ but every she was in Mr. Burch ly. As sh looked dir young sish us in pray

Every body seem almost st excited br in the sile ordinary journey he was co young me religion" or ten year teen; she the singin with an a he, conclu pillar of t the utmos

Rebecca could she

FREE

Let us send you, free, a wonderful catalogue of Ingrain Carpets and Art Squares; illustrated with full color reproductions. Buy your carpets direct from the manufacturer and save 40 or 50 cents out of every dollar.

CARPETS
 FROM FACTORY TO HOME
 SEND THE COUPON NOW

Send your catalogue to

NAME.....
 ADDRESS.....

U.R. BERNER
 12 Gordon St. GUELPH, Ont.

FREE

Send for this Book of Musical Instruments

Five hundred pages, illustrating and describing every kind of musical instrument, with prices. Costs 35c to mail. Ask for Catalogue Hand send 15c to help cover postage.

The WILLIAMS & Sons Co.
 R. S. O'Shea, Limited
 145 Yonge St., Toronto

Seed Corn, Barley, Oats for Sale—High-grade seed of Improved Leaning Corn, Newmarket Oats of pedigreed stock, and O. A. C. 21 Barley. For samples and prices write. **W. A. BARNET, Mgr. Gov. Exp. Farm, Harrow, Essex Co.**

pennies and dimes in the contribution box, and reflected that his mission was not only to gather funds for the building of his church, but to keep alive, in all these remote and lonely neighborhoods, that love for the cause which was its only hope in the years to come.

"If any of the sisters will provide entertainment," he said, "Mrs. Burch and I will remain among you to-night and to-morrow. In that event we could hold a parlor meeting. My wife and one of my children would wear the native costume, we would display some specimens of Syrian handicraft, and give an account of our educational methods with the children. These informal parlor meetings, admitting of questions or conversation, are often the means of interesting those not commonly found at church services; so I repeat, if any member of the congregation desires it and offers her hospitality, we will gladly stay and tell you more of the Lord's work."

A pall of silence settled over the little assembly. There was some cogent reason why every "sister" there was disinclined for company. Some had no spare room, some had a larder less well stocked than usual, some had sickness in the family, some were "unequally yoked together with unbelievers" who disliked strange ministers. Mrs. Burch's thin hands fingered her black silk nervously. "Would no one speak!" thought Rebecca, her heart fluttering with sympathy. Mrs. Robinson leaned over and whispered significantly, "The missionaries always used to be entertained at the brick house; your grandfather never would let 'em sleep anywhere else when he was alive." She meant this for a stab at Miss Miranda's parsimony, remembering the four spare chambers, closed from January to December; but Rebecca thought it was intended as a suggestion. If it had been a former custom, perhaps her aunts would want her to do the right thing; for what else was she representing the family? So, delighted that duty lay in so pleasant a direction, she rose from her seat and said in the pretty voice and with the quaint manner that so separated her from all the other young people in the village, "My aunts, Miss Miranda and Miss Jane Sawyer, would be very happy to have you visit them at the brick house, as the ministers always used to do when their father was alive. They sent their respects by me." The "respects" might have been the freedom of the city, or an equestrian statue, when presented in this way, and the aunts would have shuddered could they have foreseen the manner of delivery; but it was vastly impressive to the audience, who concluded that Mirandy Sawyer must be making her way uncommonly fast to mansions in the skies, else what meant this abrupt change of heart?

Mr. Burch bowed courteously, accepted the invitation "in the same spirit in which it was offered," and asked Brother Milliken to lead in prayer.

If the Eternal Ear could ever tire it would have ceased long ere this to listen to Deacon Milliken, who had wafted to the throne of grace the same prayer, with very slight variations, for forty years. Mrs. Perkins followed; she had several petitions at her command, good sincere ones too, but a little cut and dried, made of scripture texts laboriously woven together. Rebecca wondered why she always ended, at the most peaceful seasons, with the form, "Do Thou be with us, God of Battles, while we strive onward like Christian soldiers marching as to war"; but everything sounded real to her to-day; she was in a devout mood, and many things Mr. Burch had said moved her strangely. As she lifted her head the minister looked directly at her and said, "Will our young sister close the service by leading us in prayer?"

Every drop of blood in Rebecca's body seemed to stand still, and her heart almost stopped beating. Mrs. Cobb's excited breathing could be heard distinctly in the silence. There was nothing extraordinary in Mr. Burch's request. In his journeyings among country congregations he was constantly in the habit of meeting young members who had "experienced religion" and joined the church when nine or ten years old. Rebecca was now thirteen; she had played the melodeon, led the singing, delivered her aunts' invitation with an air of great worldly wisdom, and he, concluding that she must be a youthful pillar of the church, called upon her with the utmost simplicity.

Rebecca's plight was pathetic. How could she refuse; how could she explain

Prove the "BISSELL" by Its Work

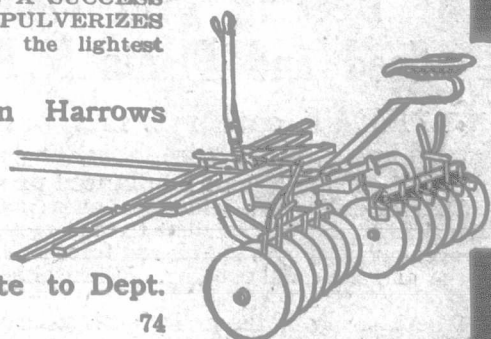
Do the gangs on your Harrow crowd together and raise out of the ground if it is hard? They won't do this on the "Bissell." The "Bissell" is so designed that THE GANGS CANT CROWD OR BUMP together no matter how hard the ground may be.

Tough soil won't stick the "Bissell." It stays right down to its work and pulverizes the ground thoroughly.

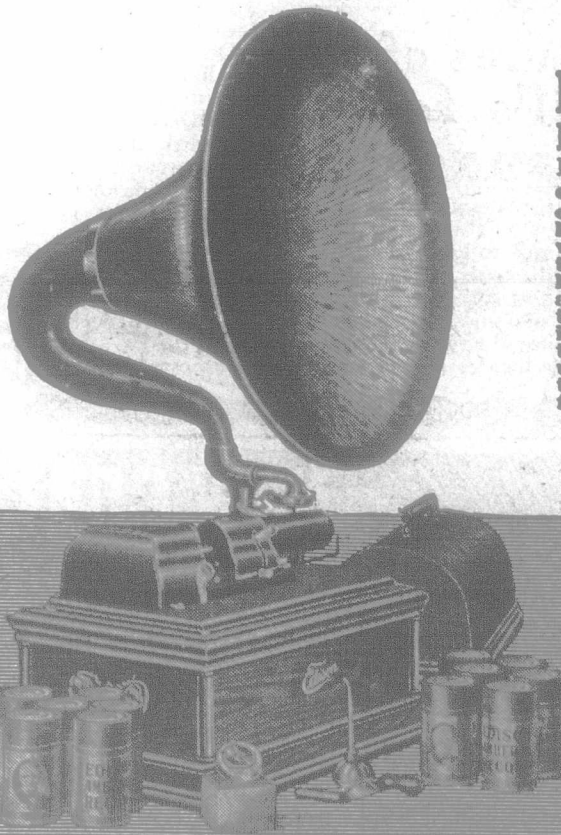
We ask you to take a "Bissell" out into the field and test it beside other Harrows. Then you

will HAVE PROOF that it is A SUCCESS ON HARD LAND—THAT IT PULVERIZES THE BEST—and that it is the lightest draught.

Post yourself fully on Harrows before buying. We put our name on every Harrow so that you will know it is genuine. Ask your local dealer, or write to Dept. W for free Catalogue.



T. E. Bissell Company, Limited, Elora, Ont.



Mr. Edison's Pet and Hobby

He realizes the wonderful value of his phonograph as a cementer of homes and as a maker of happy homes. And for this reason he worked for years striving to produce the most perfect phonograph. At last he has produced this new model, and his friends have induced him to take the first vacation he has had in over a quarter of a century. Just think of it; over twenty-five years of unremitting work on many inventions—then his pet and hobby perfected—then a vacation.

Wonderful NEW Edison FREE Shipped

Write today for our new Edison catalog that tells you all about the wonderful new model Edison with Mr. Edison's new Model R Reproducer and the new parlor grand equipment. With this catalog we also send full explanation of our free shipment offer.

Mr. Edison Says

"I want to see a phonograph in every home."

The Offer We will send you the new model Edison Phonograph and your choice of over a thousand records on an absolutely free loan. We want you to have all the waltzes, two-steps, vaudevilles, minstrels, grand operas, also the sacred music, etc., etc., by the world's greatest artists. Entertain your family and your friends. Give plays and concerts right in your own parlor. Hear the songs, solos, duets and quartettes, the pealing organs, the brass bands, the symphony orchestras, the choirs of Europe's great cathedrals, the piano and violin concerts, virtuoso—all these we want you to hear free as reproduced on the new Edison. Then, when you are through with the outfit you may send it back to us.

Read this remarkable Free Shipment offer on the first lot of the new style Edison Phonographs; these new Phonographs to be shipped FREE on this special offer NOW.

The Reason Why should we make such an ultra-liberal offer? Why should we go to all this expense and trouble just so you can have all these free concerts? Well, we'll tell you: we are tremendously proud of this magnificent new instrument. When you get it in your town we know everybody will say that nothing like it has ever been heard—so wonderful, so grand, so beautiful, such a king of entertainers—so we are pretty sure that at least some one, if not you, then somebody else, will want to buy one of these new style Edisons (especially as they are being offered now at the most astounding rock-bottom price and on easy terms as low as \$2.00 a month). But even if nobody buys there is no obligation and we'll be just as glad anyway that we sent you the New Edison on our free trial; for that is our way of advertising quickly everywhere the wonderful superiority of the New Edison.

FREE: Our New Edison Catalog
Write today for our new Edison catalog

FREE COUPON

and learn all about the wonderful New Edison. Learn how thousands of people are entertaining their friends by giving Edison concerts—learn how the boys and girls are kept at home and all the family made happy by the wonderful Edison. No obligations whatsoever in asking for this magnificently illustrated catalog, so write now.

BABSON BROS., Edison Phonograph Distrs.
Dept. 7531, 365 Portage Ave. Winnipeg, Can.
Dear Sir:—Please send me your New Edison Catalog and full particulars of your free trial offer on the first lot of the new model Edison Phonographs.

BABSON BROS., 355 Portage Ave., Dept. 7531 WINNIPEG, CAN.
Western Office: 65 Post Street, San Francisco, Cal. U.S. Office: Edison Block, Chicago, Ill.

Name.....
Address.....

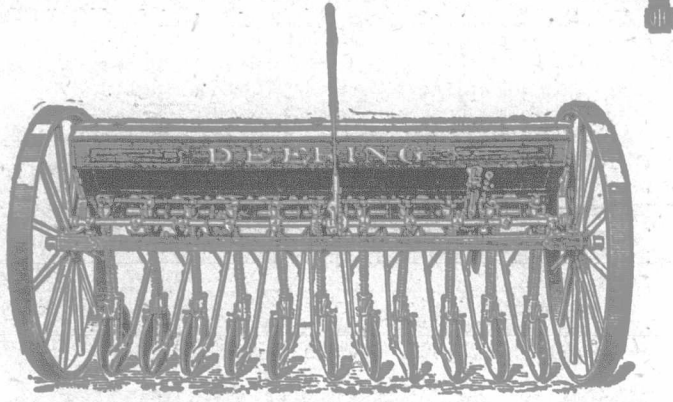
The Deering Drill Plants Any Seed and Plants It Right

WHEAT, oats, rye, flax, barley, corn, peas, beans—in short, any seed, large or small, can be planted properly with a Deering drill. Ten minutes' time is enough to make the change from the smallest to the largest seed. This is accomplished by a double run force feed having one large and one small opening. When either is in use, the other is tightly closed.

The capacity of the grain box is so large that fewer fillings are required. The runs are so nicely adjusted that the drill plants evenly whether the hopper is full or almost empty. The feed runs are thrown into and out of gear automatically as the markers are lowered or raised, preventing any waste of seed from this cause.

Special Features of Deering Drills for Eastern Canada

Deering drills have high, wide wheels, which lessen the draft and ride the machine smoothly over rough places. This tends to keep the disks at an even depth in rough fields. The disks turn easily—even the lightest soil offers resistance enough to keep them moving. One reason for this is that the bearings are always well lubricated, being oiled from the inside. The grease



or oil thus tends to force out all dust, dirt, and grit, adding life to the bearings and keeping them running freely.

In any kind of soil, hard or soft, trashy or clean, muddy or dry, in stubble or in well prepared seed beds, the Deering drill does good work. It plants the seed at an even depth, and covers it in such a way as to insure its getting the best kind of a start.

The Deering line of tillage implements consists of drills, disk harrows, spring and peg tooth harrows, land rollers, etc. The Deering local agent can give you catalogues of any of the machines here named. See him, or, write the nearest branch house.

Eastern Canadian Branches
International Harvester Company of America
(Incorporated)

At Hamilton, Ont. London, Ont. Montreal, P. Q.
Ottawa, Ont. St. John, N. B. Quebec, P. Q.

These machines are built at Hamilton, Ont.



she was not a "member;" how could she pray before all those elderly women! John Rogers at the stake hardly suffered more than this poor child for the moment as she rose to her feet, forgetting that ladies prayed sitting down, deacons stood in prayer. Her mind was a maze of pictures that the Rev. Mr. Burch had flung on the screen. She knew the conventional phraseology, of course; what New England child accustomed to Wednesday evening meetings, does not? But her own secret prayers were different. However, she began slowly and tremulously:—

"Our Father who art in Heaven, . . . Thou art God in Syria just the same as in Maine; . . . over there to-day are blue skies and yellow stars and burning suns. . . the great trees are waving in the warm air, while here the snow lies thick under our feet, . . . but no distance is too far for God to travel and so He is with us here as He is with them there, . . . and our thoughts rise to Him 'as doves that to their windows fly.' . . ."

"We cannot all be missionaries, teaching people to be good, . . . some of us have not learned yet how to be good ourselves, but if thy kingdom is to come and Thy will is to be done on earth as it is in heaven, everybody must try and everybody must help, . . . those who are old and tired and those who are young and strong. . . The little children of whom we have heard, those born under Syrian skies, have strange and interesting work to do for Thee, and some of us would like to travel in far lands and do wonderful brave things for the heathen and gently take away their idols of wood and stone. But perhaps we have to stay at home and do what is given us to do. . . sometimes even things we dislike, . . . but that must be what it means in the hymn we sang, when it talked about the sweet perfume that rises with every morning sacrifice. . . This is the way that God teaches us to be meek and patient, and the thought that He has willed it so should rob us of our fears and help us bear the years. Amen."

Poor little ignorant, fantastic child! Her petition was simply a succession of lines from the various hymns, and images the minister had used in his sermon, but she had her own way of recombining and applying these things, even of using them in a new connection, so that they had a curious effect of belonging to her. The words of some people might generally be written with a minus sign after them, the minus speaking of the personality of the speaker subtracted from, rather than added to, their weight; but Rebecca's words might always have borne the plus sign.

The "Amen" said, she sat down, or presumed she sat down, on what she believed to be a bench, and there was a benediction. In a moment or two, when the room ceased spinning, she went up to Mrs. Burch, who kissed her affectionately and said, "My dear how glad I am that we are to stay with you. Will half past five be too late for us to come? It is three now, and we have to go to the station for our valise and for our children. We left them there, being uncertain whether we should go back or stop here."

Rebecca said that half past five was their supper hour, and then accepted an invitation to drive home with Mrs. Cobb. Her face was flushed and her lip quivered in a way that aunt Sarah had learned to know, so the homeward drive was taken almost in silence. The bleak wind and aunt Sarah's quieting presence brought her back to herself, however, and she entered the brick house cheerily. Being too full of news she carefully lifted a braided rug into the sitting room and stood on that while she opened her budget.

"There are your shoes warming by the fire," said aunt Jane. "Slip them right on while you talk."

(To be continued.)

Gossip.

The bay, registered, eighteen-months-Clydesdale stallion, Regal Grand Duke [13946], by Imp. King's Friendship (14724), son of Hiawatha Godolphin (by the champion, Hiawatha, whose dam was by Baron's Pride), dam by Joe Anderson (imp.), by Cairnbroe Stamp, is advertised for sale by Henry Schlichter, New Dundee, Waterloo County, Ont. This colt is described as large for his age, having weighed, without preparation, 1,060 lbs., at seventeen months old, with good limbs and flat bone, good conformation, and his breeding first-class.

NEW COAL OIL LIGHT

Beats Electric or Gasoline

Powerful white incandescent mantle light. Replacing common oil lights everywhere. Burns 70 hours on one gallon of coal oil (kerosene.) No odor or noise, simple, clean. Tests by Prof. McKergow, McGill University, Montreal, on leading oil burning lights show this gives over twice as much light as the Rayo and other round wick lamps and uses less than half as much oil. Thousands of satisfied users endorse it as the best light in the world. To introduce this modern white light quickly, we will let you

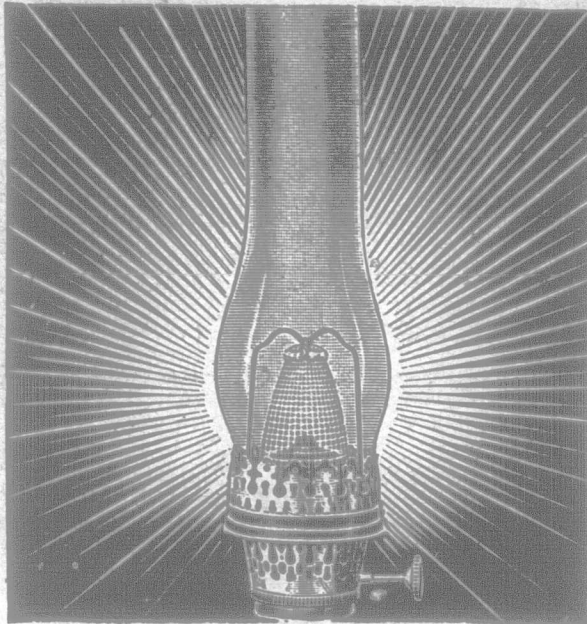
TRY ONE TEN DAYS At Our Risk

We want one person in each locality to whom we can refer customers. Write quick for agents wholesale prices and special introductory offer, which entitles you to One FREE.

MANTLE LAMP CO.
723 Aladdin Building, Montreal and Winnipeg

AGENTS WANTED

Experience unnecessary. Make Money evenings or spare time. Write quick.



MORE POTATOES PER ACRE
Think of finding one to eleven \$5 bills in the furrow, on every acre you plant. It's been done many times. Plant the spaces you skip, sell the potatoes, and you've got the money. No extra land, no extra work. It costs no more to prepare ground, fertilize, cultivate, spray and dig a perfect stand.

IRON AGE Potato Planter
(Approved Robins)
(Now made in Canada.)
This machine soon pays for itself and yet puts real money into your pocket. One seed piece in every space and one only. Uniform spacing. No injury to seed. Ask your dealer to show it and write us for free booklet, "100 per cent Potato Planting." We make full line Potato machines, Garden tools.

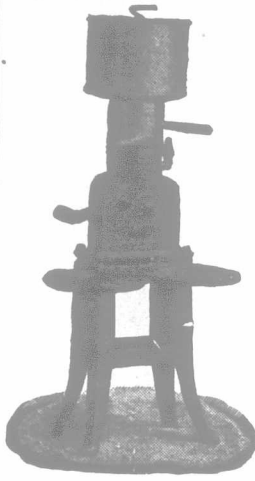
The Bateman-Watson Co., Limited
416 "Brimington" Ave.
Toronto Ontario

MERCHANTS PRODUCE CO.
Butter Eggs Poultry Honey
Beans Apples Potatoes, etc.

Our constantly growing trade demands large supplies of choice farm produce. We need yours. Write for weekly market letter.

37 Front St. E., Toronto
Established 1890

Fifteen Dollars and Expenses Weekly for trustworthy man or woman to act as travelling representative. Previous experience not required. Travelling expenses advanced. Commence in home territory.
WINSTON LIMITED
Toronto Ontario



We give a FREE TRIAL of the Domo Cream Separator

Think of it! We send this high-grade, easy-turning machine on approval, freight prepaid, to test at our expense. We take all the risk. Prices from \$15 and upwards, about half what you pay for others, and you can be the judge of its merit. Write to-day for circular "A," which gives full particulars of our trial offer, with prices and easy terms of payment. It's FREE.

DOMO SEPARATOR CO.
Brighton, Ont. St. Hyacinthe, Que.

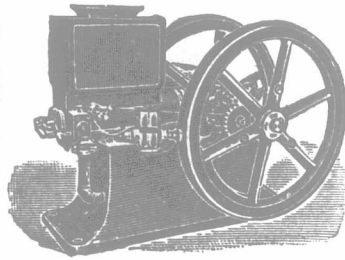
MAKE A "MONARCH" DO YOUR CHORES

Our special factory for building farm engines has experts to work on each part of the "Monarch". It is built differently from ordinary engines, with very big bearings (adjustable), over-size carbon-steel shaft, etc. Besides, it has equipment not found ordinarily—protected fuel tank and sight gauge in base, governor, timer, primer, etc. It is the best engine made—Sizes: 1½ to 35 h.p., for farms.

Ask for our "RED-CIRCLE" folder, and our easy buying terms and catalogue. A post card will do.

CANADIAN ENGINES, LIMITED, DUNNVILLE, ONT.

Sole Selling Agents for Eastern Ontario, Quebec and Maritime Provinces, The Frost & Wood Co., Limited, Smith's Falls, Ont.



THE FARMER'S PLASTER

Every farmer should be familiar with

PULPSTONE

Wood-fibre Wall Plaster

IT is the strongest, warmest and most durable of all plastering materials. It is made from Gypsum Cement and wood fibre.

PULPSTONE is ready for use as soon as mixed with water—nothing to add—simply mix and apply—ONE COAT ONLY—and it is the only wall plaster you can use yourself.

It sets in about three hours, and is finished! You have a wall ten times as strong as lime mortar, and twice as warm.

PULPSTONE can be used outside by adding 10% Portland Cement. It is suitable for the exterior or interior of

Homes, Poultry Houses, Silos, Barns, Outhouses, etc.

A postal will bring full information if addressed to

The Alabastine Co., Limited
PARIS, ONTARIO

Sydney Basic Slag

THE IDEAL FERTILIZER TO RESTORE FERTILITY TO YOUR WORN OUT PASTURES

Have you read our previous advertisements? It will certainly pay you to order on a ton of Basic Slag and apply same to two acres of any worn out pastures on your farm.

Until our selling arrangements are completed in Ontario, we will supply you direct from the factory at \$20.00 per ton, freight prepaid to your nearest station—cash with order.

For further particulars, apply to

The Cross Fertilizer Co., Ltd., Sydney, N. S.

OR TO THEIR SALES AGENTS:

For Western Ontario, A. E. WARK Wanstead, Ont.
For Eastern Ontario, A. L. SMITH, 220 Alfred St., Kingston, Ont.

SEEDS SEEDS

JOHN A. BRUCE & CO. LIMITED

BRUCE'S SEEDS SATISFY FREE

Write at once for our 112-page handsomely illustrated Catalogue of Seeds, Plants, Bulbs, Implements, and Poultry Supplies, etc.

ESTABLISHED 1850

JOHN A. BRUCE & CO. LIMITED
HAMILTON CANADA

SEEDS SEEDS

65

They Get All the Power

Kerosene, distillate, "stove-tops," etc., are cheaper than gasoline, naphtha, etc., in the United States or Canada, or almost anywhere. The



15-30 h.p. or 30-60 h.p.

runs cheaper anywhere because it burns the cheapest fuel.

The way to boost profits is to cut costs. OilPull will save \$1.50 to \$3.50 a day in fuel cost—more than the wear and tear on the tractor. When an OilPull is worn out you've saved enough on fuel to buy a new one.

You can get OilPull fuels anywhere—store them anywhere—there is no loss from evaporation. They are safe!

OilPull Tractors are oil cooled—no freezing of the radiator, even in the coldest weather—no evaporation, even in the hottest.

The OilPull is built to last. It is simple and durable. It costs less than other tractors because it lasts longer.

It has the Secor-Higgins system of carburetion—the only successful system of burning kerosene in an ordinary engine under all tests.

Write for Data-book No. 353 on the OilPull.



RUMELY PRODUCTS CO.

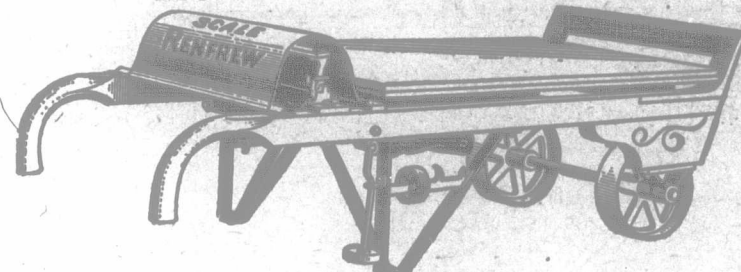
(Incorporated)

Power-Farming Machinery

Toronto, Ont.

462

THE FARM SCALE THAT SAVES MONEY FOR FARMERS



The Renfrew Handy Two-Wheel Truck Scale

☞ The RENFREW saves every cent of profit for the farmer on everything he sells by weight, because of its absolute accuracy.

☞ It saves for him time and labor—simply wheel the RENFREW to what you want to weigh.

☞ It saves for him because it is built to last, and weighs anything from one pound to 2,000 pounds.

☞ Does your scale do these things? If not, it is time to buy a RENFREW—the farm scale built to meet your requirements.

Mail Coupon Now for this Free Booklet, "The Profit on the Last Ounce." It tells interestingly about the business side of farming—and how money is saved with a "RENFREW" Handy Two Wheel Truck Scale.

THE
RENFREW SCALE CO.
RENFREW, ONTARIO.

AGENTS:

SASKATOON—Western Distributing Agency
CALGARY—Renolds & Jackson
EDMONTON—Race, Hunt & Giddy
MANITOBA—Clare & Brockest, Winnipeg.

Mail Now Coupon

Please send me free of charge the booklet "The Profit on the Last Ounce."

Name.....

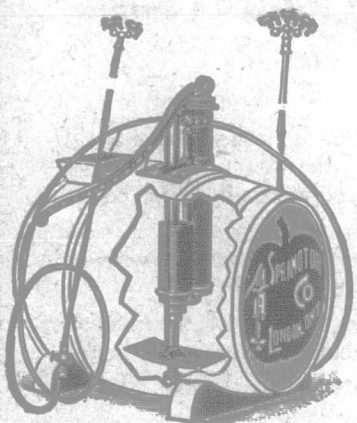
Address.....
THE RENFREW SCALE CO.
Renfrew, Ont.

"Shall I Buy a SPRAMOTOR or an ordinary spraying outfit?"

That's the question. Your decision should be determined by what you expect the machine to do and how long you expect it to do it.

If you want a durable hand machine for the purpose of destroying weeds, spraying orchards, potatoes and row crops—one that you can also paint with—you want a

HAND SPRAMOTOR



If you want a durable H. P. machine to do all these things, besides spraying grain and doing the white-washing, you want a

H. P. SPRAMOTOR

If you want a durable gasoline machine to do all these things in a bigger way, but mainly for orchard work and white-washing, you want the

MODEL "C" SPRAMOTOR

The SPRAMOTOR in every class has demonstrated its superiority to all other spraying outfits, and there's one built specifically for your needs.

Prices range from \$6.00 to \$350.00.

N.B.—When you buy a SPRAMOTOR you make a permanent investment, because every machine bearing the name is built to endure.

SPRAMOTOR, LIMITED, 1563 King St., LONDON, CAN.

DAIRY FEED

Comprised of 50% Corn, the balance being Oats and Barley. This Feed has been tested by some of the prominent Dairymen of this section, and pronounced to be of A1 quality, both for milking and fattening purposes.

If your dealer does not handle the Archibald brands, write us direct for samples and prices. It will pay you. We also have Canada Western Seed Oats for sale.

ARCHIBALD CEREAL COMPANY

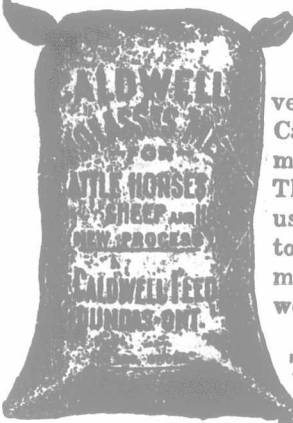
LIMITED.

WOODSTOCK

ONTARIO

CALDWELL'S MOLASSES MEAL

is a decided Economy and an excellent Investment—



Because it makes other feed more palatable and digestible. It also puts stock in first-class condition very quick. Caldwell's Molasses Meal is 84% Pure Cane Molasses with 16% a special variety of edible moss possessing unique digestive action. Thousands of stockmen and farmers are consistent users of Molasses Meal because they have proven it to be the best conditioner on the market. Your feedman likely has it. If he hasn't, it would be well worth your while to write for prices.

THE CALDWELL FEED CO., LIMITED,
DUNDAS, ONTARIO.

Gossip.

In his new advertisement in this issue, Herbert German, St. George, Ont., breeder of Tamworths, offers for sale some choice young boars and sows, three to five months old, also a yearling boar, at a bargain. He has Bell 'phone.

The dehorning of cattle can be accomplished easily, and without pain, if action is taken early enough. Calves should be taken in hand when they are not more than four days old; the earlier the better. The hair is clipped away from the embryo horn, and a stick of caustic potash, to be obtained from any chemist, is moistened and rubbed firmly on the center of the horn for several minutes. Care must be taken to protect the fingers from the caustic, and also not to get it too wet, or it will run and damage the skin in the neighborhood of the horn, the center of which should be attacked.

Richard Reid, of Berlin, Ont., who has for several years been the capable Secretary of the Canadian Jersey Cattle Club, and was for many years a breeder of Jerseys, has been appointed Ontario Government Agent in Great Britain. His headquarters will be in London, and he will give particular attention to immigration and the advertising of Northern Ontario. Mr. Reid is a very clever and genial gentleman, and is well-fitted for the position to which he has been appointed. He was for many years Principal of the Berlin High School, and at the same time conducted a farm and herd of high-class stock. His host of friends will congratulate him on his appointment.

D. C. Flatt & Son, Hamilton, Ont., write: We have recently sold a very valuable Holstein bull to Byron Stevens, of Bridgen, Ont. This bull is from Daisy Pietertje Johanna, the champion four-year-old of Canada for yearly butter production, and with a record of 27.16 lbs. butter in seven days. His sire is Sir Admiral Ormsby, the sire of Jenny Bonerges Ormsby, the world's record two-year-old for yearly butter production, and now has a record over 33 lbs. in seven days, and 125½ lbs. butter in thirty days as a four-year-old; also Francy Bonerges Ormsby, 29.16 lbs. butter in seven days, and Vronka B 2nd, with over 27 lbs. as a four-year-old. We might also mention the sale of a fine bull calf to Walburn Rivers, of Folden's Corners, Ont. His dam has just completed a seven-day record of almost 20 lbs. butter as a four-year-old. She suffered very much from a healing in her foot, which reduced her milking considerably. We have every belief that she is a 30-lb. cow. Her dam gave 119 lbs. milk a day, and 25,650 lbs. milk in a year. The calf is sired by our junior herd bull, Royalton Canary Hartog 7th, whose dam gave 111 lbs. milk a day, and 34.00 lbs. butter in seven days as a four-year-old. We still have a few more top-notchers to sell.

Trade Topic.

Inspiration is not confined to artists only. In every avocation of life, men are occasionally found so wrapped up in their work that not only does their interest find expression in the product of their hands or brains, but at some point in their life-work they bring forth that which unmistakably excels all their former efforts. Samuel L. Allen, a practical farmer, is said to be such a man, and his Planet Jr. No. 10 Horse-Hoe, he believes to be the most excellent invention of all his labor-saving devices. This hoe is said to be better than any other horse-hoe, and may be used to work crops from sowing-time until further cultivation is not necessary. Look up the advertisement elsewhere in this issue, and get further information from S. L. Allen & Co., Box 1108F, Philadelphia.

WESTERN LAND FOR SALE

In areas to suit purchasers from 160 acres upwards, situated on or near railways in the

Best Wheat, Oat and
Stock Growing
Districts of
SASKATCHEWAN

AND

ALBERTA

200,000 acres to choose from.
PRICES LOW.

Special Inducements
Given Actual Settlers

F. W. HODSON & CO.
Room 102, Temple Building
TORONTO, ONTARIO, CANADA
Western Office: North Battleford, Sask.

Farm Help Supplied

With a view to securing to its many patrons the very best obtainable in the way of immigrated

Farm Laborers

THE

SALVATION ARMY
is this year putting forth special efforts in the rural and outlying districts of
THE BRITISH ISLES

From such districts will come the very class of men, boys, and housekeepers required by Canadian farmers.

Apply by letter at once to—

IMMIGRATION SECRETARY
20 ALBERT STREET, TORONTO, ONT.

OR

MAJOR MCGILLIVARY
376 CLARENCE STREET - LONDON, ONT.

Choice Ensilage Corn

THAT WILL GROW

Mammoth White

Improved Leaming

Yellow Dent

(Car Lots)

February, March, April shipments

Our crop is very choice this year.

E. R. ULRICH & SONS

Springfield Illinois

SPRAYERS

For large or small orchards, market gardens, potato farms, grain, mustard, tobacco, home and garden work, poultry plants, whitewashing, cleaning, cold water painting, etc. From **Bucket, Knapsack and Barrel Sprayers** to **Tractor and 50, 100, 150 and 250 gallon Power Sprayers**—complete or in parts to build up. Sprayers already in use, for combinations.

IRON AGE \$4 to \$400 (New models in Canada)

They have outside pumps, no corrosion. Unit sprayers, so you can build bigger when necessary. Ask your dealer to show them and write for new booklet, "Spraying Trees, Trees and Bushes." We also make full line potato machines, garden tools, etc.

The **Bateman-Wilkinson Co.** Limited
414 Bymington Ave., Toronto, Ontario

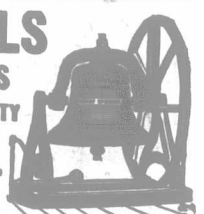
CHURCH BELLS

CHIMES AND PEALS

MEMORIAL BELLS A SPECIALTY

FULLY WARRANTED

MCSHANE BELL FOUNDRY CO.
BALTIMORE, Md., U. S. A.
Established 1866





No ruts on this or any other concrete road

You Can't Wear Ruts in a Concrete Road

Concrete is the Ideal Pavement
for either town streets or
country highways

CONCRETE IS "RUT-PROOF"

TO REALIZE WHAT THIS MEANS, it is only necessary to compare a piece of dirt or Macadam roadway with one that is built properly with concrete. The roadway shown in the illustration is a typical one of its kind. You can see one just like it in almost any Canadian Community. Take a look at the one nearest you. You'll see a big double rut down the centre, made by the vehicles driven there to escape the soft, oozy surface on either side.

There's a reason for that double rut down the centre. A Macadam road when originally laid, must be constructed with a high "Crown," so that the water may drain off properly on either side.

A Concrete road, you'll notice, is not built that way. True, it has a slightly sloping surface, a certain amount of "Crown", but very little is necessary, because a concrete surface drains so much more easily than dirt.

The high crown of the Macadam road forces all vehicles to drive in the centre of the road. From the very day the roadway is ready, every wagon takes the middle of the road; and every one that follows, follows in the ruts thus started. The result is that you have two narrow strips of surface carrying the total traffic that passes over that road. Everybody takes to the ruts.

Now see what happens when the road is of concrete. The slope, or crown, of a concrete road is so imperceptible that there's no need to keep to the centre. Vehicles, therefore, use the entire width of the road. The traffic is distributed over the whole surface.

When you drive along a concrete pavement, you'll find no ruts whatever. Concrete doesn't give them a chance to get started.

Concrete roads are not an experiment. They have been proven the best and, in the long run, the cheapest of all roads.

Wind and rain, instead of making mud-pools and ditches, only serve to keep them clean enough to serve as a pathway for pedestrians.

Concrete roads save the farmer's money by allowing him to haul bigger loads, in faster time; they are never impassable when he wants to hurry in with a load of produce to catch high prices.



Driving in the rut. Where else can you drive?

For further information address: PUBLICITY DEPARTMENT

CANADA CEMENT CO., Limited, MONTREAL

Concrete roads save the public money, their cost of maintenance is so low.

Concrete roads are within the reach of every community—the first cost is very little more than that of a good Macadam road; the ultimate cost is infinitely less.



The cost of maintaining 33 miles of concrete road in Wayne County, Michigan, does not exceed \$6.00 per mile per year.

It costs Peel County, Ontario, \$900.00 per mile to maintain Macadam roads for the same period.

FOR FARMERS AND GARDENERS

The Latest Improved Specialties

Every Farmer and Gardener should use Eureka Tools and Implements. These tools have proved to be great labor and Money Savers. Our method of making these Specialties assures adaptability, strength and service at the minimum price for the best goods of their kind on the market.



Without wings and ladders it is an excellent Wagon Box, with them it is a perfect Hay, Stock, Wood, Corn or Fruit Rack. Can be instantly adjusted to five different working positions without the use of a single tool. Suitable for moving any kind of load. The material used in construction is of the very best being made from sound hardwood and tough malleable iron castings. Buy one which meets every requirement.

"EUREKA" GARDEN SEEDER
Will handle the most delicate Seed without bruising or breaking and will sow evenly to the last seed. An excellent tool for sowing Sugar Beets and all kinds of Garden Seeds. Sold with or without the Cultivator Attachments.

"EUREKA" SANITARY CHURN
The only Sanitary Churn made. Barrel of finest stoneware, top of clear pressed glass, very easy to operate. Three sizes, No. 1, 2 and 3.

"EUREKA" ROOT CUTTERS
Will shred or slice from one to two bushels per minute. Tapering cylinder with ten carefully tempered steel knives. Strong and durable.

WRITE FOR CATALOGUE
Our latest catalogue describes our entire line. It shows our Cultivators, Seeders and Tools as they are and gives a full description of their construction in detail. Write for free copy.

THE EUREKA PLANTER COMPANY LIMITED
WOODSTOCK, Ontario. 21

You Need This Light 'Most Every Night

Indoors—outdoors—in the stables and driving shed—hundreds of times—dozens of places—you need the

"NINE LIVES" ELECTRIC FLASHLIGHT

with its bright but economical little Tungsten incandescent lamp. Compact, handy, and safe! Easily carried in your pocket or under your arm. Simply press the button and you have instantaneous flash. Can't set fire to anything.

We'll send you a "Nine Lives" Electric Flashlight, fully prepaid. Pocket type for \$1.50. Tubular type for \$2.00. It's too convenient to be without—write to-day.

CANADIAN CARBON CO., Limited
92 West King St., Toronto

POTATO GROWING COSTS CUT IN TWO

EUREKA PLANTER

Doubles your potato profits. Minimizes labor. Use a Eureka Potato Planter. Opens the furrow, drops seed accurately any distance or depth desired; puts on fertilizer if wanted, covers perfectly and marks for next row. Always plants uniform depth. Requires only one man. Driver sees seed drop. Made in three sizes, for 1 or 2 rows.

The Eureka Mulcher and Seeder

A mulcher, smoothing harrow, cultivator, weeder and seeder all combined. Forms dust mulch and conserves moisture. Three sizes, 8, 10 and 12 ft. Lever with pressure spring regulates depth of cut. Pulverizes the soil. Levels the ground. Teeth are flat and can be removed to cultivate in rows. The driver rides.

Seeding boxes can be easily attached to sow grass seed, alfalfa, oats, etc. Adjusts for seeding various quantities. Teeth cover seed thoroughly, either shallow or deep. Economical in price.

Prompt shipments from branch near you. Send for free catalogue today.

E. H. COMFORT
Box 24
North Pelham, Ontario.

Gossip.
The William Davies Company, in their new advertisement in this issue, have changed their address, in connection with fertilizer, from Toronto to West Toronto, and call attention to their offering of fertilizers of high-grade materials, low prices, and easy terms. See advertisement, and write for free special booklet.

ANOTHER BIG SALE OF HOLSTEINS
John McKenzie, the well-known breeder and exhibitor of Holstein cattle and Tamworth swine, of Willowdale, Ont., six miles north of the C. P. R. crossing, Yonge street, Toronto, having sold his farm, will hold an absolute dispersion sale of his high-class herd of forty registered Holstein cattle and herd of Tamworth swine, on Wednesday, March 12th. The sale will be held at the farm. The Metropolitan electric cars, starting at the C. P. R. crossing, pass the farm every hour, stop 34 being at the gate. Among the Tamworths are two brood sows, six young sows bred, two stock boars, one of them from the well-known, high-class herd of A. A. Colwill, Newcastle, the other from the equally well-known herd of Herbert German, St. George. The entire offering, both Holsteins and Tamworths, are strictly high-class, and will be offered in fine condition. The terms will be cash, or eight months on bankable paper, with 6-per-cent. interest. The sale will commence sharp at 12 noon. In next week's issue will be a short resume of the producing qualities of the Holsteins. For full particulars, write for catalogue, to John McKenzie, Willowdale, Ont.

T. H. Hassard, Markham, Ont., writes: I recently sold the big, well-colored, quality Clydesdale stallion, Craigie Squire (imp.), by Sir Humphrey (the sire of the Cawdor Cup winner, St. Clair), to W. J. Ross, of Campbellford, Ont. This horse stood third in the three-year-old class at the Guelph Winter Fair, 1912. J. H. Mooney, of Weyburn, Sask., purchased the two-year-old Clydesdale colt, Lord Newburgh (imp.), by Pacific, dam by Acme. He is a thick, weighty colt, possessing a great amount of substance, and the very best of quality. He moves very close and true. He won second prize in his class at the Canadian National Exhibition in Toronto, 1912. R. J. Norton, of Owen Sound, Ont., secured a model draft horse in the three-year-old Clydesdale stallion, Tomedia (imp.), by the good breeding horse Dupedin, dam by Knight of Cowal. M. T. Stafford, of Renfrew, Ont., purchased the richly-bred two-year-old Clydesdale colt, Earl Park (imp.), by Ardimersey Prince, dam by Springhill Victor, and second dam Forest Queen (the dam of the great Baron's Pride), by Springhill Darnley. Wm. Hassard, of Hamiota, Man., purchased the thick, weighty three-year-old Percheron stallion Josias, and the two-year-old Clydesdale colts Paradox (imp.), by Castle Royal, by Royal Favorite, dam by Baron's Pride; and Valerez (imp.), by Sir Humphrey, dam by Perpetual Motion. Both are good-sized colts, with the best-quality feet and legs obtainable. To Geo. H. Hooton, of Peterboro, Ont., goes the big, flashy-moving Clydesdale mare, Nelly Taylor 2nd, by Hiawatha. She stood third in the aged mare class at the Guelph Winter Fair, 1912. F. H. Burke, of Peterboro, Ont., purchased the three-year-old Percheron stallion, Journalier, a horse possessing great substance and quality, two of the most important essentials good Percheron stallions must have. Mr. Burke is to be congratulated in making such a choice, and the farmers and breeders of the Peterboro district are fortunate in having a horse of his class within easy reach. In securing the two-year-old Percheron stallion, Kartomier, W. J. Sloan, of Wallacetown, Ont., obtained one of the very best the breed ever produced. Kartomier won in the two-year-old class at the Canadian National Exhibition, Toronto, and also the championship. Later he won first and championship at the Western Fair, London, 1912. The team of heavy draft, prize-winning geldings that were first at Guelph, 1912, have been sold to the Colony Stock Farm, of Coquitlam, B. C.

Dispersion Sale of Shorthorns
Having sold our farms, J. & E. Chinnick, of Eberts, Ont., will sell by auction, at the farm, one-half mile from Eberts Station, on **Tuesday, February 25th, 1913**
30 CHOICE
Scotch Shorthorns
23 females and 7 bulls

They are from such noted sires as Prince of the Forest (Imp.) and Pride of Morning, out of Joy of Morning. They are descendants of Duchess of Gloster A and Butterfly 49th (Imp.). The farm is six miles north of Chatham and half a mile north of Eberts Station, on the Pere Marquette Railroad.

TERMS: Eight months' credit, or 6% discount per annum for cash.

Capt. T. E. Robson, London, and Messrs. McCoig & Harrington, Auctioneers. Catalogues on application to **J. & E. CHINNICK, Chatham, Ont., (Box 86), or Eberts P.O.**

Important Holstein Sale
100 HEAD OF
High-class Holsteins
Property of **MONRO & LAWLESS, of Thorold, Welland Co., Ontario, will be sold by auction at their farm on**
Tuesday, February 25th
Fifty-five head of milking age, mostly fresh or springing, five choicely-bred bulls of various ages, ten yearling heifers and five choice grades in milk. No faulty udders. Tubercular tested. Good cattle and a square deal. Many of these cattle have R. of M. and R. of P. records. Some have both. We believe no such large lot of such uniform excellence was ever before offered to the public of Canada.

Thorold is easily reached by Grand Trunk, and by trolley every hour from St. Catharines, Merriton, Niagara Falls, Welland, Welland Junction and Port Colborne, which gives good connections with all C. P. R., M. C. R., T. H. & B., Wabash, Pere Marquette, Buffalo & Goderich and St. Thomas points.

Auctioneers **(B. V. KELLY, Syracuse, N. Y., R. E. HAEGER, Algonquin, Ill., L. V. GARNER, Welland, Ont.)**

MONRO & LAWLESS, Proprietors, Thorold, Ont.
WRITE FOR CATALOGUE

MAPLE SYRUP MAKERS!

\$500 MAPLE SYRUP PRIZE CONTEST

ENTER THIS CONTEST CUT OUT THIS COUPON

THE demand for genuine and high-grade goods so enhances the market price of Maple Sugar and Syrup that we have decided to open a competition to educate the consumer who is more familiar with the second- or third-grade article. To attain this result, we offer \$500 in gold for the best-made syrup and sugar.

Syrup and Sugar on Exhibition in Montreal

The object of making a display of this kind is to show the public the products of the very best Maple Syrup and Sugar Makers in Canada, and must undoubtedly result in unlimited benefit to you should you be one of the exhibitors. All syrup must be made on a **Grimm "Champion"**—will be judged impartially—must be of a light color to stand a chance of winning a prize—will be paid for if you enter the contest, or returned after contest is over if you so desire.

The entries will be exhibited in the magnificent show window of the "Montreal Star." Why not properly equip yourself to be a winner in this contest? State number of trees you tap, and we will give you price on a suitably sized outfit.

For all conditions and particulars, address:

PRIZE CONTEST
GRIMM MFG. CO. Limited
58 Wellington Street
MONTREAL
(Don't forget coupon.)

Questions and Answers. Miscellaneous.

ROOF FOR BARN.

I am pleased to note that you are going to give us information on farm buildings. I trust you will have something to say about roofing. I can supply my own shingle timber, but if there is roofing that will give better satisfaction, I may not use shingles. I had my barns destroyed by fire, and any information I get cannot come too soon. G. D.

Ans.—There are so many excellent roofing materials that it is often difficult for the builder to decide just which one is going to be most satisfactory in his case. Cost, durability, efficiency, and freedom from the danger of fire, are considerations which must be dealt with. A shingle roof, made of good shingles, properly laid, is quite a durable roof, and has given good satisfaction in innumerable cases. First-growth cedar and pine are very suitable for shingles of this kind, and where one has the material on hand, the shingle roof is certainly worthy of consideration. Shingles made from second-growth material are usually not so satisfactory. If shingles are used, insist that they are properly laid. The average carpenter does not put nails enough in the shingles to make a first-class roof. Metal roofs, and different other roofing materials, are giving first-class satisfaction where in use. Investigate the matter in your own locality; get prices on the different roofing materials, first-class shingles included. You know the life of a shingle roof; see how it compares with the others, and on the basis of prices quoted, figure carefully which has the advantage. If you have the right class of timber, and can get the bolts sawn without too much trouble in hauling, the shingle roof should have an advantage in this particular case.

FENCING BETWEEN FARMS.

A owned a farm 80 rods wide and 400 rods long, containing 200 acres, which he divided between his two sons, B and C, giving a deed to B for the south half, containing 100 acres, more or less, and C a deed for the north. The two brothers had a stone planted to mark the center line at the concession roads, the one at the west still remaining in place; but the one at the east cannot be located. The brothers also made a verbal agreement for each to allow 12 feet from center line for use as a lane, and neither of them to let stock run at large, but were supposed to have them driven to the pasture field and from it. As the bush on the east end of the farms was cleared away, each one built his own side of the lane fence, keeping as near as he could 12 feet from the center line. The last 100 rods of this fence on the south side was built in 1898, and of the north side in 1895. C sold his north half to D, who has leased it to different tenants, and their stock is mostly let run at large in this lane, so that it has become almost a continual annoyance to B's son, who has inherited his father's farm. He wishes to erect a new steel fence on this center line, as the present fences on each side of this lane are getting to be in very poor shape, and the roadbed (in a wet season) almost impassable in some places. By dividing this lane, it would also divide the traffic, thereby making it much easier to keep the roadway in better condition, and also for peace and convenience. The present owner of the north half, being D's heir, objects on account of expense.

- 1. Can B's son commence at the east end of this center line and erect 200 rods of fence, no matter what objections D's heir may make?
2. Can B's son compel D's heir, who is present owner of the north farm, to erect the remaining part of the fence?

Ans.—We think that B's son is still, for all that appears in the foregoing statement of facts, legally entitled to have a fence placed on the boundary line between the two farms. But, unless he can come to an agreement with D's heir about the matter, he ought to call in the local fence-viewers to pass upon the portion of fence which each should erect, and the kind of fencing, etc.

HURST SPRAYERS ON FREE TRIAL

NO-MONEY-IN-ADVANCE PAY AFTER IT HAS PAID FOR ITSELF

LET US SEND YOU ANY OF THESE SPRAYERS—to try for 10 days, then if you buy, you can pay us cash or we'll wait till you sell your crop, then you can pay us out of the "extra profit." We pay freight. Wholesale dealers' prices.



Man-Power Potato and Orchard Sprayer.

Sprays "anything"—potatoes or truck, 4 rows at a time. Also first-class tree sprayer. Vapor spray prevents blight, bugs, scab and rot from cutting your crop in half. High pressure from big wheel. Pushes easy. Spray arms adjust to any width or height of row. Cheap in price, light, strong and durable. GUARANTEED FOR FIVE FULL YEARS. Needn't send a cent to get it "on trial." You can get one free if you are first in your locality. Write today.

Horse-Power Potato and Orchard Sprayer.

For big growers. Most powerful machine made. 80 to 100 gallon tank for one or two horses. Steel axle. One-piece heavy-axle-iron frame, express wood tank with adjustable round iron hoops. Metal wheels. "Adjustable" spray arms and nozzles. Brass ball-valves, plunger, strainer, etc. Big pump gives vapor spray. Warranted for five years. Try this machine at our expense with your money in your pocket. See free offer below. Write today.

Fits-All Barrel-Sprayer.

Fits any barrel or tank. High pressure, perfect agitation, easy to operate. Brass ball-valves, plunger, strainer, etc. Automatic strainer. No "cup leathers" or rubber about any of our sprayers. Furnished plain, mounted on barrel, or on wheels as shown. First year guarantee. It don't cost you "a cent" to try it in your orchard. Get one free. See below. Write today.

FREE—Get a sprayer FREE.—After you have tried the sprayer and are satisfied that it is just as we recommend it, send us a list of the names of your neighbors and we will write them and quote them price and have them call and see your machine work, and for every Fits-All Sprayer we sell from your list we will credit you with \$2.00 or send you check if you have paid cash. For every Man-Power Potato and Orchard Sprayer we sell we will credit you with \$3.50 or send check. For every Horse-Power Potato and Orchard Sprayer we sell we will credit you \$8.50 or send check. We do all corresponding and selling. All you need do is to show the sprayer. Many have paid for their sprayer in this way. This offer is good for only the first order in each locality. Don't delay. Send the coupon or post card NOW.

COUPON — Fill Out and send to-day. THE ONTARIO SEED CO., Successors, 138 King Street, Waterloo, Ontario. Send me your Catalogue, Spraying Guide, and "special offer" on the sprayer marked with an X below. Man-Power Potato and Orchard Sprayer. Horse-Power Potato and Orchard Sprayer. Fits-All Barrel Sprayer. NAME ADDRESS

Also ask for catalogue of our superior home grown and imported Seeds. Order our famous collections: Farm Garden Collection, 26 selected varieties, \$1.00, postpaid; Trial Collection, 18 selected varieties, 50c., postpaid; Childrens' Collection, 15 selected varieties, 25c., postpaid. "Our Ideal" Mangel has proven the largest yielder in last year's co-operative experiments.

DO YOU LIKE THIS PLAN? Use the Coupon

WE have others in our new free booklet. Use the coupon to-day and get a copy. In our plans we aim to give you a real service in the way of working drawings, lists of materials needed, general instructions, etc. Your copy will go to you as soon as you fill out the coupon below and send it to us.

The Metal Shingle & Siding Co. Limited. Associated with A. B. ORMSBY, Limited, TORONTO, ONT. FACTORIES AT MONTREAL, QUE. TORONTO, ONT. PRESTON, ONT. WINNIPEG, MAN. SASKATOON, SASK. CALGARY, ALTA. Head Office: PRESTON, ONT.

USE THIS COUPON

The Metal Shingle & Siding Co., Limited, Preston, Ont.: Please send a copy of "Better Buildings" Free. NAME ADDRESS WHO IS YOUR BUILDER? Paper London Farmer's Advocate. 205

TRANSIT Insurance

HORSES and cattle shipped to the Western Provinces or elsewhere can be insured under short term Policies of 5, 10, 15, 20, 25, 30 days to cover the Railroad transit and a few days after arrival. These policies cover the Owner against loss by Accident or Disease and only cost a few dollars per carload.

Losses are heavy on Live Stock shipments on account of injuries sustained in cars through rough shunting, trampling, car fever, etc. not to mention numerous other causes resulting fatally a day or two after landing at destination. We cover both on board car and after arrival, some other companies do not cover after arrival. Insure with us and get the most for an equal premium. Do not take any chances with others.

All kinds of live stock insurance transacted. Write us for particulars and name and address of nearest agent.

Head Office: THE GENERAL ANIMALS INSURANCE CO. OF CANADA, 71a ST. JAMES STREET, MONTREAL, Que.

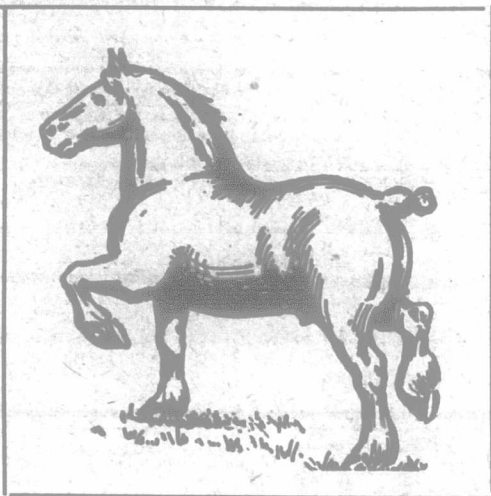
ANNUAL COMBINATION

<Auction Sale>

Tuesday, Feb. 25th

AT 11 a.m.

75 Clydesdales



Wednesday, Feb. 26th

AT 11 a.m.

50 Percherons

CLYDESDALES AND PERCHERONS

Imported and Canadian Bred

AT

Union Stock Yards, Toronto, Ont.

A number of the best breeders in Ontario are consigning for this sale. Entry lists are filling rapidly with choice stock, and for quantity and quality this sale will be unsurpassed. Stallions and mares, sired by Scotland's best horses, will be on offer.

Mr. E. J. Wigle, of Kingsville, Ont., will sell a carload of richly-bred **Percherons, Stallions and Mares**

It will pay Percheron fanciers to see this stock.

BE SURE AND ARRANGE TO ATTEND THIS SALE, AND YOU WILL NOT BE DISAPPOINTED IN YOUR TRIP.

Union Stock Yards of Toronto, Limited (Horse Dep't.) TORONTO, ONTARIO

Clydesdales and Percherons

Thirty stallions of the above-mentioned breeds to choose from. All are government-inspected and approved. A large number of them have won high honors at the leading shows of Scotland, France and Canada. All are for sale at reasonable prices and the best of terms.

T. H. HASSARD, Markham, Ont. Stations: Markham G. T. R., Locust Hill C.P.R. Long-distance phone in connection.

Prize-winning Clydesdales, Imported Stallions and Fillies. Our record at the late Guelph Show, showed a one or more winners in every class. We have now prize-winning Stallions and Fillies with breeding and quality unsurpassed—All are for sale.
JOHN A. BOAG & SON, QUEENSVILLE, ONT.

Young Clydesdale Stallion for sale. Regal Grand Duke [13946], foaled June 2nd, 1911; color, bay; face and feet, white; weight at 17 months, 1,100 lbs. A good, strong colt, with right quality and action. Sire King's Friendship, Imp. (14724), Dam May Anderson [5261]. Will be sold right.
HENRY SCHLICHTER, New Dundee, Ont.

Elmhurst Shorthorns—We will sell Chancellor's Model = 58524 =, the straight Marchioness-bred son of the great Bapton Chancellor, together with 4 young bulls of his get; thick, low-down, mossy-coated fellows, from dams from 1,400 lbs. up. Write for particulars or better come and see. **H. M. VANDERLIP, Langford, Ont., Brantford & Hamilton Radial, Cainsville P.O., 6 miles from Brantford, Main Line, G.T.R.**

ALBERTA 125 METAL COVERED EGG
POULTRY PAYS WELL by using our improved, safe, sure, simple, durable hatcher of 10 years experience by a Canadian. **OUR FACTORY PRICES SAVED YOU HALF.** Special adapted for Canada—heavy lumber case covered with felt, asbestos, galv-iron, copper tank, self-regulator nursery, ready to use. **Guarantee—2 Hatch Trials.** Fine Catalog. Write now! Breeders too. **ALBERTA INCUBATOR CO., BOX 946**
We QUICK SHIP FROM TORONTO OR WINNIPEG DUTY PAID 250 EGG \$17.95 MARKATO, MINN.

RINGING IN EARS DEAFNESS INSTANTLY RELIEVED BY THE OLD **DR. MARSHALL'S CATARRH SNUFF** 25¢ AT ALL DRUG STORES OR SENT PRE-PAID BY C.H. KEITH, CLEVELAND OHIO

Questions and Answers.

Veterinary.

FISTULA.

Mare had distemper in November, and an abscess formed between the jaws. She is now thriving well, and looks well, but there is a running sore at the seat of abscess between the jaws.

S. S. P.

Ans.—This is a fistula. It should be opened up freely with a sharp knife, and then dressed three times daily until healed, with a five-per-cent. solution of carbolic acid. It is possible that injecting the carbolic lotion into the opening regularly might effect a cure, but the surest and quickest treatment is the operation mentioned.

V.

UNTHRIFTY MARE.

Pregnant Clydesdale mare is not doing well. Her hair is rough, and her skin breaks out with small boils. Her hind legs are itchy, and she stamps a great deal, and rubs her legs. She also has pinworms.

J. H. F.

Ans.—The trouble is all due to skin disease. Give the body a thorough washing every third day with a warm five-per-cent. solution of Creolin or Zenoleum, applied with a stiff scrubbing brush. Rub well after washing, and blanket and keep warm until thoroughly dry. For the legs, make a solution of corrosive sublimate 40 grains to a quart of water, and rub well into the skin of the legs once daily until itches ceases. It will be wise to apply this warm, too. As she is pregnant, it will not be wise to give her medicine. The pinworms will not materially interfere with her health or thriftiness. Feed well on laxative, easily-digested food, and see that she gets regular exercise or light work.

V.

RUPTURE OF THE STOMACH.

Horse became sick at noon with what I thought was a slight attack of indigestion. He soon appeared to be better, and I drove him 2½ miles. He had another attack during the afternoon, and about 8 o'clock in the evening he became very bad. I treated him for indigestion without effect, and he died. A post-mortem revealed rupture of the stomach, and blood on the intestines leading from the stomach.

F. W. B.

Ans.—The horse suffered from acute indigestion, with the formation of gas in the stomach, which caused rupture. A veterinarian, by the hypodermic injection of eserine or arecoline, or the use of a stomach tube, could have dissipated or removed the gases, and in all probability have saved him. The early symptoms of many intestinal diseases are often not typical, and while it is well for an owner to give a dose for colic or indigestion, when the symptoms recur he should come to the conclusion that he does not understand the case, and send for his veterinarian. It is less expensive to call in a veterinarian occasionally when his services may not be required, than to lose a horse occasionally on account of calling him too late or not at all.

V.

Miscellaneous.

TEST OF CREAM.

What should forty-five pounds of cream test that churned thirteen pounds of butter, unsalted?

I. R.

Ans.—Probably about 25 per cent. In this calculation, we have assumed that the butter was of average composition for saltless butter.

GRAND TRUNK RAILWAY SYSTEM

Are You Going West?

The Grand Trunk Pacific Railway is the shortest and quickest route between Winnipeg, Saskatoon, Edmonton.

Fast trains leave Winnipeg at:

6.00 p.m. Daily
8.45 a.m. Daily Except Sunday

—FOR—

Portage la Prairie	Rivers
Melville	Regina
Watrous	Saskatoon
Tofield	Camrose
Wainwright	Edmonton

Smooth Roadbed.

Electric lighted sleeping cars. Superb dining car service.

Ask nearest Grand Trunk Agent for full information, literature, etc., or write A.E. Duff, D.P.A., G.T.R., Toronto, Ont.

CANADIAN PACIFIC

SPECIAL CRUISE AROUND THE WORLD

Empresses of "Russia" and "Asia" (New C. P. R. Pacific Steamships)

The Empress of Russia will leave Liverpool April 1st, calling at Gibraltar, Villefranche and Port Said, proceeding via Suez, Colombo, Singapore, Hong Kong, Shanghai, Nagasaki, Kobe and Yokohama, arriving Vancouver June 7th, 1913.

Vessel remains 16 days at Hong Kong. Empress of Asia will sail from Liverpool June 18th, particulars of trip will be announced later.

Most direct connection for April 1st sailing is via "Empress of Britain" from St. John, N. B., March 21st.

Rate for Entire Cruise, \$639.10

Exclusive of maintenance between arrival time in England and departure of "Empress of Russia," and stop over at Hong Kong. Particulars from Canadian Pacific agents, or write M. G. MURPHY, D.P.A., C.P.R., Toronto.

The Call of the North

Do you know of the many advantages that New Ontario, with its millions of fertile acres, offers to the prospective settler? Do you know that these rich agricultural lands, obtainable free, and at a nominal cost, are already producing grain and vegetables second to none in the world?

For literature descriptive of this great territory, and for information as to terms, homestead regulations, settlers' rates, etc., write to

H. A. MACDONELL

Director of Colonization

Parliament Bldgs. TORONTO, ONT.

WORN-OUT SOILS

can be made to yield bumper crops if the right fertilizer is used. There are 14 different Harab Fertilizers—each for a different purpose. For full particulars write:

The Harris Abattoir Co., Limited, Toronto

I have two designs, patents **Animal Traps**. Issued me in Canada on Anybody interested in trapping, drop me a line, and if they are not the best you ever saw return my sheet, and there will be no bad feeling.

SAMUEL WIEHL, Sisters, Oregon.

Famous "Pint of Cough Syrup" Recipe.

No Better Remedy at any Price. Fully Guaranteed.

Make a plain syrup by mixing two cups of granulated sugar and one cup of warm water and stir for two minutes. Put 2 1/4 ounces of pure Pinex (fifty cents' worth) in a 16-ounce bottle, and fill it up with the Sugar Syrup. This gives you a family supply of the best cough syrup at a saving of \$2. It never spoils. Take a teaspoonful every one, two or three hours.

The effectiveness of this simple remedy is surprising. It seems to take hold instantly, and will usually stop the most obstinate cough in 24 hours. It tones up the jaded appetite and is just laxative enough to be helpful in a cough, and has a pleasing taste. Also excellent for bronchial trouble, throat tickle, sore lungs and asthma, and an unequalled remedy for whooping cough and croup.

This recipe for making cough remedy with Pinex and Sugar Syrup (or strained honey) is a prime favorite in thousands of homes in the United States and Canada. The plan has been imitated, though never successfully. If you try it, use only genuine Pinex, which is the most valuable concentrated compound of Norway white pine extract, and is rich in guaiacol and all the natural healing pine elements. Other preparations will not work in this recipe.

A guarantee of absolute satisfaction, or money promptly refunded, goes with this recipe. Your druggist has Pinex, or will get it for you. If not, send to The Pinex Co., Toronto, Ont.

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 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 lameness, 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 lamenesses. Durable bound, indexed and illustrated. Make a right beginning by sending for this book. FLEMING BROS., Chemists, 75 Church Street, Toronto, Ont.

The Guelph Chemical Closet

Convenient, Odorless, Inexpensive, COST ONLY \$18.00 COMPLETE

Are you living as your ancestors lived two hundred years ago? You certainly are if you have not installed a Guelph Sanitary Closet in your home. Why endanger the health of yourself or family, or pay unnecessary doctor bills?

The Guelph Chemical Closet is a wonderful advancement in refinement, comfort and sanitary convenience. It can be placed in the bathroom, cellar, or any desirable place. It requires no plumbing, sewage, or flushing system, only a stove-pipe connected to a chimney-hole for ventilation.

The up-keep is trifling. Less than one cent a day. Write for descriptive circulars. Agents wanted. This closet sells on sight. Seeing one is wanting one.

THE GUELPH MFG. CO.
256 YORK ST. GUELPH, ONT.

ABSORBINE
will reduce inflamed, swollen joints, Bruises, Soft Branches, Cure Bolls, Poll Evil, Ointor, Fistula or any unhealthy sore quickly. Pleasant to use; does not blister under bandage or remove the hair, and you can work the horse, as per bottle delivered. Book 7 1/2 free. ABSORBINE, J.R., Liniment for manning. Reduces Painful, Swollen Veins, Gout, Wens, Inflammation. Stops Pain and Inflammation. Price \$1.00 per bottle at dealers or delivered. Will tell you more if you write. Manufactured only by W. F. YOUNG, F.D.F., 258 Lyman's Bldg., Montreal, Can.

SEED GRAIN
Don't sow musty grain. It is devalued. Good seed pays. Oats—Siberian heads list in Experimental Union. Banner—fine stock, from imported seed. Special—from Lord Rosebery's estate, Scotland. Dalmeny Special and Garton's Record. O. A. C. No. 21 Barley, Ontario's favorite. Siberian, 55c. per bus., Banner, 55c. per bus., Dalmeny, 75c. per bus., Record, 75c. per bus., O. A. C. 21 Barley, \$1.00 per bus. Bags free; send for sample. Yorkshire Swine. W. T. DAVIDSON & SON, Meadowdale, Ont.

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

Questions and Answers.

Veterinary.

SKIN TROUBLE.

I have a calf five weeks old who has thin scales showing through the hair as though it had been slightly sunburned. The nose and lower jaw were first affected, but now the whole fore part of the body is involved. H. H. K.

Ans.—This is a form of eczema. Give a thorough washing with a warm three-per-cent. solution of Creolin or Zenoleum. Keep comfortable, and clothe warmly until dry. Repeat the treatment every four or five days until cured. V.

SEMI DIARRHEA.

Nine-months-old filly that is doing fairly well is too loose in her bowels, almost amounting to diarrhea, especially if I allow her to drink water freely. D. P. L. C.

Ans.—Feed on dry hay and rolled oats, and also give her a couple of carrots daily, unless they cause diarrhea. Add to her drinking water one-fifth of its bulk of lime water, and if the weather be quite cold, take the chill off the water. It is probable she will get over this weakness when she grows older. V.

SOFT PALATE.

The apron of my colt's palate hangs downward at the back of the palate. Will it ever return to its natural place? It is thriving well. C. S.

Ans.—We have never heard of the apron of a palate. We presume you refer to the soft or pendulous palate, which hangs from the back part of hard palate downwards at the root of the tongue. It is on account of this palate that a horse is unable to breathe through his mouth. If there really be any abnormal condition in the mouth, it will be wise to have your veterinarian examine it. V.

LAME HORSE.

Fast horse has gone lame in front, sometimes on one foot and sometimes on the other. After being driven and allowed to rest, he starts off very lame. He is very sore and stiff when in the stable. A. M.

Ans.—The symptoms indicate navicular disease, which, in a well-established case, is incurable. The symptoms can be relieved to some extent, and if treated before alteration of the structure of the joint has taken place, the trouble may be cured by long rest and repeated blistering. Get a blister made of 2 drams each of cantharides and biniodide of mercury, mixed with 2 ounces vaseline. Clip the hair off for two inches high all around the hoofs. Tie so that he cannot bite the part. Rub well with the blister once daily for two days. On the third day apply sweet oil, and turn loose in a box stall. Oil every day until the scales come off, then tie up and blister again, and after this blister once monthly as long as you can give him rest. It is not probable he will ever be useful for road purposes again. V.

RESULTS OF WOUNDS.

Mare had hock and fetlock joint cut last fall. The wound on hock healed, but the other still has a scab. A few days ago the leg swelled up badly, and she cannot put any weight upon it. R. L.

Ans.—This is either lymphatic trouble or blood poisoning. If the former, it is probable the acute soreness will have passed before you see this. Give her a purgative of 8 drams aloes and 2 drams ginger, and follow up with 4 drams hyposulphite of soda three times daily. Bathe the leg well three times daily with hot water, and after bathing rub well with a liniment made of 1 ounce oil of turpentine, 1 ounce camphor, 8 ounces alcohol, and water to make a pint, until the acute soreness has passed, then give regular exercise, hand rub well, and keep a bandage on when standing. If her appetite and general constitution becomes affected, you had better send at once for your veterinarian, as this will indicate a very serious condition that will require treatment according to the symptoms and existing state of the parts. V.

MAPLE LEAF CANADIAN BRAND

OUR OIL CAKE MEAL

has no equal as a **Milk and Butter Producer**

It not only increases the flow of milk, but adds greatly to its butter making properties, aids digestion in the cow, and therefore makes the rough feeds of greater productive value. It puts muscle on the beef animal in the right places, and makes prize-winners.

Try it on your young cattle, spring calves, horses and sheep and **WATCH THE RESULT.**

If your dealer cannot supply you write direct for samples and prices.

THE CANADA LINSEED OIL MILLS, Limited.
Mills at MONTREAL and TORONTO.

FREE-FARM ACCOUNT BOOK

Bickmore's Farm Account Book will be sent free to any farmer who will tell us who and where he is. This book is arranged to keep all accounts in simple form—more simple and certainly more practical than trying to remember them; shows what to charge against crop production; has a laborer's time record; and section for personal accounts. 64 pages, for ink or pencil. Not a cheap affair. Its quality is in keeping with BICKMORE'S Gall Cure, a soothing, healing salve, the old-time reliable horse remedy. Horses are now too valuable and too high priced to take chances of losing their services. Bickmore's Gall Cure heals and cures Hives and Saddle Galls, Rope Burns, Cuts, Scorchings, Grease Heel, etc. You don't have to lay the horse off. Bickmore's cures while the horse works. Great thing for sore tests in cows. The work-horse trade mark on every box. None genuine without it. Be sure to ask for Bickmore's Gall Cure when you go to buy and do not take a substitute. Farm Account Book is ready. Send today.

WINGATE CHEMICAL CO., Canadian Distr., 2800 Notre Dame St. W., Montreal, Can.

To Prospective Stallion and Mare Buyers

We have at our barns the largest and finest bunch of imported approved Percheron stallions and mares ever brought into this country. Our stallions range in age from two-year-olds to six, and are all the large, drafty, heavy-boned type and good movers.

Our mares, of which only a few are left, range from two to five years old, and are all in foal.

As we buy for cash direct from the small French farmer, we are able to sell at prices that will give any buyer from \$300 to \$500 on a stallion, and give more quality and breeding.

To all parties contemplating buying a stallion, we feel confident that it will be to their advantage to inspect our stock, as we sell below competition.

Correspondence invited from all interested parties.

R. HAMILTON & SON, SIMCOE, ONTARIO

COLUMBUS CLYDESDALES AT HOME

To our past customers and intending purchasers, we wish to say that we can show you something really worth while in Canadian-bred and imported Clydesdale stallions and mares. Our aim is to please you.

SMITH & RICHARDSON, Columbus, Ontario
Phone connections. Stations: Oshawa G.T.R. and C.N.R., Brooklyn G.T.R., Myrtle C.P.R.

Clydesdales in Quantity and Quality

ORMSBY GRANGE STOCK FARM, Ormstown, P. Que.

As I am feeding no steers this winter I have filled my stables with imported fillies, selected personally in Scotland; many in foal to such sires as Hiawatha, Sir Hugo, King's Champion, Sir Rudolph, etc. Fourteen have been sold, eighteen of the best are still on hand—the selections being made more on account of price than superiority. There are no culls in the lot. Send for pedigrees and particulars **D. McEACHRAN,** before buying elsewhere. Inspection invited.

CLYDESDALES OF CANADA'S STANDARD

They have arrived—my third importation for 1912, stallions and fillies. I have now the biggest selection in Canada, and a few toppers in stallions. High-class breeding and high-class quality and low prices.

G. A. BRODIE, Newmarket P.O.

Percheron, Belgian and Shire Stallions—Imported and home-bred. Three to four years old, maturing 1,800 to 2,400 lbs. No finer lot in America. Prices and terms reasonable. Barns in city.

LEW W. COCHRAN, Office, 205 Ben Hur Bldg., Crawfordsville, Ind.

IMPORTED CLYDESDALES.

A few choice young stallions always on hand and for sale. Frequent importations maintain a high standard. Prices and terms to suit.

BARBER BROS., Gatineau Pt., Que., near Ottawa.

Stallions — CLYDESDALES — Fillies

I have a big importation of Clyde stallions and fillies just landed; a lot that cannot be duplicated to-day in Scotland and never was in Canada. Let me know your wants.

ROBT. BEITH, Bowmanville, Ont.

CLYDESDALES --- A NEW IMPORTATION

We have lately landed a shipment of Clyde stallions and fillies, several Scotch winners among them. Their breeding is unsurpassed. Comparison with any others in the country will make you a buyer from us. Our prices are as low as the lowest. L. D. Phone. **GOODFELLOW BROS., MACVILLE P. O., ONT.; BOLTON STATION, C. P. R.**

CLYDESDALES OF SHOW CALIBRE

We have stallions and fillies of our 1912 importation that have won many first prizes and championships. This type, quality and breeding is unequalled. Prices as low as any, and terms the best.

ROBT. NESS & SON, Howick, Que.

Rosedale Stock Farm—Breeder and importer of Clydesdale and Shire horses, Shetland and Welsh ponies, Shorthorn cattle, Leicester sheep. Established over 40 years. Always on hand, a big selection of highest quality. Write your wants.

G.T.R. and C.P.R., Electric cars. J. M. GARDHOUSE, Weston, Ont.

Imported Clydesdale Fillies of "Baron's Pride," "Hiawatha" and "Royal Favorite" strains; also children's ponies.

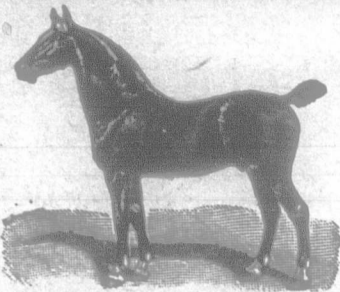
Long-distance phone 704 ring 41. **ALEX. F. MCNIVEN, St. Thomas, Ontario**
Visitors met at any of the stations.

PERCHERONS, STANDARD-BRED and FRENCH COACHERS

I am offering prizewinners and champions in Percheron stallions, Standard-bred stallions, French Coach stallions and Percheron mares, filly and horse colts. Prices very low.

C. P. R., Ottawa to Montreal line. J. E. ARNOLD, Grenville, Quebec.

Warranted to Give Satisfaction. **Gombault's Caustic Balsam**



Has Imitators But No Competitors. A Safe, Speedy and Positive Cure for Curb, Spint, 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 Spunches 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 satisfaction. 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.

CREDIT SALE

There will be sold by Public Auction at Lot 10, Con. 6, Whitechurch Tp., 6 miles from Stouffville (G.T.R.) Station and 6 miles from Gormley Station (C.N.R.) on Tuesday, March 4th, 1913 at 12 noon. Lunch provided.

REG. CLYDESDALE

Mares and Fillies, Dairy Cows, and other farm stock and implements of Mr. M. Regan, Lemonville. 8 months' credit, 5% off for cash.

FRED W. SILVERSIDES Auctioneer Stouffville, Ont.

FERTILIZERS

Wholesale and Retail

Write for literature and quotations on **DAVIES FAMOUS MIXED BRANDS** (24) Muriate of Potash Acid Phosphate Sulphate of Potash Bone Meal Kainite Basic Slag Nitrate of Soda Blood Meal Sulphate of Ammonia Lime Rock Phosphate Salt, etc., etc.

In bag, ton, carload lots. High-grade materials. Low prices and easy terms. Special booklet, "Farm Davies Wav," free. Patronize our agents. **THE WM. DAVIES CO., LTD.** West Toronto, Ont. Commercial Fertilizer Department, R. INNES, B.S.A., MANAGER.

NOTICE TO HORSE IMPORTERS

GERALD POWELL,

Commission Agent and Interpreter, **NOGENT LE ROTROU, FRANCE**

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

Notice to Importers

C. CHABOUDEZ & SON 205 rue La Fayette, PARIS, FRANCE.

If you want to buy Percheron Horses and Mares, I will save you time and money and all trouble with papers and shipment. Will meet importers at any landing port. I am acquainted with all breeders and farmers. Thirty years' experience. Best reference. Correspondence solicited.

DUNHAMS' PERCHERONS

are today as for the past forty-seven years the **-B-E-S-T-** Fresh importation. Catalogue FREE.

DUNHAMS, Wayne, Du Page County, Ill. Clydesdales, Standard-breds, and Short-horns. Our herd numbers about 40 head. Headed by the great stock bull, Trout Creek Wonder. Ten bulls for sale, from 6 to 14 months old; all good colors and good individuals. **DUNCAN BROWN & SONS, Walnut Grove Stock Farm, Iowa, Ont.**

CLYDESDALES FOR SALE. Present offering. King of Fountain Park (10220) a choice three-year-old stallion. Mertoun's Duchess (23701), a beautiful two-year-old filly. D. Hill, Staffa, Seaforth. G. T. R.

Questions and Answers.

Miscellaneous.

HOTBEDS AND COLD FRAMES.

Kindly tell me how to construct and manage a hotbed and cold-frame.

J. F. S.

Ans.—These points were well covered by articles in our Garden and Orchard Department of issue of Feb. 6.

SCOTCH COLLIES.

Do you know where I could get a black Scotch collie pup, and at what price?

C. W.

Ans.—Look over our advertising columns carefully. There are some breeders advertising Scotch collies. Any others having this class of stock for sale should bring the fact before prospective buyers through an advertisement in "The Farmer's Advocate."

THRUSH.

I have a mare eight years old that has thrush in her front feet. Please say whether thrush can be cured, and what will cure it.

G. G.

Ans.—Mix one part of formalin with nine parts of water. Clean out the cleft of the frog, and pour a little of the liquid on, and then stuff with batting. Apply every third day.

HOLSTEINS.

1. I saw in "The Farmer's Advocate," advertisement of Holsteins. Could you advise me where I could get two young suckers, heifers, and price?

2. I would like to get a list of gasoline engines, or book with price.

J. W. L.

Ans.—1. Correspond with some of the numerous breeders offering Holstein stock through "The Farmer's Advocate." 2. Consult our advertising columns.

CORN RACK.

Would you give me a plan for making a low corn rack on a half-truck wagon? What kind of a corn rack do you think is the handiest for hauling corn to a blower when filling silos?

D. R. G.

Ans.—The flat, solid-bottom rack, is considered by many who have used several different types of corn rack, the best of the lot. This rack, as described by a subscriber who has made one for his own use, is made with spruce sills and a spruce bottom. The bottom should be made of inch boards. A narrow strip, 1 x 2 inches, should be bolted around the edge. Four rock-elm cross-pieces should be sufficient, and the edging bolts should go through these. Uprights may be placed at each end. This rack is also useful as a hay and grain rack, and is used by some to haul roots and bags of grain. Some others recommend the use of an ordinary low wagon, and a rack which consists of two stout poles or sills 18 to 20 feet long. This rack is like an ordinary wood rack for drawing cordwood. Holes may be bored in the ends of the sills, and upright, hardwood stakes, put in for the ends. The corn is placed crosswise on the rack, like cordwood.

SAND VETCH.

Will you kindly let me know whether sand vetch will make good hay for horses and cows, when it should be cut, and how it is best cured? I understand it should be sown with rye.

G. D.

Ans.—The sand or hairy vetch is a plant which makes a very good cover crop for an orchard. The seed is, however, rather expensive, usually costing upwards of \$5 per bushel. It does well in the southern counties of Ontario. For hay or fodder, it is usually sown in the fall with rye, because, the plant being a trailer, climbs up the stiff rye stems, and is easier to cut and harvest. The crop is not much used as a cured hay, being more commonly pastured, or better still, fed as a soiling crop. It is ready to cut early in the season, and for this reason is not favored for a hay crop, as early hay weather is frequently wet. Cut just as the seed approaches the soft-dough stage. For pasture, cover crops, or forage, it may also be sown in the spring. It is doubtful whether sand vetch will ever hold an important place in crop rotations in Ontario. There are special conditions, however, under which it may prove profitable, but for a mixture for hay, oats and peas, sown in the spring, are far more likely to be a successful crop.

\$15.95 AND UPWARD SENT ON TRIAL FULLY GUARANTEED.

AMERICAN SEPARATOR

Thousands In Use giving splendid satisfaction our wonderful offer to furnish a brand new, well made, easy running, easily cleaned, perfect skimming separator for only \$15.95. Skims one quart of milk a minute, warm or cold. Makes thick or thin cream. Different from this picture, which illustrates our low priced large capacity machines. The bowl is a sanitary marvel and embodies all our latest improvements.



Our Twenty-Year Guarantee Protects You

Our wonderfully low prices and high quality on all sizes and generous terms of trial will astonish you. Whether your dairy is large or small, do not fail to get our great offer. Our richly illustrated catalog, sent free of charge on request, is the most complete, elaborate and expensive book on Cream Separators issued by any concern in the world.

Shipments made promptly from **Winnipeg, Man., St. John, N. B., and Toronto, Ont.**

Write today for our catalog and see for yourself what a big money saving proposition we will make you. Address,

AMERICAN SEPARATOR CO., BOX 1200 BAINBRIDGE, N. Y.

My barns at Weston, Ontario, and Brandon, Manitoba, are now full of

PERCHERON

Mares and Stallions

Ages from one year old to five years old. Blacks and grays. Weights from 1,600 to 2,100 pounds, of the very best style and quality and breeding France produces. They are of the big thick kind. See them before you buy. I do my own buying in France, ship large numbers, have no partners to divide profits with. Will take small profits so feel sure it will save you money to get prices before you buy. No reasonable offer will be refused. Terms to suit. Many of the mares are safe in foal. For further particulars, write

J. B. HOGATE West Toronto, Ontario

SAVE-THE-HORSE

Registered Trade-Mark. THE TIME IS NOW

All the winter long, the troubled owner of a lame horse reads our advertisements. Then, day after day slips away, while he talks, laments, listens, takes advice and hesitating,—FAILS TO ACT,—till the Springtime is on him and his horse is not yet able to work. Meantime, the thrifty, prosperous, resolute man, reads, considers the evidence carefully — Decides Promptly — and his horse is working in, say, ten days to two weeks. That's exactly what happens every winter.

We Originated the treatment of horses by mail — Under Signed Contract to Return Money if Remedy Fails — and every minute of every day for seventeen years our advice and treatments have been on the way wherever mails go and horses are. Our charges are moderate. Spring work is near; Write at once.

Our Latest Save-The-Horse BOOK is a Mind Settler—Tells How to Test for Spavin—What to Do for a Lame Horse—Covers 58 Forms of Lameness—Illustrated. But write describing your case and we will send our—BOOK—Sample Contract and Advice—ALL FREE to (Horse Owners and Managers—Only).

Address—TROY CHEMICAL CO., 148 Van Horn Street, Toronto, Ont.; also Binghampton, N. Y.

Druggists everywhere sell Save-The-Horse with contract, or sent by us Express Paid.



Mount Victoria Clydes & Hackneys

When in want of a high-class Clydesdale stallion or filly, or something that has won and can win again in Hackney stallions or fillies, visit our barns at Hudson Heights, Que. T. B. MACAULAY, Proprietor. E. WATSON, Manager, Hudson Heights, Que.

Clydesdales and Percherons

Stallions and fillies of either breed. Over forty head to select from. Draft horses in reality as well as in name. Highest types of the breeds. Come and see them. Terms to suit.

T. D. ELLIOTT & SON, BOLTON, ONTARIO.



QUALITY AND SIZE IN CLYDESDALES

For the best the breed produces in the combination of size, character, quality, breeding and action, see my 1912 importation of Clyde Stallions and Fillies. Prices and terms unequalled. **JAMES TORRANCE, MARKHAM, Locust Hill, C. P. R.** P. O. and Sta., G. T. R. L. D. Phone

Plan Your Garden Early

Don't wait till the rush of Spring Work is on—write at once for the new 1913 Catalogue of

EWING'S Reliable Seeds

Then sit down, while you have the leisure to enjoy it, go over this illustrated catalogue carefully, and select the flower and vegetable seeds for a bumper crop next season.

You cannot go wrong with Ewing's Catalogue. The different varieties are so clearly pictured or described that you can be sure of getting just the kinds you like best.

As for quality, ALL Ewing's Seeds are thoroughly reliable—true to name and sure to grow.

If your dealer cannot supply you the Ewing's Seeds you select, order from us direct.

WM. EWING & CO.
SEEDSMEN

McGill St.,
Montreal.



SKIPPED HILLS RAISE NO POTATOES

Every hill you miss in planting means money lost out of your pocket. No machine can plant perfectly unless there is hand correction of misses and double sows. 10 to 50 bushels more to acre, using **IRON AGE** (Improved Robbins) Potato Planter (Now made in Canada). A piece in every space and one only. No pickets used—no injury to seed. Perfect placing of seed and uniform spacing. Can't you see that it must pay for itself? Write for booklet, "100 per cent potato planting." We make full line Potato Machines, Garden Tools, Sprayers, etc. The Bateman-Wilkinson Co., Limited 413 Symington Ave. Toronto Ontario

Aberdeen-Angus Cattle Mature early. Best of beef. Several young bulls for sale. Apply **MANAGER "GRAPE GRANGE" FARM Clarksburg, Ont**

For Sale—Angus Cattle. Some nice yearling bulls and good females, all ages. Use an Angus bull to cross and get the kind the butcher likes. **J. W. BURT & SONS, Hillsburg P.O., R.R. No. 1, Ont.**

Oakland—50 Shorthorns.

Offering for winter and spring trade, is six excellent bulls from ten months to two years old. Out of fine dual purpose dams and sired by our noted Scotch Grey Bull 72692. He is a beautiful roan and all quality, he is also for sale or exchange. **John Elder & Sons, Hensall, Ont. Station and P. O.**

Questions and Answers. Miscellaneous.

CLEANING CATTLE.

What is the best method of cleaning cattle for a sale? What will remove the dirt and stains which stick to them? What is the best material to use on their horns? **J. L. W.**

Ans.—Daily use of the currycomb and brush is required. If the cattle are gaining in flesh, a good deal of the dirt may be removed in this way. Where they are very bad, it may be necessary to soak the dirt off with warm water. This will take some time, as the clods cling tenaciously. For the horns, smooth them up with sandpaper, and rub well with a clean, dry cloth.

LIME FOR LIGHT LOAM.

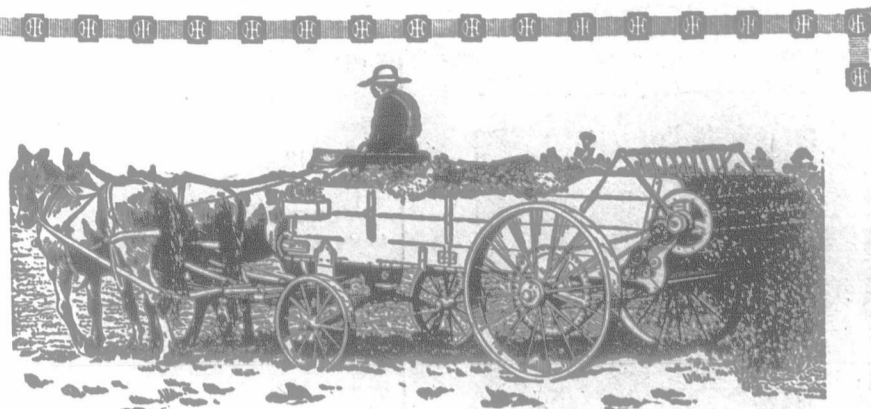
Living close to a lime kiln, where plenty of rough and air-slaked lime can be obtained, in what quantity per acre should it be spread on light-loam land? Do you think it a good fertilizer? Also, in what quantity should ashes from same kiln be used, and how should it be used, plowed down or top-dressed? **R. T. C.**

Ans.—Lime, as a fertilizer, is simply calcium carbonate. It is valuable to apply to soils which contain an undue or injurious percentage of acidity. Being in a very fine state, it effects a beneficial admixture with many soils. Its greatest value is due to chemical action which it performs in the soil, and to the improvement of physical texture on soils destitute of lime, as some clays, sandstones, or moor soils. Lime used to excess diminishes humus, so heavy clays or soils very rich in humus, are those most benefited. Lime renders available plant food already in the soil, so cannot be used with success only at infrequent intervals. Be careful with it on light loam, unless the land has plenty of humus. Some authorities claim that one ton to the acre every three to five years is sufficient. Would suggest that you determine whether or not your land needs it by applying this amount to an acre and ascertaining results before applying it over an extensive area. Lime ashes contain from 20 to 60 per cent. of lime, according to circumstances. This would guide in their application. Top dressing is generally the method of application.

FERTILIZING YOUNG ORCHARD

Young apple trees, planted two years ago, do not seem to be making much growth. Would some nitrate of soda help them? If so, about how much per tree, and when would you apply it? Would barnyard manure be better, or a combination of both? The trees are in sod, but were plowed around last fall, and will be cultivated this year for a strip on each side wide enough to take a disc harrow. **"ASS AM."**

Ans.—Do not apply nitrate of soda alone to your young orchard. It may be used to advantage in a complete fertilizer, comprising also a goodly proportion of potash. A suitable formula would be as follows: Nitrate of soda or sulphate of ammonia, 100 pounds; acid phosphate, 400 pounds; muriate of potash, 200 pounds, per acre. The phosphate and potash should be mixed together and applied first thing in the spring. Broadcast them over the cultivated strip, and work in carefully. If sulphate of ammonia is used, it may be mixed with the other ingredients and applied at the same time. If nitrate is employed, it had better be put on in two dressings, one just as growth is commencing in the spring, or at the same time as applying the potash and phosphate, and one two weeks later. Nitrate of soda is very soluble, and subject to leaching. If you use a ready-mixed fertilizer, get one with a 2:8:12 formula, or something approaching it. Barnyard manure, supplemented by wood ashes, would be excellent for your orchard if you have these to spare. A combination of manure and commercial fertilizer would be excellent. Sow a leguminous cover crop in July.



What Three Bushels More to the Acre Means

EIGHT years ago the farmers in a central state raised average crops that ran three bushels less to the acre than they now get. Suppose each acre of farm land in this country were so tended that it produced an equal increase. How much more money would farmers have, with which to buy the luxuries of life that they earn and deserve? What others have done, you can do. Your share in this prosperity depends entirely upon yourself. The first step for you to take is to fertilize your land properly with manure spread by an

I H C Manure Spreader Corn King or Cloverleaf

Manure cannot be spread as it should be unless a machine is used. An I H C spreader covers the ground with an even coat, light or heavy as may be needed, and pulverized so that the plant food elements in the manure combine with the soil to best advantage.

The spreader that does this work as it should be done must have many excellent mechanical features. The apron should move without jerking; the beater should meet the load at exactly the right point to pulverize the manure without too greatly increasing the draft of the machine; the speed changes of the apron should be positive whether the spreader is going uphill or down, otherwise the spreading will be uneven. All these features are provided for in the construction of I H C spreaders.

The I H C local agent carries in stock the machines best suited to your locality. See him for catalogues and full information, or, write the nearest branch house.

CANADIAN BRANCH HOUSES

International Harvester Company of America

(Incorporated)

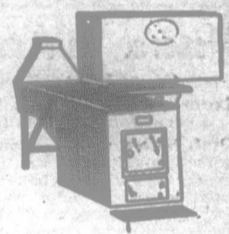
At Brandon, Calgary, Edmonton, Estevan, Hamilton, Lethbridge, London, Montreal, N. Battleford, Ottawa, Quebec, Regina, Saskatoon, St. John, Winnipeg, Yorkton



MAPLE EVAPORATORS

TO the live farmer, our Perfect Maple Evaporator and a sugar bush can be made to produce a revenue when it is most needed.

With our Maple Evaporator sap is easily and economically converted into the finest quality maple syrup. The body of the Perfect Evaporator is made of heavy sheet steel, thoroughly riveted and braced with steel angles and fitted with cast-iron door and frame. The working of the Evaporator is very simple—put the sap in at one end, and it comes out syrup at the other. Send for illustrated catalogue.



STEEL TROUGH & MACHINE CO., Limited, 5 James St. TWEED, Ont.

ANNUAL PROVINCIAL SALE OF PURE-BRED CATTLE

Under the auspices of the **ONTARIO DEPARTMENT OF AGRICULTURE** and management of the **GUELPH FAT STOCK CLUB**, will be held in the **Winter Fair Building, GUELPH, ONT., on**

Wednesday, March 5th, 1913, at 1 o'clock p.m.

The sale will comprise 40 head of Shorthorns, principally bulls, many of them of the very best Scotch families. For catalogues and further information, apply to

A. E. MEYER, Guelph
President

J. M. DUFF, Guelph
Secretary

Orchard Grove Herefords I have lately made a big importation of the leading herds of Illinois. In my herd you now have 25 Bulls to select from; a big range of Heifers and Cows. High-class show and breeding stock a specialty. **L. O. CLIFFORD, Oshawa, Ontario, G. T. R. and C. N. R.**

Springhurst Shorthorns Four of the first-prize Shorthorns at the late Guelph show, including the champion and grand champion fat heifer, were all sired by bulls of my breeding. I have now for sale ten young herd headers of this champion-producing breeding. **HARRY SMITH, HAY P. O., ONT Exeter Station. Long-distance phone.**

SCOTCH SHORTHORNS At prices that defy competition. I am offering a big choice and royally-bred selection of females from calves up. Also a few right good herd headers, including my great stock bull, Lord Lavendar. **A. J. HOWDEN, COLUMBUS P.O., ONT. Brooklyn Sta., G.T.R.; Myrtle Sta., C.P.R.**

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

Calves Without Milk
BLATCHEFORD'S CALF MEAL
 The Complete Milk Substitute
 The result of over 100 years' experience with
 calf-rearers. The only Calf Meal made in an
 exclusive Calf Meal Factory. As rich as new
 milk at less than half the cost. Makes rapid
 growth. Stops scouring. Three calves can be
 raised on it at the cost of one. Get Bulletin,
 "How to Raise Calves
 Cheaply and Success-
 fully Without Milk," by
 sending a post card to
**STEELE, BRIGGS
 SEED COMPANY**
 Toronto,
 Ont.



Messrs. Nickman & Scruby
 Court Lodge, Egerton, Kent, Eng.
 Exporters of Pedigree Live Stock of All De-
 scriptions. Draft Horses a Specialty.
 Draft horses are high, and feed is low; imported
 horses bought well are easily the best value for
 money that can be bought in horse flesh. Write
 us for full particulars. We can give highest refer-
 ences, many being to entire strangers who have
 dealt with us by correspondence only.

"The Manor" Scotch Shorthorns
 Present offering: Three choice yearling
 bulls. Young cows in calf. Yearling
 heifers; Clippers, Minns, Wimples, Julias,
 etc. Inspection solicited. Prices moderate.
 Phone connection.

J.T. GIBSON, DENFIELD, ONTARIO.

Woodholme Shorthorns
 I have for sale a number of choice
 young bulls, from 8 to 14 months old
 (pure Scotch); also a number of heifers,
 1 to 2 years old, of this level type, and
 richest breeding. **G. M. FORSYTH,**
 North Claremont, Ont.

SPRING VALLEY SHORTHORNS
 Herd headed by the two imported bulls, Newton
 Ringleader, -73783-, and Scottish Pride, -36106-
 The females are of the best Scottish families
 Young stock of both sexes for sale at reasonable
 prices. Telephone connection.

KYLE BROS. - - - - - Ayr, Ontario.

1854 Maple Lodge Stock Farm 1913
 Am offering a very fine lot of young Shorthorn
 bulls just now. Excellent breeding and most
 from splendid milking dams. The
 kind that is needed.

House is one mile from Lucan Crossing, G. T. R.
A. W. SMITH, Maple Lodge P.O., Ont.

Shorthorn Bulls and Heifers—I have a
 choice lot of young bulls and
 heifers in calf now to offer. Former sires, Joy of
 Morning (imp.) -32070- and Benachie (imp.)
 -69954-. Present stock bull, Royal Bruce (imp.)
 -55038- (89909) 273853.

GEO. D. FLETCHER, R. R. No. 2, Erin, Ont.
SHORTHORNS and SWINE—Have
 some choice young
 bulls for sale, also cows and heifers of show
 material, some with calves at foot. Also choice
 Yorkshire and Berkshire sows. **ISRAEL GROFF,**
 Elmira, Ontario.

Gossip.

George Gier & Son, breeders of high-
 class Shorthorns, and whose post-office
 address has been changed from Grand
 Valley to Waldemar, Ont., R. R. No. 1,
 write: We are offering at present one
 extra-good young cow, with a calf at
 foot, and some heifers old enough to
 breed, all by Mildred's Royal, and will
 sell these cheap on account of not hav-
 ing a bull to breed them to. They are
 right good ones, with first-class pedi-
 grees. We also have one young bull for
 sale that would make a show bull if
 fitted. He is by Mount Royal (imp.),
 and out of Gem Lady, a Belona, by Mil-
 dred's Royal. The herd of calves that
 we showed in Toronto last fall are all
 heifers, and look fine.

N. E. Mallory, Blenheim, Kent County,
 Ont., advertises in this paper for sale,
 choice seed corn of the most popular
 varieties, both for husking and for silo
 purposes in Ontario and Quebec, at mod-
 erate prices, and on reasonable terms.
 Mr. Mallory writes: This is my third
 year in the seed-corn business. With
 the helpful influence of pleased customers
 of my first year, it was easy to more
 than double my sales last year. For
 this season's trade I have grown, and
 had grown for me by neighbors, about
 three times as much seed corn as I sold
 last season. Mr. Mallory also grows
 and supplies strawberry and black rasp-
 berry plants of the most desirable varie-
 ties. See advertisement, and write for
 catalogue.

Collver V. Robbins, River Bend, Ont.,
 breeder of Holsteins, whose advertise-
 ment appears in this paper, writes: I
 have been breeding pure-bred Holsteins
 for eight years, and have used the best
 bulls obtainable. The last three herd
 bulls have been sons of Johanna Rue
 4th's Lad (2105), Tidy Abbekerk's Mer-
 cena's Posch (4391), Count Hengerveldt
 Payne De Kol (7877). The young stuff
 offering includes some bulls ready for
 service. While this year is the first I
 have done any official testing, we are
 now satisfied that a number of our cows
 are capable of making large records
 under favorable conditions. I have ex-
 hibited very successfully at the leading
 local shows, including the Welland County
 Fair, where we won herd special in
 strong competition. The mature females
 for sale are either fresh, or due before
 April 1st, and two of them test over
 four-per-cent. butter-fat.

BEGINNING IN ANIMAL HUSBANDRY.

Chas. S. Plumb, Professor of Animal
 Husbandry in the College of Agriculture
 of Ohio State University, already well
 known to agricultural students through
 his books, "Types and Breeds of Farm
 Animals," "Little Sketches of Famous
 Beef Cattle," etc., has written another
 valuable work, "Beginning in Animal
 Husbandry." This new book is a credit
 to the author, and to the publishers,
 The Webb Publishing Co., St. Paul,
 Minn., is handsomely bound, is printed
 in bold, clear type, and is most pro-
 fusely illustrated, the illustrations being
 clear and distinct, and setting forth the
 points contained in the printed matter
 vividly. The book is an elementary
 text-book for young people, schoolboys
 and girls, young men thinking of taking
 a short or a longer course at an agri-
 cultural college, or, in fact, for anyone
 interested in animal husbandry. It is
 readable, and easily understood, covers
 in its 23 chapters and 400 pages, all the
 well-known breeds of cattle, horses,
 sheep, swine, and poultry, with their
 characteristics and comparative values,
 together with the best methods of feed-
 ing and caring for the stock. Origin
 of breeds, pedigrees, types, judging, ven-
 tilation and housing, feeds and feeding,
 and all the more important considera-
 tions are dealt with. This book should
 have a place in every farm library. It
 may be had through this office, at \$1.50,
 postpaid.

HIGH-CLASS SHORTHORN SALE

MR. JAMES COWAN, of Seaforth, Ont.,
 having sold his farm, will, on

Thursday, March 6, 1913

At the farm, one mile from the G. T. R. station at Seaforth,
 sell by auction, positively without reserve, his entire herd
 of 33 Scotch Shorthorns, imp. cows of the Lady Ythan,
 Miss Ramsden, Roan Lady and Scotch Beauty
 tribes, their daughters and g. daughters. Also
 the 2,450-lb. stock bull, Royalist, a Marr-
 Clara-bred son of Imp. Blood Royal.
 The big majority are heifers, nearly
 all eligible for the American
 Book. A strictly high-class
 offering in prime condition.

TERMS: 8 months on bankable paper, or 5% per annum off for cash.

CAPT. T. E. ROBSON, Auctioneer.

Catalogues on application to:

JAMES COWAN,

SEAFORTH, ONT.

MOLASSINE MEAL



Figs fetch higher prices and are ready for
 market three weeks earlier when fed on
 MOLASSINE MEAL than when fed on any
 other food. It is the best food known to Sci-
 ence for all Live Stock. It puts the digestive
 organs in perfect condition and enables the
 animals to obtain all the nutriment of their
 entire food. It keeps them free from worms.
 Get the genuine made in England
THE MOLASSINE CO., LTD., LONDON, ENGLAND
 Distributors for Canada, L. C. PRIME CO., LTD.
 St. John, N.B. 402 Board of Trade Building, Montreal. Pacific Building, Toronto.

MALASOFAT A BALANCED FOOD
 Wholesome, nutritious, palatable,
 digestible. Feed your milk cows
 "Malasofat" and increase your
 profits. "Malasofat" produces
 maximum results at a minimum cost.
 Ask your dealer, or send direct for
 information.

DAIRY MEAL

PARK FEED MILLING COMPANY, LIMITED
 17 River Street Toronto, Ontario, Canada

**SCOTCH SHORTHORNS
 FOR SALE**



Two high-class imported yearling bulls.
 Eighteen bull calves, 8 to 14 months old,
 by the imported sires Bandsman and Village
 Duke. Forty heifers and young cows of
 best Scotch families, bred to imported sires.
 Some Toronto and London prizewinners,
 both sexes; also some imp. yearling heifers.

MITCHELL BROS.
 Burlington, Ontario
 Farm 1/2 mile from Burlington Junction Station

15 SHORTHORN BULLS 15

We have been breeding Shorthorns on this farm for over 60 years, and I never saw a better lot of
 young bulls for sale than I have at the present time. Nearly all of the best Scotch breeding
 reds and roans, from 10 to 20 months old. Also a few females and several registered Clyde
 fillies. Prices within the reach of all. Will quote prices, freight paid to your nearest station.

Claremont Sta., C.P.R., 3 miles.
 Pickering Sta., G.T.R., 7 miles.

JOHN MILLER, Brougham, Ont.

Shorthorns—Records show that cattle bought from the
 Salem herd won numerous ribbons the past sea-
 son. We have others. Several young bulls are priced reasonably.
Elora G. T. R. and C. P. R. J. A. WATT, Salem, Ont.

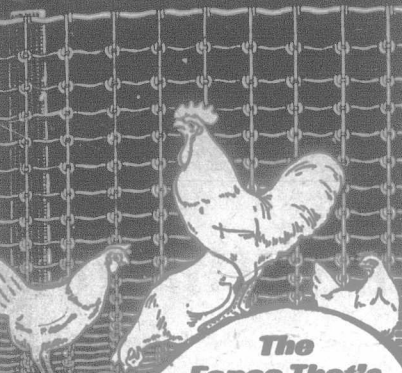
10 SHORTHORN BULLS 10

If in need of a bull those that we are offering should interest you. They range from 8 to 14 months
 old, and are nearly all bred direct from imported stock. We also have females of all ages.
 Bell 'phone. Burlington Junction, G. T. R. **W. G. PETTIT & SONS,**
 Freeman, Ontario.

1861 Irvine-Side Shorthorns 1912

Offering for sale young bulls and heifers that are the result of over 50 years successful breed-
 ing. Pure Scotch, and carrying the best blood of the breed. Few good Oxford Down rams.
John Watt & Son, Salem P. O., Ont. Elora Station, G. T. and C. P. R.

PEERLESS PERFECTION



The Fence That's Locked Together

It's close enough to keep small fowl in and strong enough to keep large animals out. Securely locked together at each intersection of the wires. It's many times heavier and stronger than poultry netting, and being well galvanized, will last many years longer. Top and bottom wires are extra heavy. PEERLESS Poultry Fence is built so strong and heavy, that but half the ordinary number of posts are required. It gives you real fence service.

Here's How Strong It Is

Dear Sirs: I am writing a testimonial as to the strength of PEERLESS Junior Chicken Fencing. Mine is four feet high. It turned two horses each weighing 1400 pounds. They ran full tilt into the fencing about 2 rods from each other at the same time. The result was that they both turned a somersault over the fence, alighting on their heads and necks, scratching them up some, but the fence remained intact. Yours truly,
Surrey Center, B. C. Joe Boothroyd

Think of it—a poultry fence strong enough to withstand the combined weight of two big horses. And that without a top or bottom board either. If you are interested in such fencing, write us. Ask for our literature. We also manufacture farm fence and ornamental gates.

Agents nearly everywhere. Live agents wanted in unassigned territory.
The Banwell-Hoxie Wire Fence Co., Ltd.
Winnipeg, Man. Hamilton, Ont.

CEREMOL

A well-balanced Molasses Feed
FOR DAIRY CATTLE

Made by
The CHISHOLM MILLING CO., Ltd.
Toronto, Ont.
Write for prices and particulars.

GLENGOW Shorthorns and Cotswolds

Our present offering in Shorthorn heifers and young bulls are modern in type and of richest Scotch breeding, and the prices are low; Cotswold Ewe and Ram lambs of high quality.

WM. SMITH & SON - COLUMBUS, ONT.
L. D. Phone

Golfer—You must acknowledge that it requires great skill to drive a ball two hundred yards—

Farmer—Don't require half so much skill as it does to drive a pig 50 feet.

"Why, Billy, how you do grow!"
"Yes, auntie, I think they wet me too much. Why, I'm bathed night and morning."

Chapped Hands
Won't Bother
You

if instead of soap you use SNAP, the original hand cleaner.

SNAP contains no lye or acids, but glycerine and neutral oils which keep the skin smooth and in splendid condition.

Try SNAP for a week and notice the difference. 47

SNAP

Order from your dealer to-day. Save coupons.



Gossip.

H. M. Vanderlip, Cainsville, Ont., breeder of Shorthorns and Berkshires, in renewing his advertisement, writes: In offering for sale the herd bull, Chancellor's Model =58524=; I do so with regret, and only because his daughters are of breeding age. What he has done for this herd he will do for any herd he may be mated with, as he is in splendid breeding condition, and as active as ever. We believe him to be one of the very best breeding bulls in Canada at present. Chas. Yule, for H. L. Emmert, Oak Bluff, Man., has just selected one of the sons of Chancellor's Model. He also selected a grand young brood sow, and a younger one of similar breeding. We have for sale four young bulls of the thick, mellow, low-down sort, characteristic of their sire, at prices in reach of any breeder desiring a good sire. Our Berkshires are pretty well reduced in numbers, owing to unprecedented demands. We have a few left, have already booked a number of orders for spring litters, will be importing as soon as the ports are open, and will fill any orders for imported stock.

R. Honey & Sons, Brickley, Ont., breeders of Holsteins, write: The young bull we advertised last week was sold to W. R. May, Castleton, Ont., and should make good, as he is a fine individual, and has the right kind of breeding. We are now offering another bull, fit for service in spring, is well-built, and is from May Snowflake De Kol, who produced 7,808½ lbs. of milk in one season, under very unfavorable conditions, as a junior two-year-old. She has a four-year-old sister that gave 13,300 lbs. of milk in ten months. Her dam is Snowflake Queen De Kol of Minster, who gave 13,089 lbs. milk and 448 lbs. of fat in R. O. P. in 1908. In 1910, she gave 2,054½ lbs. of milk in thirty days. The sire of this calf is Lakeview Burke Fayne, whose dam and sire's dam averaged 23.14 lbs. butter in seven days. He has six R. O. M. sisters. One gave 8.85 lbs. butter eight months after calving, as a yearling. His sire has ten sisters that gave 30.63 lbs. butter in seven days, and his dam has two sisters that made over 30 lbs. butter in seven days. Look up advertisement, and write for prices and particulars.

THE GRAHAM-RENFREW HORSE SALE.

The dispersion sale of imported Clydesdale and Hackney stallions and fillies held by the Graham-Renfrew Co., at the Repository of Burns & Shepherd, Toronto, on Friday, February 7th, was a pronounced success, drawing together a crowd of several hundred from every Province in the Dominion. The quality of the entire offering was up to a high standard, and brought out in the pink of condition. That there were some big bargains is certain, but the average all around was fairly satisfactory. Five imported Clydesdale stallions, all of them above the average in breed type, breeding, and quality, made an average of \$920, or a total of \$4,600, the highest price being \$1,000, for the four-year-old, Milton's Last, a son of the renowned Baron's Pride. The lowest price was \$800, for the four-year-old, Rose Victor, a grandson of the noted champion sire, Hiawatha. Twenty Clyde fillies sold for a total of \$11,170, an average of \$558.50, the highest price being \$1,025, for the two-year-old, Netta (imp.), by Baron Lionel, and the lowest price \$335, for the six-year-old Canadian-bred mare, Queen of the Park, by Right Forward (imp.). Two Clyde foals sold for an average of \$162.50 each. Possibly the biggest bargains of the sale were found in the two imported Hackney stallions, Terrington Semaphore and Terrington Narcissus, which sold for \$500 each. The highest price for a Hackney mare was \$470, for the seven-year-old, Blanch Sunbeam (imp.).

Livingston's OIL CAKE MEAL

Is the most wholly nutritious stock food you can buy. Made of the purest Linseed—by the celebrated Old Patent Process (which makes it keep three or four years, if necessary) proved by feeding tests, both practical and scientific, to be 95% digestible.

Even if LIVINGSTON'S OIL CAKE MEAL costs twice as much as the other foods which do not keep and cannot be half digested, it would pay every farmer and dairyman to get LIVINGSTON'S OIL CAKE MEAL. The cost is only a trifle higher.

LIVINGSTON'S OIL CAKE MEAL is really cheapest in the end—quickly increasing and improving the milk and healthily FATTENING CATTLE.

Ask your dealer. If he cannot supply you, write us.

THE DOMINION LINSEED OIL CO. LTD.

Manufacturers.

BADEN, ONTARIO.

MONTREAL, QUEBEC.

SHORTHORNS!

Have now a choice lot of young bulls to offer; also with something nice in heifers. Catalogue of herd and list of young animals on application. H. Cargill & Son, Props., John Clancy, Manager. Cargill, Ont., Bruce Co.



I Have SHORTHORN Bulls and Heifers, SHROPSHIRE and COTSWOLD Rams and Ewes, CLYDESDALE Fillies and Colts

that are as good as I have ever had, and that I will sell for prices within the reach of all. We have been in the business 75 years, always in the front rank, and propose to keep that position. You cannot afford to buy without writing us for prices.

ROBERT MILLER, STOUFFVILLE, ONTARIO

SHORTHORNS of breeding and quality: Our present offering: One grand young cow with calf at foot; also heifers, old enough to breed, got by Mildred's Royal. No bull to breed to. Will sell cheap. Also one first-class young bull. GEO. GIER & SON, WALDEMAR P. O., ONTARIO.

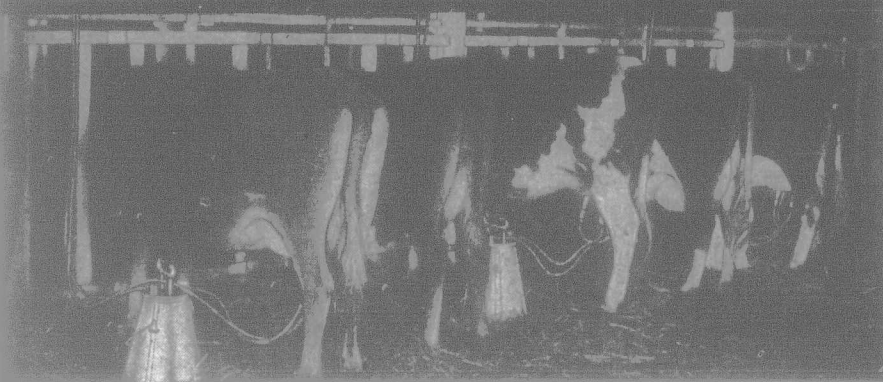
LAKEVIEW HOLSTEINS

We have a few bulls left that are ready for service, and must sell them now, as our barns are full. They are sired by Count Hengerveld Fayne De Kol, or out of his daughters by Dutchland Colantha Sir Mona, and all their dams are in the Record of Merit. For immediate sale the prices will be greatly reduced. A post card will bring extended pedigrees by return of mail.



E. F. OSLER, BRONTE, ONTARIO

The World's Finest Dairy Cows are Milked by the SHARPLES MECHANICAL MILKER



Owners of the highest priced dairy cows in America use the Sharples Mechanical Milker. One of the world's highest priced dairy cows, Imported Billy's Lady Frances Gazelle, owned by Branford Farms, Groton, Conn., is an example. Another, the 76 Dairy Cows on the famous "White Horse Farm" at Paoli, Pa., none of which is valued at less than \$1,000. Read this letter:

After considerable use of your Mechanical Milker, will say it is a decided success. I feel justified in saying I could hardly get along without it, so satisfactory has it proved to be from every point of view. It is merely necessary for the dairyman to become acquainted with the Sharples Milker to insure its perfect service and to convince him that it is for his own best interests. Feb. 19, 1912. W. W. BLAKE ARKOLL, Mgr. White Horse Farm, Paoli, Pa.

When owners of these high-priced animals use and endorse the Sharples Milker, surely you need have no fear of the slightest injury to even the most sensitive animal. Further, it will enable you to add \$300 to \$1,000 extra to your dairy profits each year. It will do away with the most disagreeable job on the farm; enable you to double your dairy capacity with the same help; give you absolute freedom from worry, and independence from shiftless, unreliable workmen.

Send this coupon for free catalog. We will give you ample time for trial. If the Sharples Milker don't make good, if it don't more than satisfy you, there will be no sale. Guaranteed by The Sharples Separator Company, which has been making high-class Dairy Machinery for 31 years. Write today for free catalog M

THE SHARPLES SEPARATOR CO.

WEST CHESTER, PA.
Chicago, Ill.; San Francisco, Cal.; Portland, Ore.;
Dallas, Tex.; Toronto, Can.; Winnipeg, Can.

THE SHARPLES MECHANICAL MILKER

Name _____
P. O. _____
State _____
I am milking _____ cows at _____
The Sharples Separator Co.
of The Sharples Separator Co.
1111 North Dearborn St.,
Chicago, Ill.

GUNNS



FERTILIZER

ALSO
GUNN'S SHUR-GAIN FEEDS
FOR STOCK and POULTRY

GUNNS

40 years' experience behind them. Write for Price List and booklet.

Gunn's Pork and Beef Packers
WEST TORONTO



Lump Rock Salt, \$10.00 for ton lots, f.o.b. Toronto
Toronto Salt Works, 128 Adelaide Street E.
G. J. CLIFF, MANAGER. Toronto Ont.



PURE - BRED REGISTERED
Holstein Cattle

The most profitable dairy breed, greatest in size, milk, butter-fat and in vitality. Send for

FREE illustrated descriptive booklets.
HOLSTEIN - FRIESIAN ASSOCIATION,
F. L. Houghton, Sec., Box 127, Battleboro, Vt.

Special Offering at Maple Grove, Crescent Ridge and Welcome Stock Farms. To make room for the spring calf crop, we offer at bargain prices, considering their quality and breeding, young cows, Record of Merit backing, fresh and shortly to freshen. Also heifers due to freshen, bred to our great bulls; also one of the stock bulls and a young bull fit for service, out of our 21-lb. 3-year-old. Come and see them, or write

H. BOLLERT, Tavistock, Ontario
R. R. No. 1.

Registered Holsteins

Cows in splendid condition, all large, straight animals and due to freshen before 1st April. Also some young stock of excellent breeding, both sexes.

Coliver V. Robbins, Riverbend. Bell Phone.

Hawthorne Glen Holstein Herd

Offers young bulls ready for service, one from Calamity Houwtje, winner of 1st prize in cow class at Guelph, 1912; also a half-brother to Pontiac Jessie, sweepstakes heifer under 36 months; also a few females. Prices reasonable.

Write for particulars, or come and make your choice.
MARTIN McDOWELL
Eastwood Sta., G. T. R. Oxford Centre, Ont.

The Maples' Holsteins

I am now offering for sale 10 young bulls, official record backing on both sire's and dam's side. They are well enough for service, and my prices should soon sell them.

WALBURN RIVERS, Foldens, Ont.
Oxford County.
Phone.

Maple Holstein-Friesians Special offering: Bulls from 1 to 15 months old. The growthy kind that will give good service. One from a son of Evergreen March, and all from Record of Merit dams. Write for particulars. **C. W. CLEMONS, St. George, Ont.** Bell telephone.

Holsteins and Tamworths

I am over-stocked and will sell a lot of young cows and heifers, winners and bred from winners; officially backed and right good ones. Also Tamworths of all ages.

R. O. Morrow & Son, Hilton P.O., Ont.
Brighton Station. Phone.

For Sale Choice Reg. **HOLSTEIN HEIFER** CALVES, sired by Homestead Colantha Sir Abberkerk 2nd, whose dam and sire's dam average 26.81 butter 7 days and from tested dams; and two yearling heifers, sired by Corinne Calamity Ormsby. **W. A. Bryant, Cairngorm, Ont.**

HOLSTEINS and YORKSHIRES Minster Farm offers a grandson of Snowflake. She gave 2,054 1/2 lbs. milk in 30 days, and of Count Hengerveld Fayne De Kol, his dam and sire's dam average 24.075. A sister made 35.55 lbs. butter in 7 days. For extended pedigree and price, write: **R. Honey & Sons, Brickley, Ont.**

Gossip.

J. COWAN'S SHORTHORN SALE.

The females to be sold at the dispersion sale of James Cowan's Shorthorn herd, at Seaforth, Ont., on Thursday, March 6th, offer an opportunity seldom presented to stock up with a foundation of Scotch Shorthorns with breeding and individual merit that will certainly prove a profitable investment for their fortunate purchasers. Lady Jane (imp.), a Campbell Lady-Ythan, and two of her daughters, one by Imp. Nonpareil Archer, the other by the stock bull; Cecilia (imp.), a Miss Ramsden, and several of her daughters and granddaughters, got by such great bulls as Imp. Trumpeter, the London champion, Golden Emir, a son of Imp. Golden Drop Victor, and out of Imp. Emir 35th, and the present stock bull; Roan Lady 40th, sired by the Missie bull, Imp. Merchantman, and four of her daughters, got by Lord Crocus; Golden Emir, and the present stock bull; Scotch Beauty, sired by the Missie bull, Imp. Mistletoe, and out of Imp. Scotch Beauty 2nd, and two of her daughters. The above shows the lines of blood breeding of the entire lot, among which are five two-year-old heifers and nine yearlings, with some heifer calves. The heifers are a particularly choice lot, not a common one among them, and they are all in splendid condition. All the heifers are in the present stock bull. Royalist = 71800 =, by Blood Royal (imp.), bred by Wm. Duthie, of Collynie. In young bulls, there are only two left, one a red, eleven months old, a Marr Roan Lady, the other a white, three months old, a pair of extra good ones. Write Mr. Cowan for catalogue, to Seaforth P. O., Ont.

THE SPAN OF LIFE.

In the Middle Ages, the average span of human life was about thirty years. The average among civilized peoples is now about forty years. The startling prophecy that man would some time only begin to understand life at one hundred years does not seem so unreasonable, perhaps, when we consider the span of life allotted to vegetables and to animals. There exists at the present time in the island of Ceylon, a tree which was planted 288 years before Christ. In the suburbs of Athens, travellers are shown the olive tree of Plato, which is 2,000 years old. The plantain tree of Hippocrates, the father of medicine, is 2,300 years old, while the giant redwood trees of California are estimated to have lived at least twenty centuries. Tourists in Hildesheim, Germany, are never allowed to pass the famous so-called "thousand-year rosebush" in the grounds of the cathedral. The list of legendary trees might be indefinitely extended, and world trees include the chestnuts of Etra, the walnut trees of St. Nicholas in Lorena, the olives of Jerusalem, the yew trees of Yorkshire, England, which are 1,000, 2,000, and 2,500 years old, and the cypresses of Mexico, which are considered the oldest trees in the world.

These figures are taken from the data of Dr. Legrand, a well-known French naturalist. He also points out singular differences in the longevity of animals of varying species. The crocodile and the carp live, he says, 300 years; the elephant and the whale 200; the falcon 150; the parrot and eagle 100; the lion and rhinoceros 60; the goose, common pike, and pelican 50; the hart and vulture 40; the ass, bull, and camel, 30; the horse 25; the peacock from 23 to 25; the pig, bear, cow, pigeon, cat, dog, deer, wolf, and the fresh-water lobster 20 years; the duck, nightingale, lark, fox, and pheasant 15; the canary and the cricket average 10; the rabbit lives 8; the squirrel and hare 7. Insects which undergo metamorphosis live usually from one to two years, and there are flies whose span of life is one day. Nature, it will be seen, shows man no special favor or disfavor among the animals. The great epidemics which have disappeared at the edict of science, together with intelligence in the matter of living, are the chief causes which are favoring, and will in the future favor, man's longevity.—Toronto Saturday Night.

HOLSTEINS
By Auction

Owing to having sold his farm, Mr. A. H. Teeple, of Currie's, Ont., at the big Sale Pavilion, in the City of

WOODSTOCK, ONTARIO

Tuesday, March 11th, 1913

Will sell by Auction, without any reserve, his entire herd of 48 head of richly-bred and producing Holsteins. This is one of the noted herds of Oxford County, the result of many years' breeding, the produce of high, official backing on both sides for generations; including a big number of very choice heifers, and the two grandly-bred stock bulls, King Fayne Segis Clothilde and Prince Abberkerk Mercena. The entire offering is an exceptionally high-class one and in splendid condition.

TERMS: Cash, or 11 months on approved note with 6%.

COL. WELBY ALMAS Brantford }
COL. A. SIPLE, WM. PULLIN, Woodstock } Auctioneers

Catalogues on application to
A. H. TEEPLE - **CURRIE'S, ONTARIO**

BIG DISPERSION SALE OF
Holsteins and Tamworths

Mr. John McKenzie, of

Willowdale, Ontario

6 miles north of C. P. R. Crossing, on Yonge St., having sold his farm, will, on

WEDNESDAY, MARCH 12th, 1913, AT THE FARM

Sell by auction, his entire herd of 40 registered Holstein cattle, and a number of registered Tamworth Swine, Brood Sows, Young-bred Sows, Stock Boars, Etc. There are cows with A.R. records up to 19.14 lbs. Two year-old heifers with A.R. records up to 16.30 lbs., R.O.P. records up to 14,000 lbs.; B.F. tests up to 4.51%. A strictly high-class lot in high-class condition. Nearly all in calf to a son of the great King Segis; and many of the young ones, sons and daughters of the same bull.

Metropolitan Electric Cars pass the farm every hour. STOP 34.
TERMS: Cash, or 8 months with 6%.

JOHN PRENTICE, Toronto, Auctioneer. For catalogues, write.
JOHN MCKENZIE - **WILLOWDALE, ONTARIO**

FAIRVIEW FARM'S HERD OFFERS sons of Pontiac Koradyke 25983, the greatest sire that ever lived, and the only bull that ever sired 12 daughters that have made 7-day records above 30 pounds each. Do you want your next bull to be a brother to such cows as Pontiac Lady Koradyke (38.02), Pontiac Pet (37.67), Pontiac Clothilde De Kol 2nd (37.21), Sadie Vale Koradyke (36.20), and eight others above 30 pounds? If you do, write me for price on a son of Pontiac Koradyke. I also have sons of Rag Apple Koradyke and Sir Johanna Colantha Gladi. **E. H. DOLLAR, HEUVELTON, NEW YORK.** Near Prescott.

AVONDALE STOCK FARM

Herd bulls: Prince Hengerveld Pietje 8230 (50582). Sire, Pietje 22nd Woodcrest Lad, out of Pietje 22nd; 31.00 lbs. butter 7 days; greatest imported cow, and one of the greatest young sires of the herd, having already sired a 35-lb. 4-year-old daughter. Dam, Princess Hengerveld De Kol, 33.62 lbs. butter 7 days, highest record daughter of Hengerveld De Kol, with 116 tested daughters. King Pontiac Artis Canada 10042 (72294). Sire, King of the Pontiacs, greatest living sire of the herd, and sired by the greatest sire of the breed Pontiac Koradyke. Dam, Pontiac Artis, daughter of Hengerveld De Kol. Record, 31.8 lbs. butter 7 days, 128 lbs. 30 days, 1,076 lbs. 365 days. Young bulls from these two great sires for sale, from cow with records up to 29 lbs. Write us, or better come and see them. Visitors always welcome. Address all correspondence to:
A. C. HARDY, Owner. **H. LORNE LOGAN, Mgr., Brockville, Ont.**

King Segis Walker

The highest pedigreed sire in Canada. Average record of dam, grandams, and g. gr. dams: Butter, 28.30 lbs.; milk, 544.42 lbs.; fat, 4.24 lbs. Fee for service, \$25. This sire's get are 80 per cent. females. King Segis and Pontiac Pet, record 37.67 lbs. butter and the world's champion; also a bull calf whose dam is a daughter of Pontiac Koradyke, and just completed a record of 722 lbs. in seven days

A. A. FAREWELL, OSHAWA, ONTARIO

Summer Hill Holsteins

Would you like your next bull to be from the same sire as the heifer that holds the world's record for yearly work, and the same sire as the Champion Cow of Canada in the seven day work, and the same sire as the Champion four-year-old of Canada in the thirty day work? We have bulls of this breeding to offer whose dams have records of over 27 lbs. We have also some extra choice heifers bred to our junior herd bull whose dam has a record of 34.60 lbs. butter in seven days and 111 lbs. milk a day. Yorkshires of all ages. **D. C. FLATT & SON, R. R. No. 2, Hamilton, Ont.**

HOLSTEINS

I can supply a limited number of high-producing and highly-bred females; also young bulls, bred on both sides from high official backing. Let me know your wants.
W. E. THOMPSON, R. R. No. 7, Woodstock, Ont.


Holsteins of Quality

No more bulls at present. Write for catalogue of our sale to be held on the farm
February 25th, 1913.
MONRO & LAWLESS, Elmdale Farms, Thorold, Ontario

Holsteins

\$250 buys two 2-year-old Reg. Holstein heifers, bred to freshen in September. **A. Watson & Sons, R.R. No. 1, St. Thomas, 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 Advice. 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 Street, Toronto, Ont.

NO MORE WET OR COLD FEET!!

With Health Brand Clogs on, the man or woman who works in the wettest, coldest places always has warm, dry and comfortable feet. Try a pair yourself this winter.



Felt-lined CLOGS
(As illustrated)
Fine leather tops, hardwood sole and heel, cosily lined with warm felt. All sizes for men and women, delivered, all charges paid, ONLY **\$1.75**

Higher 3 buckles \$2.25
High-legged Wellingtons \$2.75 and 3.25
Children's lace, 7's to 2's 1.25
Or if you wish to learn more about these wonderful Clogs before ordering, write to us for catalogue booklet, telling how Health Brand Clogs are made, etc., etc. Dealers, write for proposition.

CANADIAN FELT-LINED CLOG CO.,
Dept. 8, 363 Spadina Ave., Toronto, Canada

Cattle and Sheep Labels

A cent spent now may be the means of saving you three calves next fall. Send your name and address for free sample and circular. It is no trouble, and you can judge them for yourself. Write to-day.

F. G. JAMES, Bowmanville, Ont.

Balaphorene Farm Jerseys Present offerings: Choice bull calves from three to sixteen months, at very reasonable prices for quick sale. **JOSEPH SEABROOK, Havelock, Ontario.**

For Sale—Jersey cows and heifers and bulls for exportation. All pedigree and head-book stock. For further particulars apply to **A. T. SPRINGATE, Breeder and Exporter, Gore, Jersey, Europe.**

AYRSHIRES FOR SALE! Seven bulls and a few heifers of different ages, bred by Woodroffe Comrade, whose first heifer in milk gave 11,392 lbs. milk, 480 lbs. butterfat in one year. Prices right. **H. C. HAMIL, BOX GROVE P. O., ONT.** Markham, G. T. R.; Locust Hill, C. P. R. Bell phone connection from Markham.

Farnham Oxfords and Hampshires. The oldest established flock in America. Present offering: a few two-shear and older ewes of both breeds, bred to our imported champion ram. Also a few nice ewe lambs by imported sires. Prices reasonable. **Henry Arkell & Sons, Arkell, Ont.** L.-D. phone in house.

Dorset Ewes

In lamb. Ewe lambs. Chester White Boars about five months old. One Holstein bull 12 months old. All of the choicest breeding, and will be sold at a bargain to make room. **R. H. HARDING, THORNDALE, ONTARIO** Maplevue Farm.

ALLOWAY LODGE STOCK FARM
SOUTH DOWNS
ANGUS
COLLIES

The best in their respective breeds Write for information to: **ROBT. McEWEN, Byron, Ont.** R.R. Stn. and Tel. Office, London.

Notice to Sheepmen: I have a design, patent No. 140,673, issued in Canada and applied for in other countries, for a safety apron, to be used on a buck to prevent breeding at the wrong season. Anyone wishing to use same, drop me a postal, and full instructions will be sent. Pay for same when you are convinced it is effective.

SAMUEL WIEHL, Sisters, Oregon.

Trade Topic.
SOMETHING NEW IN FARM BUILDINGS—A STEEL-TRUSSED FRAME.

Growing scarcity of timber, high cost of labor, heavy losses from electrical storms, and other factors, have made the framers, builders, and building-material manufacturers look around for the means of overcoming some or all the difficulties. The plank-frame helped out considerably in the question of timber and labor, but was still wanting in fire-proof qualities, although, when covered with sheet-metal goods, it makes a barn tolerably safe against fire. Then these same metal goods made the old timber barns somewhat better, but it still required a proper combining of the wood and metal goods, and the introduction of a certain amount of structural steel for the important parts, to provide a strong, fireproof, cheap, farm structure. This has been no easy job to accomplish, and must certainly have taken much study on the part of the inventors before they succeeded in producing the steel-trussed frame, invented, patented, and manufactured by the Metal Shingle & Siding Company, Limited, of Preston, Ont. Anyone caring to see one can do so by going to their plant there and giving the full-size model they have erected, a careful examination. This model is 36 x 60 feet, and 16 feet high to the eave of the roof, and has a gambrel roof in which the lower roof rises 18 inches to every 12 inches of run, and the top one rises 8 inches to every 12 inches of run. The walls are made of small wood strips over the strong frame members, to provide close-nailing points for the corrugated, galvanized sheets, which go out with the barn. The roof being of the same sort of material, has a somewhat similar construction, and together with the tight corners, they send out with each complete barn, makes a thoroughly-tight spark, lightning, wind and rain-proof structure, and protects both frame and contents. Of course, the chief merits of the building lies in the entire inside space from floor to roof, so convenient in storing the contents away, and also in getting fodder out during the winter, besides, the space is for storing contents alone, and not taken up by beams, posts, and braces, as in the ordinary frame. In order that this valuable improvement could be successfully carried out, it required that the principal members of the frame be very strong and rigid, and of course required to be made of steel, of which considerable is used in the frame. Another noticeable thing, is that nearly every part, while supporting some weight, or holding something in place, is also set at an incline to act as a brace in the frame, and so meets two or three requirements, with a consequent saving of material, and it is just such ideas as this that have enabled the firm to sell these frames at a cost so low as to be below that of a timber-frame barn. The using of wood, nailing strips, may seem out of place in a steel frame, but when it is considered that one of these barns might be destroyed by fire getting started in the contents, the wisdom of the procedure becomes apparent. In such an instance, the small strips would soon burn away and let the sheets drop off without much injury to them, and this would admit sufficient air to prevent the structural steel of the frame being heated to such a degree as would cause it to buckle and twist out of shape, and so render it unfit for use again. In place of this, the barn built along the lines as explained above, can be rebuilt for a few hundred dollars of labor, and new wood members, and the same sheets painted and put on the walls and roof again by replacing a small member of the worst bent with new ones, while the structural steel parts of the frame will be as good as new.

A. A. GILMORE.

Silage Would Increase Your Dairy Profits



This winter weather, when dry feeding is reducing your dairy output, don't you often wish that you had erected a silo last summer?

If you had done so you would right now be feeding your cows succulent and milk-producing silage, just as good a milk-producing food as green summer pasturage, and getting a good deal more milk and making more profit out of your dairy.

All successful dairymen now-a-days consider a good silo a very necessary part of their dairy equipment and there is no question but that feeding silage greatly increases the milk flow.

If you haven't a silo perhaps you have made up your mind that this is the last year you are going to get along without one.

If so, don't put off ordering it until late next summer and perhaps find yourself in the same fix next year.

Write to-day for 48 page Ideal Green Feed Silo Book.

This book contains much interesting and valuable information about silos, silage and silage feeding, and even if you are not yet ready to buy, you will find the book interesting and instructive.

More than twice as many Ideal Green Feed Silos were sold last year than in any previous year. If you keep cows you need a Silo. Full specifications are given in the Silo book. Be sure to write for it.

We are exclusive distributors in Canada of the World's Standard De Laval Cream Separators, and also carry a complete line of creamery and dairy machinery and supplies. If interested, write for separate catalogues.

DE LAVAL DAIRY SUPPLY COMPANY, LIMITED
LARGEST MANUFACTURERS OF DAIRY SUPPLIES IN CANADA
173 William Street, MONTREAL 128 James Street, WINNIPEG

Brampton Jerseys

Bulls fit for service are getting scarce. Just a few left. Yearling heifers in calf are in great demand, 6 for sale; 6 now being bred. **Brampton Stockwell** the sire. A few good cows and some calves for sale. Production and quality. **B. H. BULL & SON, Brampton, Ont.**

80 Imported and Canadian-bred Ayrshires

I am now offering by private sale my entire herd of 80 Ayrshires, imported, imp. in dam and Canadian-bred; big producers, show stock, high-class in quality, with best breeding. L.-D. PHONE. **DAVID HUNTER, MAXVILLE, ONTARIO**

Ayrshires and Yorkshires—We now offer at bargain bull calves dropped in July, 1912. All bred from (imp.) sire and from either dams with good records, or their daughters either imported or home-bred. Some choice February **Alex Hume & Co., Menie, Ont.** pigs; also young pigs.

Stonehouse Ayrshires

Of choicest imported stock and with imp. sires and dams. I am offering young cows, 3, 4 and 5 years of age; a grand bunch of imp. yearling heifers, and a particularly good pair of young bulls. L.-D. Phone. **HECTOR GORDON, Howick, Que.**

City View Ayrshires—Three young bulls fit for service; females from 3 months to 9 years; all young stock 3 years and under from R. O. F. ancestors. Always something for sale. Bell phone connections; 1 1/4 miles from 5 railroad stations. **JAMES BEGG & SON, R. R. 1, St. Thomas, Ont.**

GLENHURST AYRSHIRES ESTABLISHED OVER 50 YEARS

AGO, and ever since kept up to a high standard. We can supply females of all ages and young bulls, the result of a lifetime's intelligent breeding; 46 head to select from. Let me know your wants. **JAMES BENNING, WILLIAMSTOWN P. O.** Summerstown Sta., Glengarry

STOCKWOOD AYRSHIRES This herd is now headed by White Hill Free Trader (imp.) No. 33273, championship bull at Sherbrooke; also headed the 1st-prize aged herd. All ages for sale. Satisfaction guaranteed. **D. M. WATT, St. Louis Sta., Que.** Telephone in house.

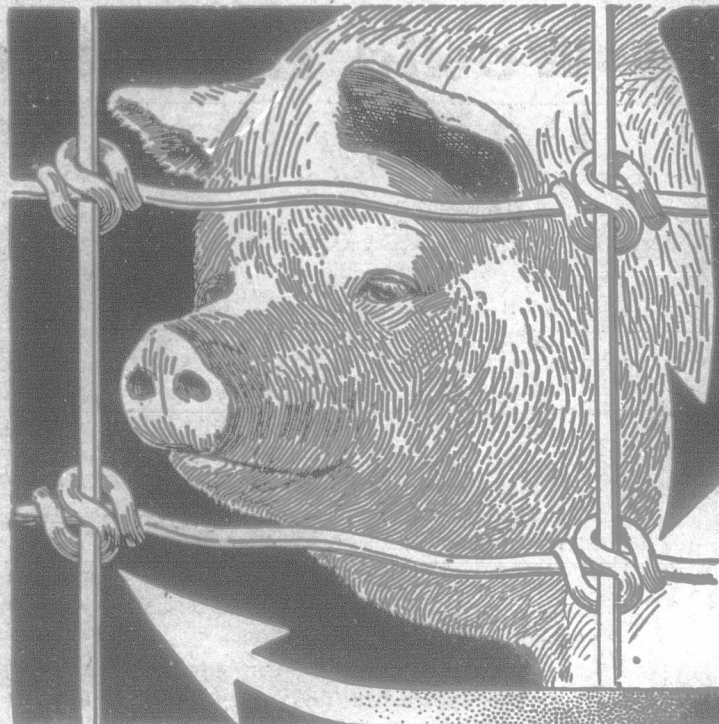
Belmont Shropshires, Southdowns

I have a grand lot of rams and ewes for sale, both breeds. Anyone wanting a good ram, or a few good breeding ewes, should write me at once and get the first choice.

C. Hodgson, Brantford, Ont.

AMERICAN SHROPSHIRE REGISTRY ASSOCIATION
Only Shropshire Association recognized by U. S. Government Largest membership of any live-stock association in the world. Life membership \$5.00. No yearly dues. Write for information. **I. M. WADE, SECRETARY, LAFAYETTE, INDIAN A**

COTSWOLDS AND SHROPSHIRE At Toronto I won 1st on flock, champion on both ram and ewe in Cotswolds. I have for sale a big lot of shearing rams and ewes, ram and ewe lambs of both breeds; strictly high-class. **J. MILLER, JR., "BLAIRGOWRIE FARM," ASHBURN, P. O., ONTARIO**



INVEST IN "IDEAL" FENCE

Money used in the purchase of "Ideal" Fence is not spent—it is invested. When you invest a dollar in "Ideal" Fence you get a dollar's worth. You get full value for your money because "Ideal" Fence is made exactly as represented and described in our catalogue and all our advertisements. When we say "Ideal" Fence is made of No. 9 gauge wire (which is one hundred and forty-four one-thousandths of an inch in diameter), it is full size No. 9; if anything it will average over full size.

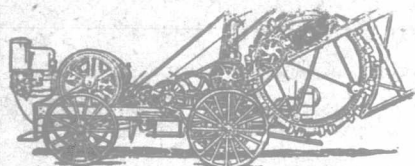
When we say the uprights or stays on "Ideal" Fence are 16½ inches apart, they are 16½ inches, not 18 or 20 inches, and the same with 22 inch spacing.

A fence can be greatly cheapened by using under-gauged wire or having the stays farther apart than advertised. From top to bottom "Ideal" Fence is all the same, made of large gauge, No. 9, evenly galvanized hard steel wire—no small or soft wires—all are full size, true to gauge, tough

and hard. The reason that there are more miles of "Ideal" Fence sold in Canada annually than any other make is not due to salesmanship or advertising, but it is due to the merit of the fence itself, to the quality of material and workmanship that enters into it, to the protection it affords, to the service it renders and to our many satisfied customers all over the Dominion. Do not experiment in buying fence; it will not pay you. If you buy "Ideal" you are absolutely sure of getting a fence exactly as represented. We invite you to compare "Ideal" Fence with any and every other make on the market. Compare the size of wire; compare the weight to the rod of fence; study the quality of workmanship; test it in the severest way you can think of, and you will find "Ideal" to be superior in every way. Do not spend money in buying fence—invest it in "Ideal"

A postal card will bring you the "Ideal" catalog 121 which shows many different styles of fence—a style for every purpose; also our complete line of Field and Stock Gates, Lawn Fence and all fences supplies.

The McGregor Banwell Fence Co., Limited, Walkerville, Ont.



Farmers are Getting Ready for Spring Ditching

THEY'LL soon be letting their contracts for this work, and hundreds of live, alert men are going to cash in heavily, digging the ditches for these farmers.

More men are wanted for the ditching business. Why don't you get into it? Now's the time. Put your order in today for a

BUCKEYE TRACTION DITCHER

It will be delivered to you in time for the spring business, so you can get a flying start. You can make \$15 to \$18 a day, and the farmers in your own neighborhood will keep you busy 9 to 10 months in the year.

The Buckeye will cut 100 to 150 rods a day, depending upon the soil; dig every ditch uniform size and perfect to grade, and at the same time do the work several times faster than hand labor.

That's why farmers want Buckeye made ditches. They know the work will be done right and right on time.

If you really want to make more money, if you want to get into this business that offers you such a splendid return in your investment, write for catalogue T, which tells how.

THE BUCKEYE TRACTION DITCHER CO.
Findlay, Ohio.

Newcastle Tamworths and Shorthorns

Present offering. Seven boars from 6 to 10 months old; boars and sow pigs 6 weeks to 4 months; so was bred and others ready to breed, from such noted stock as Colwill's Choice, Canada's champion boar, 1901, '02 '03 and '05, and Imp. Cholderton Golden Secret. Also a few choice Shorthorn heifers in calf; beef and milk combined. Show stock a specialty. Prices right. L. D. Phone A. A. COLWILL Newcastle, Ontario.

Duroc Jersey Swine AND JERSEY CATTLE.

Grand stock, either sex, constantly for sale. Price reasonable. MAC CAMPBELL & SONS, Northwood, Ontario.

TAMWORTH'S

A few sows bred to farrow in February and March; Also choice pigs from three to five months. Bell phone. HERBERT GERMAN, St. George, Ont.

HAMPSHIRE SWINE

Both sexes and all ages, from imported stock. Prices reasonable. C. A. POWELL, Arva, Ontario Four miles north of London.

MORRISTON TAMWORTH'S AND SHORTHORNS

Bred from the Prize-winning herds of England; have a choice lot of young pigs, both sexes, pairs not akin; and also the dual-purpose Shorthorns. Satisfaction guaranteed. C. Currie, Morriston.

Gossip.

Official Records of 259 Holstein-Friesian Cows were received and accepted for entry in the American Advanced Registry, from Jan. 4th to Jan. 17th, 1913. This herd of 259 animals, of which nearly one-half were heifers with first or second calves, produced in seven consecutive days 105,266.5 lbs. milk, containing 3,750.595 lbs. of butter fat, thus showing an average of 3.56 per cent. fat. The average production for each animal was 406.4 lbs. milk, containing 14.481 lbs. of butter-fat; equivalent to 58.06 lbs. or over 27.64 quarts of milk per day, and nearly 16.9 lbs. of the best commercial butter per week.

D. Hill, Staffa, Ont., in his advertisement, is offering for sale the choice three-year-old Clydesdale stallion, King of Fountain Park [10220], a son of that grand stock horse, King Thomas (imp.) [9254] (12625), dam by Home Secretary (imp.) [2683] (5875), grandam by MacLennan (imp.) [4910] (6048), great-grandam (imp.) by His Royal Highness (2165). His breeding is unexcelled, having four numbered dams. He is described as a horse of good size and draft character, up to a good weight, seventeen hands high, with big depth of rib, and strong flat bone, with beautiful feather. Whoever gets him will get a good horse at a reasonable price. The filly, Merton's Duchess, is full sister to the stallion.

ANOTHER BIG SALE OF HOLSTEINS.

A. H. Teeples, of Curries, Ont., has sold his farm, and on Tuesday, March 11th, 1913, at the big sale pavilion in the city of Woodstock, will, without any reserve, sell at auction the result of many years of successful breeding and culling in his big herd of 48 head of high-class and richly-bred Holstein cattle. This is one of the noted herds of Oxford County, selected and bred for many years from officially-backed sires and dams, and as they will appear on the day of sale, up to a high standard of excellence, type, and merit, and all in the nicest kind of condition. Very many of them are daughters of that noted sire, Sir Bella Abbekerk De Kol, a grandson of the noted cow, Tidy Abbekerk, whose record with that of two of her daughters, make an average of 28.05 lbs. The dam of this bull was Bella De Kol Queen, with a two-year-old record of 13.43 lbs., and an R. O. P. record of 17,000 lbs. as an adult. Practically all the younger ones are daughters of one of the present stock bulls, King Fayne Segis Clothilde, whose seven nearest dams have records that average 27 lbs., and on his sire's side, is a grandson of the world-famed King Segis, with over 100 A. R. O. daughters. This bull will be sold. His daughters will be bred to the successful sire, Prince Abbekerk Mercena, with 11 daughters in the official list. He is a son of Mercena Schuiling, with a record of 22.56 lbs. He, too, will be sold. Write Mr. Teeples to Curries P. O. for catalogue.

Roofing

Free Samples
Free Catalogues
Free Plans

If you are interested, send us a postcard with the word "Roofing" and your name and address -- then we will send you valuable information about your ROOFING NEEDS

The Galt Art Metal Co. Limited
252 Stone Road, Galt, Ontario.

Large White Yorkshires



Have a choice lot of sows in pig. Boars ready for service and young pigs of both sexes supplied not akin at reasonable prices. All breeding stock imported, or from imported stock from the best British herds. Write or call on

H. J. Davis, Woodstock, Ont
C. P. R. and G. T. R. Long-distance phone.

Cloverdale Berkshires—Present offering: Sows bred and others ready to breed; also younger stock of both sexes. Prices reasonable.
C. J. LANG, Hampton, Ont. Durham Co.

Maple Grove Yorkshires & Holsteins



Eight young boars fit for use; good, long, straight, growthy ones, and young pigs of various ages and both sexes, sired by S. H. Jack (28315) (imp.), for three years champion at Toronto. A few beautiful sows, big enough to breed. One two-year-old Holstein bull—a show animal that has few equals—be sold very cheaply; out of a heavy milking dam. One yearling Holstein bull, a good one, sired by Dutchland Olantha Sir Abbekerk, and out of a grand young cow; also a heifer calf, just lately dropped, a beautiful, straight calf, out of the same dam; also grade heifer, calves and yearlings. All will be sold at bargain prices.

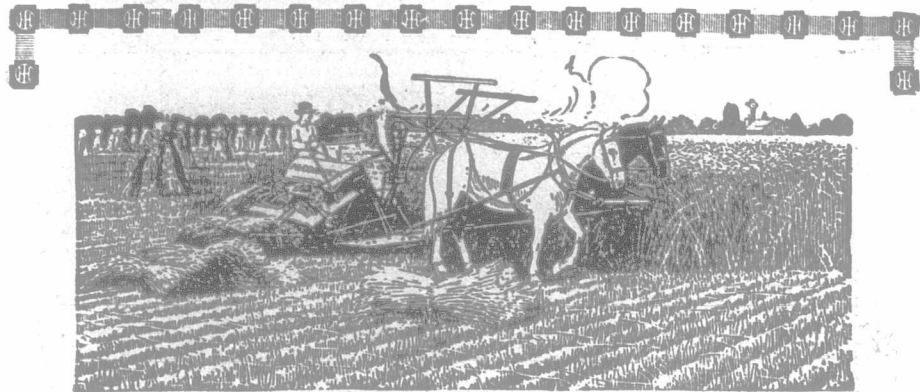
H. S. McDIARMID, Fingal, Ont. Long-distance phone. Shedden Station.



ELMHURST LARGE ENGLISH BERKSHIRES

Present offering: Select sows. Choice boars ready for service; also younger stock, the get of Duke of Somerset, imp., and out of imported dams. Satisfaction and safe delivery guaranteed. H. M. VANDERLIP, Breeder and Importer, CAINSVILLE P.O. Langford station, Brantford and Hamilton Radial.

BEST RESULTS ARE OBTAINED FROM ADS. IN "ADVOCATE."



McCormick—The Binder of Satisfactory Service

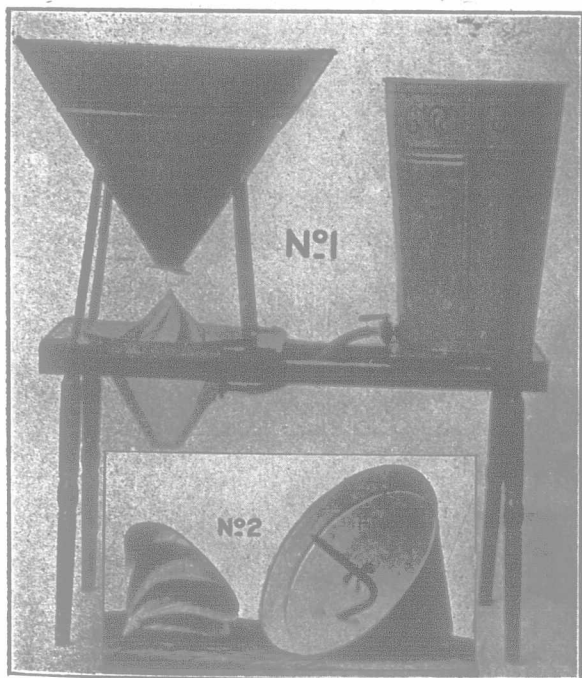
FOR more than seventy years McCormick binders have been giving such satisfactory service that sales have steadily increased in every part of the world. The secret of satisfactory binder service in Eastern Canada lies in the special features with which all McCormick binders sold in the Eastern Provinces are equipped. The McCormick binder is built to last and has every necessary adjustment to keep it working up to full capacity. On a McCormick binder the reel has a wide range of adjustments and handles successfully, tall, short, down or tangled grain. A third packet assists in handling grain that is full of undergrowth or that is very short. The bottoms of the guards are nearly level with the bottom of the platform, allowing the platform to be tilted to cut close to the ground without pushing trash ahead of the knives. The floating elevator handles grain in any quantity and does not clog. The cutter bar is built to use either smooth section or serrated knives. The improved McCormick knoter does good work without the usual close adjustments. The I H C. local agent will explain these and other important features on the McCormick binders which are built especially to meet Eastern Canadian conditions. You can get catalogues from him, or, by writing the nearest branch house.

EASTERN CANADIAN BRANCHES
International Harvester Company of America
 (Incorporated)
 At Hamilton, Ont.; London, Ont.; Montreal, P. Q.;
 Ottawa, Ont.; St. John, N. B.; Quebec, P. Q.
 These machines are built at Hamilton, Ont.



AUTOMATIC SEED GRAIN PICKLER

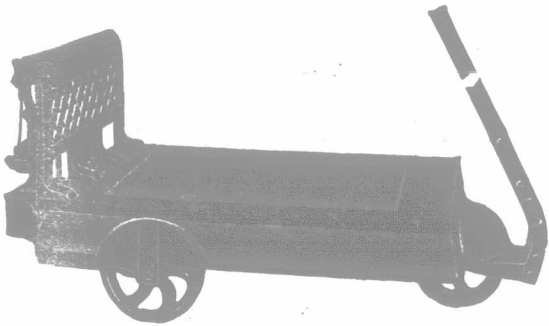
For the Prevention of Smut Germs, etc.



(Patented Jan. 17th, 1911)
 The fastest and most economical Grain Pickler on the market. This Seed Grain Pickler is a self-operating machine, supplying its own power by the force of the grain as it leaves the hopper, falling on the turbine situated in the lower hopper, causing a quick revolution of the turbine.
 Cut No. 1 is the complete machine. Cut No. 2 is the turbine and sprayer and lower hopper. The pipe, which is shown in the center of the hopper in cut No. 2, delivers the liquid to the interior of the turbine, and it is then forced by gravity to pass through openings in the bottom outer edge, spraying the grain.
 Full capacity: Wheat, 135 bushels per hour; peas, 115 bushels per hour; barley, 100 bushels per hour; oats, 90 bushels per hour, and other grain accordingly, but can be regulated to lessen the capacity as required. The machine can also be used for mixing grain.
 We guarantee this machine to give perfect satisfaction or money refunded. Prices on application.
 Directions for using.—Use 16 ozs. of liquid formaldehyde to 36 gals. of water, and thoroughly moisten the grain with the solution. Oats, barley and millet will require more water than wheat or peas. The best method is to apply it at night. Throw the grain in a heap, cover with a blanket, and bag in the morning. This method gives the gas a chance to penetrate the grain. Manufactured by

THE DOMINION SPECIALTY WORKS, STRATFORD, ONTARIO
 D. A. McCLOY, Manager. Residence, 15 Douglas St. Works, 35 Douglas St.

WAGON AND STOCK SCALE, a Money-saver to you, Mr. Farmer



So often you lose money because you are not quite sure of the weight of the article that is changing hands, and by just putting it on the scales your eyes are opened, and you are in a position to judge very accurately as to what this or that particular thing is worth. Write to-day for our illustrated catalogue, telling you about the Three-wheeled Wagon and Stock Scale. Capacity, 2,000 lbs. All material and workmanship first-class and guaranteed. Address:
The Ayler Pump & Scale Co., Limited
 AYLMER, ONTARIO

Reap The Benefits of Available Plant Food



In a favorable season crops will make enormous gains if they are given the available plant food necessary to support them. No soil contains enough available plant food for a bumper crop, or enough to prevent an unprofitable crop in a bad season. A good fertilizer increases the yield and the profit, but the plant food should be in forms available to the growing needs of the crop.

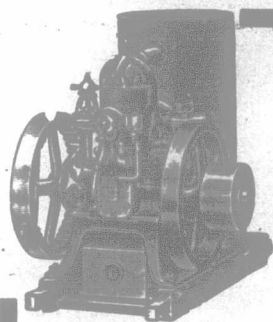
The A. A. C. Co.'s Fertilizers are manufactured from the best materials, and special factory treatment makes them highly available.

Wherever you live, we can reach you with the right fertilizer, the right service and the right price. Write today for a copy of "Plant Food," a practical hand book on fertility. No advertising in it; sent without cost, while this edition lasts.

Agents wanted in unoccupied territory. Liberal terms and goods that sell. It pays to sell our fertilizers as well as use them. Ask for agency proposition.

The American Agricultural Chemical Co.

Makers of brands with fifty years of quality and results behind them.
 P.O. Drawer 814, E. Detroit, Mich.
 71 Lyman Street, Buffalo, N. Y.



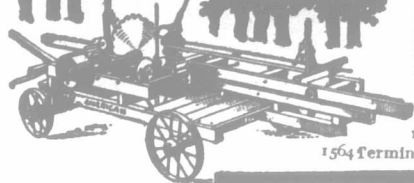
This Engine Runs on Coal Oil

Every farmer can afford an Ellis Coal Oil Engine. They give far more power from coal oil than other engines do from gasoline. They are safe, as well as cheap; no danger of explosion or fire. The strongest and simplest farm engine made; only three moving parts: nothing to get out of repair. Anyone can run it without experience. Thousands of satisfied customers use these engines to grind feed, fill silos, saw wood, pump, thresh, run cream separators, and do dozens of other jobs. Cheaper than horses or hired men. Fill up the tanks and start it running, and no further attention is necessary; it will run till you stop it.

FREE TRIAL FOR 30 DAYS. You don't have to take our word for it. We'll send an engine anywhere in Canada on Thirty Days' Free Trial. We furnish full instructions for testing on your work. If it does not suit you send it back at our expense. We pay freight and duty to get it to you and we'll pay to get it back if you don't want it.
Absolutely guaranteed for 10 years. Write for free catalog and opinions of satisfied users. Special offer in new territory.

3 to 15 horse-power We Pay Duty and Freight **Ellis Engine Co., 94 Mullett Street, DETROIT, MICH.**

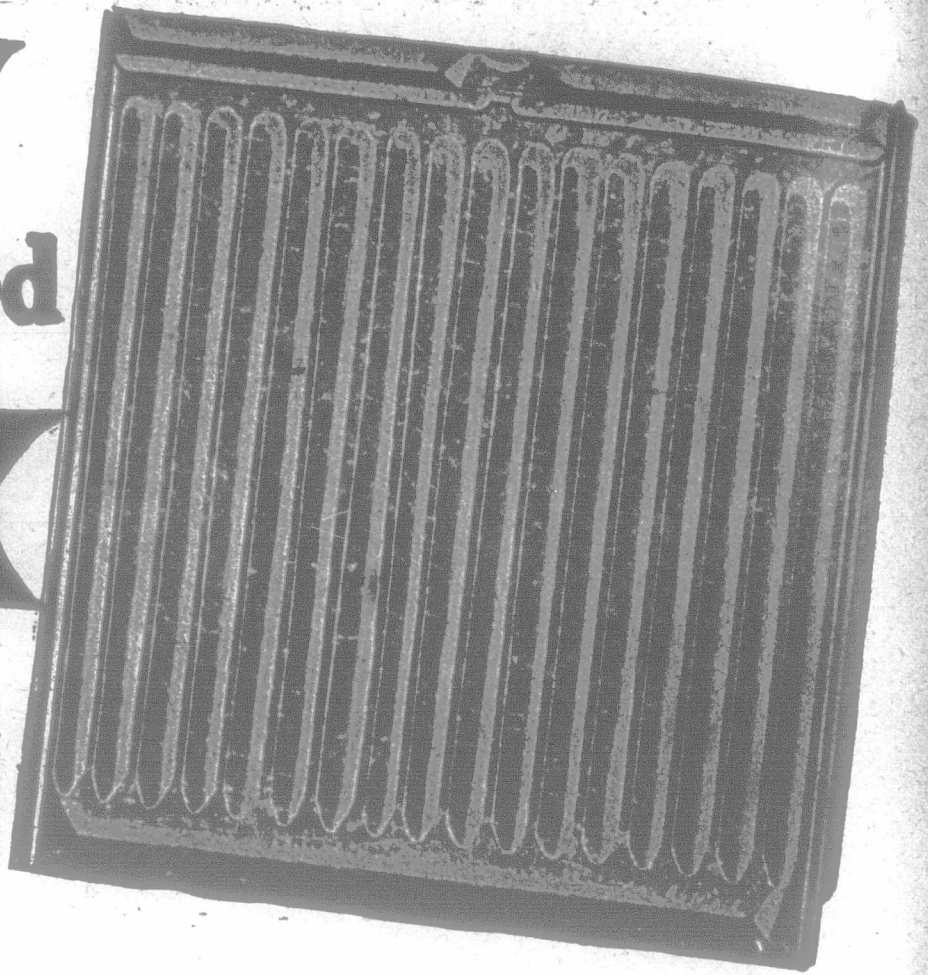
WHY NOT BE A LUMBERMAN TOO?



You can do a good lumbering business in fall and winter when the farm doesn't need you. You have the team, wagon and engine. Just get an "American" Portable Saw Mill and you're ready to saw lumber and make good money. Begin with your own wood lot, if you have one. Then saw your neighbors' lumber for them. With a mounted "American" Mill you'll cover a lot of country each season, putting in fall and winter on a good paying lumbering business. Our new book No. 32 will start you right. Ask for it, addressing nearest office.
AMERICAN SAW MILL MACHINERY CO.
 Makers of standard saw mills of any size or capacity.
 113 Hope St., Hackettstown, N. J. Chicago Savannah - New Orleans
 154 Terminal Building, New York

MENTION THE FARMER'S ADVOCATE WHEN WRITING ADVERTISERS.

"Use My Big, New 'George' Shingle and My Corrugated Iron on the Roof and Walls of your Barn"



"I HAVE just gotten out this new, big shingle for barns in 24 x 24 inch size. My son, the late Geo. H. Pedlar, Jr., invented it. It saves immense labor, and makes a fire-proof, lightning-proof barn roof, at about the cost of cedar shingle. It needs neither paint nor repairs. *G. H. Pedlar*
You can get it from any of my branch offices."



"I HAVE been making metal shingles for two generations to give farmers barn roofs that would not burn or leak. I put improvements into my shingle, year by year. Today my 'Oshawa' 16 x 20 inch shingle is sold all over the world, from Arctics to Tropics. It is made in metal that will last 100 years, and that it took me fifty years to find."

"But now I have a new shingle, 24 x 24 inches in size. I call it the 'George,' after my son."

This shingle is so big that it pays to lay it instead of cedar. Only twenty-five 'George' Shingles equal the roof area covered by 600 cedar shingles. So much high-priced labor and time is saved by my shingle, and good cedar shingles are so dear, that a 'George Shingle' Roof costs you less than a cedar roof."
"I want to save you this money. You not only save money on

your barn roof, but you make your roof fire-proof, perfect, clean and avoid repairs or leakage or paint cost for the future. Get my new big 'George' Shingle."

"I want you to go still further in saving money and getting a better barn. Instead of wood siding, put my 'Perfect Galvanized Corrugated Iron' on your barn walls. Because it is in big sheets, labor time and cost is saved to more than pay the difference between good lumber for siding and my iron, as siding."

"My Corrugated Iron braces your barn framing and strengthens it against sagging and wind pressure. It makes your barn fire-proof and saves insurance. It gives you a warm, dry, clean barn. It needs no paint or repairs, and is a nice gray color."

"Here is my plan again. To better your barn, make roof and walls of metal that will not rust, and that need no repairs or paint. To make this barn actually cost less than wood, get this metal in big enough units to save big labor. This means my 24x24 inch 'George' Metal Shingle, and my Corrugated Iron in 24 square feet sheets. This way pays big money to the man who does it." *G. H. Pedlar*

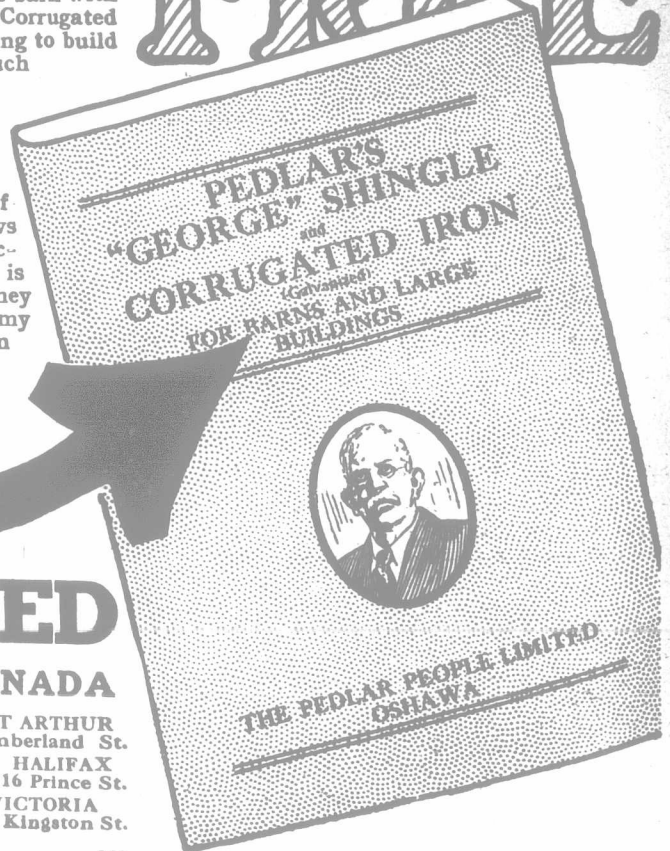
THIS NEW BOOK FREE

"THIS new kind of cost-saving, high-class barn with 'George' Shingle and my Galvanized Corrugated Iron has been built. Farmers are just starting to build them. Lumber and cedar have reached such a high price and labor costs so much to use them, that it pays to get the barn walls and roof in ready-made metal, made by machinery in my factory."

"I have written a book that I want all my friends to read. I have a lot of pictures in it. One set of pictures shows a barn from start to finish. These pictures show how my 'George' Shingle is put up, the scaffolding to use, etc. They also show how the big sheets of my zinc-covered Corrugated Iron go on

the walls. Write for a copy. Make a fire-proof barn at low cost my way, with my products."

G. H. Pedlar



I Make Helps for Your Farm

Write me if you want Metal Troughs and Mangers, Portable Granaries, Metal Tool Sheds or Portable Garages for Automobiles. My Flume and Portable Houses suit farm needs. I also make Metal Tile and Art Sidewalls to line your Kitchen, and Ceilings. I make Culvert in metal for your farm or highway bridges. I make Special Skylights in Metal for Barns.

The PEDLAR PEOPLE LIMITED

Established 1861

OSHAWA, CANADA

TORONTO 113 Bay Street	MONTREAL 321-3 Craig St.	LONDON 59 King Street	OTTAWA 432 Sussex St.	QUEBEC 127 Rue du Pont	CHATHAM 200 King St. W.	PORT ARTHUR 45 Cumberland St.
ST. JOHN, N.B. 42-46 Pr. William St.	MOOSE JAW 202 Fairford St.	WATERLOO 1262 1st Ave. St.	EDMONTON 563 3rd St. W.	WINNIPEG 76 Lombard St.	SASKATOON Box 1645	HALIFAX 16 Prince St.
SYDNEY 194-208 George St.	LETHBRIDGE 1262 1st Ave. St.	EDMONTON 563 3rd St. W.	VANCOUVER 108 Alexander St.			VICTORIA 434 Kingston St.

Address nearest Warehouse for "George Shingle," Book No. 150 329