

PUBLISHED EVERY WEEK. \$1.50 PER YEAR.



Census and Statistics
Dept. of Agriculture
dec 31, 09

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

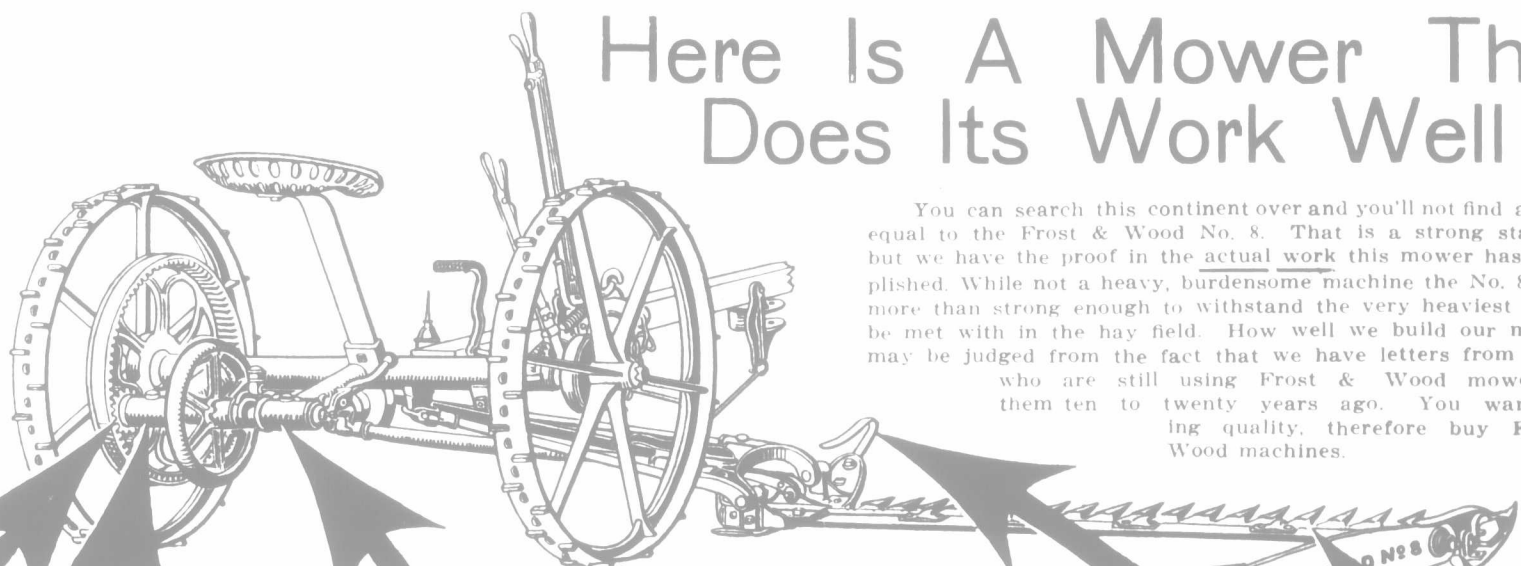
Vol. XLV.

LONDON, ONTARIO, JUNE 2, 1910.

No. 923

Here Is A Mower That Does Its Work Well

You can search this continent over and you'll not find a mower equal to the Frost & Wood No. 8. That is a strong statement, but we have the proof in the actual work this mower has accomplished. While not a heavy, burdensome machine the No. 8 is built more than strong enough to withstand the very heaviest work to be met with in the hay field. How well we build our machines may be judged from the fact that we have letters from farmers who are still using Frost & Wood mowers sold them ten to twenty years ago. You want lasting quality, therefore buy Frost & Wood machines.



No Flying Start Required With No. 8

Thanks to the Internal Gear on Frost & Wood, No. 8 Mower, it's not necessary to back up several feet and get a "flying start" before the knives will cut—as must be done with mowers designed on the External Gear Principle.

Look at illustration A and you'll understand what we mean by the Internal Gear. You see that the small gear wheel is inside the large. When outside it is the external gear.

Notice that two cogs are always in full mesh and at least one other in touch. External gear never has more than one cog in mesh, which leaves so much "slack" to be taken up between the Main Drive Wheels and the Pitman that the horses must travel several feet before the knives can commence cutting. But the Internal Gear, being nearly three times as fully in mesh there is no slack to be taken up. The knives commence cutting directly the horses begin to move. And the Internal Gear cannot slip a cog even at the heaviest part of your hay field.

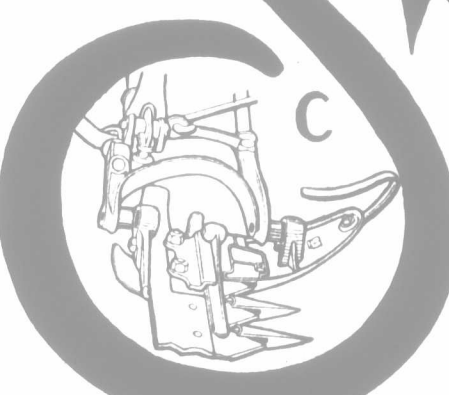
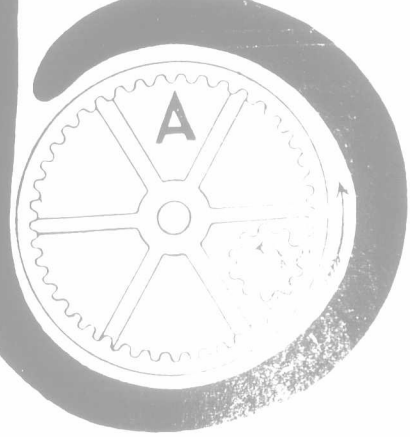


Illustration C shows you the Large Bearings used in our "stay-tight" connection between Cutter Bar and Main Frame of Mower. Unlike Small Pins used on other mowers, they do not wear down hurriedly and permit connection to work loose. Instead, they fit precisely together and have no chance to wear. That's why it is called the "stay-tight" connection. That's why there is no time lost on the field—no blacksmiths' bills to pay.

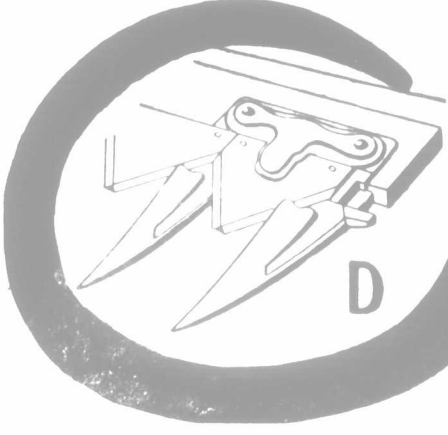
Double Brace and Roller Bearings

On illustration B the arrows point to our Double Brace. We use this Double Brace to fully protect the working parts from the jars and jolts resulting from bumping over rough ground. This is a very important feature, as it prolongs the life of the machine. Yet on other mowers only a single brace is used. Look again at B and see the Large Roller Bearings placed at the points where wear might possibly occur. When we started to build this machine we determined to make it the easiest-running, longest-wearing and we succeeded, as its records with progressive farmers have proven.



Frost & Wood No. 8 Mower

Study illustration D, because we want you to remember that we put on Frost & Wood mowers the clips that hold the knife in place. When the knife is in place, it is fully protected against the wear that would otherwise result from the pressure of the knife against the ground. This is another life-prolonging feature on the Frost & Wood mowers. Last and no less important reason why you should buy a Frost & Wood mower is its quality. In fact, there are no other mowers in the world that compare the No. 8 to fill a book. Ask for the book "The Frost & Wood Mower" 45



FROST & WOOD MOWER CO., LIMITED, SMITH'S FALLS, CANADA

We Are Building

Fine Interior Woodwork

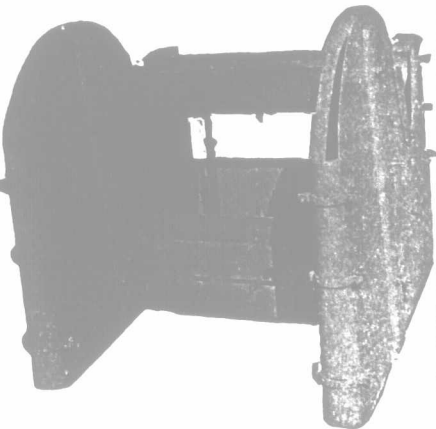
INCLUDING DOORS, ETC., IN

PINE AND HARDWOOD

For many of Toronto's best homes. Write us for prices for anything in woodwork you may require for any class of building.

**JOHN B. SMITH & SON,
LIMITED.**
Toronto.
ESTABLISHED 1851.

STABLE MOULDS



Adjustable mould for forming concrete mangers, stalls and water-troughs for cattle and horses. Pat. Oct. 24, 1909. For pamphlets, instructions to operate, and for prices, apply to

A. D. SCHMIDT,
Elmira Sta. North Woolwich P.O., Ont.

160 Acres

Of Land for the Settlers in Northern Ontario.

Situated south of the G. T. P. Trans-continental Railway, south of Winnipeg, and 800 miles nearer the seaboard. A rich and productive soil, covered with valuable timber, it is rapidly increasing in value. For full information as to terms of sale, home-stead regulations, and for special colonization rates to settlers, write to:

DONALD SUTHERLAND,
Director of Colonization
Parliament Buildings, Toronto, Ont.
or to THE HON. MR. DUFF,
Minister of Agriculture

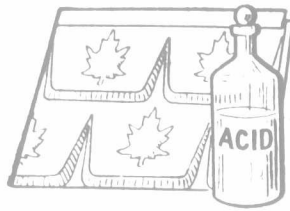
60,000 Acres

OF CHOICE FARM LAND
WESTERN CANADA.

Excellent selections within a few miles of main line of railway. Prices and terms very reasonable. Call and see us, or write for literature.

The Union Trust Co., Ltd.,
Real-estate Dept.
174-176 Bay St. Toronto, Ont.

When Writing Mention The Advocate



They Pass The Acid Test Easily

The sheet metal British Government buys for public works must be able to pass an Acid Test more severe than twenty years of Canadian weather.

PRESTON Safe-Lock Shingles are the only shingles made and galvanized according to British Government Specifications. They easily pass this Acid Test. They are practically everlasting—the most durable roofing in the world.

PRESTON Shingles are the only shingles SAFE-LOCKED on all FOUR sides. They are proof against rain, snow, fire, lightning, and wind. Canada has not yet been visited with a gale strong enough to unroof a single building covered with PRESTON Safe-Lock Shingles.

So positive are we that PRESTON Shingles are lightning proof that we

Queen Street Factory. Please send your booklet, "Truth About Roofing." I am interested in roofing and would like complete information about PRESTON Shingles.

Name _____
P.O. Address _____
County _____ Prov. _____

will give you a Lightning Guarantee Free of charge. And with PRESTON Shingles you can reduce your fire insurance rate by about one-half.

While the first cost is about \$1.00 more per 100 square feet, PRESTON Shingles are five times as durable as prepared roofing or wooden shingles. The cost per year of service of PRESTON Shingles is only one-fourth to one-third as much. PRESTON Shingles are the only roofing material good enough for that new barn of yours.

PRESTON SAFE-LOCK SHINGLES

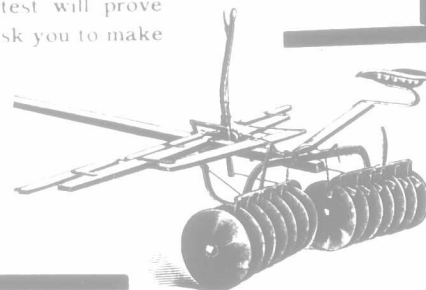
Our new and improved edition of "Truth About Roofing" contains important facts about different kinds of roofing materials. You would be willing to pay for this information if you had an idea how valuable it is. However, we will send you a copy free, provided you fill in and send the coupon to us by return mail.

**METAL SHINGLE & SIDING CO.
LIMITED**
PRESTON, CANADA.
BRANCH OFFICE AND FACTORY:
MONTREAL, QUE.

HITCH YOUR HORSES TO The "Bissell"

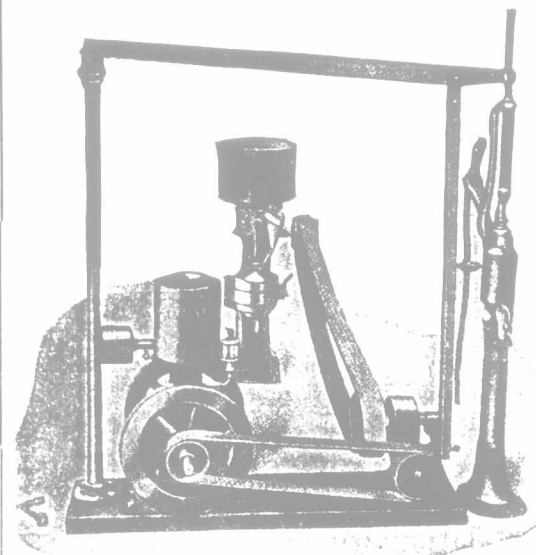
The horses hitch close to the work, giving the "Bissell" light draft. You sit well back, the seat being balanced so that it removes all neck weight. The dust-proof ball bearings still further decrease the draft. The "Bissell" is by far the easiest on the horses. It pulverizes the soil the best, too. The shape of the plates enables them to easily enter the toughest soil. They turn clean furrows. The cleaners draw to the plates and meet them chisel fashion. They cannot be forced away from the plates, but cut right through the dirt, fiber and grass, and keep the plates free. The "Bissell" is solidly braced, and cannot be beaten for rigidity and strength. It takes skill and experience to build a harrow like the "Bissell." It has taken us about a score of years to bring it to its present perfection. Other harrows may look like the "Bissell," but a field test will prove it twice as good an investment. We ask you to make the test. Ask your local dealer to show you the "Bissell," or write Dept. W. for catalogue.

**T. E. Bissell Company,
Limited.**
Elora, Ontario.



IDEAL GASOLINE ENGINES

1½ TO 40 HORSE-POWER.



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

Send for Catalogue.

**GOOLD, SHAPLEY &
MUIR CO.,
LIMITED,**
Brantford, Canada.

STOCK MEN



Advertise your fancy stock by means of first-class

DRAWINGS

AND

ENGRAVINGS

Send us your photos, and our stock artist will bring out the points.

THE
**TORONTO ENGRAVING
COMPANY LIMITED.**
TORONTO - CANADA.
DESIGNERS, ILLUSTRATORS, ENGRAVERS

For Spraying

Fruit Trees, Shrubs,
Bushes and Plants, there's
nothing to equal



**EUREKA
COMPRESSED AIR, FOUNTAIN
SPRAYER**

Requires but one pumping to empty entire contents of tank. Automatic lever valve stops flow of liquid while going from one plant to another. Easy, light, compact; tested to stand 5 times the pressure required to expel liquid. Two nozzles, with hose attachment for spraying small trees. Write for catalogue. THE EUREKA PLANTER CO. Limited, Woodstock, Ont.

BANK SHARES

BOUGHT AND SOLD.

American Securities Co.,
627 Confederation Life Bldg., Toronto

School of Mining

COLLEGE OF APPLIED SCIENCE,
Affiliated to Queen's University,
KINGSTON, ONT.

For Catalogue of Courses and other information apply to the Registrar, Kingston, Ont.

Mining and Metallurgy.
Chemistry and Mineralogy.
Mineralogy and Geology.
Chemical Engineering.
Civil Engineering.
Mechanical Engineering.
Electrical Engineering.
Biology and Public Health.
Power Development.

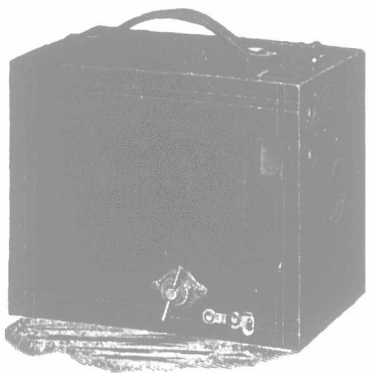


GOES LIKE SIXTY
SELLS LIKE SIXTY
SELLS FOR

**\$65
GILSON
GASOLINE
ENGINE**

For Pumping, Cream Separators, Churns, Wash Machines, etc. - Free Trial. Ask for catalog - all sizes.

GILSON MFG. CO., 150 York St., GUELPH, ONT.



Large Pictures Small Cost

In this serviceable little Camera we have simplified picture-taking to the last degree. It loads in daylight with Kodak Non-Curling Film Cartridges for four, six or twelve exposures, has a fine meniscus achromatic lens, automatic shutter for snapshots or time exposures with set of three stops, has two finders and two tripod sockets. Takes pictures $3\frac{1}{2} \times 4\frac{1}{4}$ inches, and is well made and finished in every detail. Anybody can take good pictures with this camera without previous experience. The price is \$4.00. Ask the dealer to show you the

NO. 3 BROWNIE

"The Book of the Brownies" free at the dealers, or by mail.

CANADIAN KODAK CO.,
LIMITED,
TORONTO, CANADA.

STOCK MEN

When you are wanting any cuts of Poultry, Live Stock, or for Advertising, try our specially deep-etched plates.

PRINT CLEAN
WEAR LONGER
PRICE REASONABLE

Write us your wants.

**ROBERTS
ENGRAVING
COMPANY**

LONDON-CANADA

INVENTIONS Thoroughly protected in all countries. EGERTON R. CASE, Registered U. S. Patent Attorney, TEMPLE BUILDING, TORONTO. Booklet on Patents and Drawing Sheet on request.

Amatite ROOFING

A Frank Statement

HOW many manufacturers of ready roofing will tell you frankly how their goods are made?

Mighty few.

They will talk about "secret formulas," "special waterproofing compounds," etc.—all nonsense.

They don't tell you what the goods are made of because they don't dare.

From the start we have never hesitated to tell the buying public just what Amatite is made of and just what it will do.

How Amatite is Made

Amatite is made of two layers of *Coal Tar Pitch—the greatest waterproofing material known.*

Alternating with these two layers of pitch are two layers of coal-tar-saturated felt to give it tensile strength.

On top of these four layers is a *real mineral surface—five layers of protection.*

The mineral surface is permanent, fireproof, and *absolutely requires no painting.*

It Needs No Painting

Roofings that require painting are a worry and an expense. Every year or two you have to climb up and give them a coating with some special compound sold by the manufacturers, or you are pretty sure to have a leaky roof.

Amatite is Making Good

We are constantly receiving letters from customers telling us how satisfied they are with Amatite—how much better it is than the old-fashioned roofing.

Year after year, in all weather, Amatite will give perfect service without any painting or attention of any kind.

Surely this is the kind of service that wins and keeps customers.

Free Sample

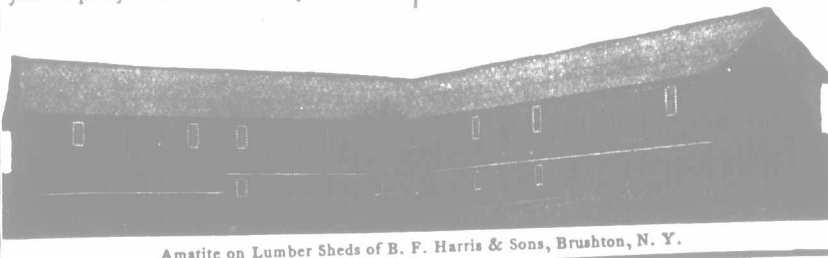
Before you go to your dealer and buy a roofing, we should be very glad to send you a sample, so that you can see for yourself just what we are talking about—what a solid, substantial, reliable roofing we are offering to the public.

Something Back of It

Remember, in this connection, that Amatite is made by the *largest manufacturers of roofing materials* in the world, and that when you buy this roofing there is something behind it. We stand back of every roll. We know we are offering the best and the most economical ready roofing on the market.

For the sample and booklet address our nearest office.

The PATERSON MFG. CO., Ltd.
Toronto. Montreal. Winnipeg.
Vancouver. St. John, N.B. Halifax, N.S.



Amatite on Lumber Sheds of B. F. Harris & Sons, Brushton, N. Y.

Eddy's "Silent" Matches

SATISFY THE MOST PARTICULAR PEOPLE

They are the most perfect made. Noiseless, as their name implies. No sputter. No smell of sulphur. Are quick and safe.

ALL FIRST-CLASS DEALERS KEEP THEM.

THE E. B. EDDY COMPANY, HULL, CANADA.

HERE SINCE 1851.

DONALD McLEAN, Agent, London, Canada.

Bell PIPE TONE Organs

THE MOST SATISFACTORY

ORGANS

FOR HOME USE

IN BUYING A

Bell Organ

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

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

Largest makers of Pianos, Organs and 2 Player-pianos in Canada.

Buchanan's Self- Compressing Long Sling



—the result of 33 years experience in making Pitching Machines. Consists of three slings and sectional pulley for drawing ends together. Easy to operate, quick to work, and exceptionally strong. We make all kinds of Pitching Machines—Swivel Carriers and Tracks, Slings, Harpoon Forks, etc. Write for catalogue. B. T. BUCHANAN & CO., INGERBOLL, Ont. 2

BINDER TWINE!

Central Prison Binder Twine will be supplied to farmers as follows:

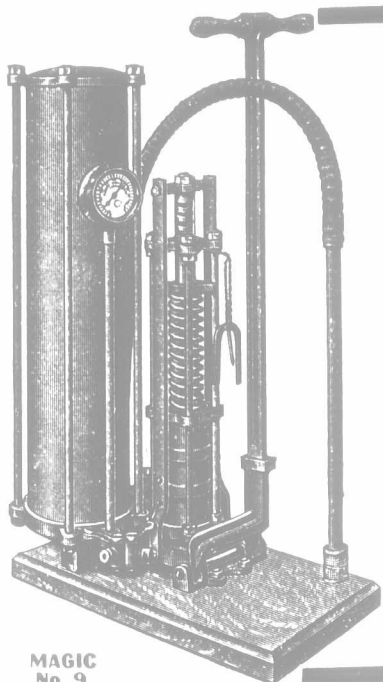
600 ft. per lb. 8c. per lb.
550 ft. per lb. 7 3/4c. per lb.
500 ft. per lb. 7 1/2c. per lb.

These prices are net cash. The twine is put up in fifty-pound jute sacks, and is manufactured from SELECT FIBER. Quality and length guaranteed.

Please specify at once what quality and quantity is required. Purchaser pays freight, and cash must accompany shipping instructions.

Apply: J. T. GILMOUR, Warden, Central Prison, Toronto, Ont.

When Writing Mention The Advocate



MAGIC No. 9

MAGIC PUMP NO. 9.

Easiest-running hand pump ever made. Largest capacity. Highest pressure.

Challenge Power Sprayer.

Will spray 400 gallons an hour at a pressure of 200 pounds.

LITTLE GIANT NO. 70.

High-powered barrel pump.

These pumps are made for DURABILITY, EFFICIENCY and POWER.

WRITE FOR CATALOGUES.

Summer Spray

NIAGARA BRAND LIME-SULPHUR ARSENATE OF LEAD.

NIAGARA is the only absolutely reliable Lime-Sulphur Spray, because it is made right. It is a permanent solution of highest insecticidal and fungicidal power. Analysis is stamped on every package, and it is guaranteed by a strong CANADIAN COMPANY.

ARSENATE OF LEAD is the one poison that kills all kinds of chewing insects. It is endorsed by all leading Entomologists and Horticulturists. It will not burn fruit or foliage. It sticks to the leaves. It mixes easily and stays mixed.

FARMERS AND FRUIT-GROWERS, with these sprays you can grow Apples and Pears free of scab and worm; Potatoes free of blight and bugs; Cherries and Plums free of rot and curculio.

COMBINE these TWO SPRAYS in ONE. This saves time and money. SPRAYING is investment, not expense.

Order now. Be ready when blossoms fall.

Write for our Book: "SPRAYS AND HOW TO USE THEM."

NIAGARA BRAND SPRAY COMPANY, Limited, Burlington, Ont.

NIAGARA SPRAYS ARE ALSO MADE BY:
Niagara Sprayer Co., Middleport, N. Y.
Oregon Spray Co., Portland, Oregon.
Bean Spray Pump Co., Cleveland, Ohio.
Medford Spray Co., Medford, Oregon.
Hood River Spray Mfg. Co., Hood River, Oregon.

The Farmer's Advocate

"Persevere and Succeed." and Home Magazine

Established
1866.

Vol. XLV.

LONDON, ONTARIO, JUNE 2, 1910

No. 923

EDITORIAL.

Lo, the poor orchard! Still in sod, still unsprayed, still unpruned or outrageously mispruned, still insufficiently fertilized—what chance does it get? Even so, it is often more profitable than its owner thinks, but with proper care it would yield astonishing returns.

An apparently successful experiment in recruiting slum-boys for a State farm, and regenerating them by judicious handling, has been carried out by Victoria, according to our Australian correspondent, who states a few very interesting particulars in his regular letter. Any success in this direction is very encouraging.

Vexed with the competition of farm products from abroad, and handicapped for want of plenty of efficient help, the English farmer strenuously complains that Canada will be satisfied with no immigrants but the very ones he wants to keep. To be eligible for an agricultural welcome in Canada, the Old Countryman should be a healthy graduate of the farm. Wanted neither at home nor abroad, it would seem that the "great unfit" of the towns will ultimately be driven to take a training course on the soil.

The gospel of forestry needs preaching now in the wooded country of the Northland. Not only are many rocky, worthless areas stripped of timber that should be left under woods, but almost every town in New Ontario is as innocent of trees as though it were a brand-new town in the midst of a prairie. Indeed, the prairie towns are often located along tree-lined streams, and are, therefore, to some extent embowered, while the Northland towns are generally bald, bare and ugly in their nakedness. A city without trees is a city of shops and residences, but not of homes in the best sense. Perhaps the trees left from the forest would not survive exposure, but if so, some park-like areas should be left intact, and hardy trees and shrubs should be planted. The new town of Cochrane, at the junction of the T. & N. O. R. with the National Transcontinental, has done this, and posterity will thank a prudent group of pioneers for a beautiful environment.

The new Conservation Commission of Canada has started out well, in one particular, at least. From Secretary James White, of Ottawa, we have already a bound copy covering in complete form the proceedings of the first annual meeting, held in January of this year. Anyone interested in the preservation and rational development of the natural resources of the country will prize having in his possession copies of the addresses of Dr. B. E. Fernow, Dr. James W. Robertson, Dr. Eugene Haanel, Hon. Frank Cochrane, P. H. Bryce, M.D., Kelly Evans, F. T. Congdon, M. P.; H. T. Gussow; Hon. Adam Beck; Dr. C. G. Hewitt, the new Dominion Entomologist, and Chas. R. Cutler, C. E. Dr. Hewitt's address on insects destructive to Canadian forests is admirable, and a more cogent and effective statement of the electric-power question than that made by Hon. Adam Beck, we have yet to read. Ten thousand copies of the report in English, and 2,500 in French, were ordered to be printed, and, we presume, are obtainable by application to the secretary, Mr. White.

The Place of Commercial Fertilizers.

The advisability of using commercial fertilizers is one of the questions that excites interest at the present time, in all gatherings of farmers. Some would have us believe that even where a large stock is kept, and nothing is sold except animals or their products, the farms must be getting poorer. Impoverishment, say they, may be slower than when grain or other natural products of the farm are marketed, but it is going on, nevertheless. In practice it does not work out thus. Where a full stock of animals is kept, and a good rotation practiced, in which clover has a place, and in which the land is in sod about half the time, the soil actually increases in productiveness. The supply of available fertility increases. Those who farm after that fashion have no serious need for special fertilizers, although it is quite possible that a supply of phosphates and potash might be advantageous in some cases, and under extraordinary conditions, where excessive precipitation washes the nitrates out of the soil in winter, light applications of complete fertilizers are sometimes resorted to to forward early spring growth. These conditions do not obtain, however, in most parts of Old Ontario or Quebec.

Conditions are different, however, where fruit farming is engaged in, or where crops for the canneries are grown, or, as in the Northwest, where almost the total crop of grain is sold year after year. In all such cases there is a serious removal of the elements of which plants are composed, which, if not replaced to some extent, must result, and does result, in decreased fertility. The bean-growers of Kent Co., Ont., are feeling this. Beans have been grown in that district for thirty years, and profitable crops are still produced, though no artificial manures have ever been used. But the average yield is becoming less, and farmers are somewhat anxiously inquiring about the worth of special fertilizers. Their rotation is simple and admirable—beans, fall wheat, and clover—but the amount of grain sold off the farms yearly in the shape of beans, and wheat, makes it a matter of wonder that soil exhaustion has not been much more serious. The fact that beans are a leguminous crop, taking nitrogen from the atmosphere, must be the chief explanation. At the bean-experiment station which has been established, these experiments with fertilizers are to be a prominent feature.

It is to the credit of Canadian farms and farming that the output of produce has been increasing, while barnyard manure has been the sole source of fertilizer supply, but with the development of special lines of crop production, such as have been mentioned, a greatly increased use of commercial fertilizers may be expected. These, while much inferior to barnyard manure, in that they supply no humus, are not merely stimulants, but contain the elements of plant nutrition, are actually foods for plants.

The experience of Japan, where land is limited, and population dense, shows the tendency of the age. In the last 30 years, according to a late Trade and Commerce report, the rice crop of Japan has increased by over 100 per cent., while the land under cultivation for rice has only increased 16 per cent. The barley crop has increased over 100 per cent., while the land under cultivation for barley only 30 per cent. These increases can only be accounted for, says Trade Commissioner G. A. Harris, Yokohama, by the use of fertilizers employed, and the more modern methods of farming. The value of fertilizers used in Japan increased from \$12,400,000, in 1902, to over \$29,000,000 in 1908.

Experience vs. "Book-farming."

A milkman walked into our office the other day, and in twenty minutes delivered himself of more nonsense about dairying and cow-keeping than we ever heard from any man before in a year's acquaintance. He began by stating that milk from his old natural pasture was worth 20 per cent. more than milk made by cows grazing on the best clover and timothy. Silage nor mangels should be fed to dairy cows, but turnips were just the thing; they gave the milk flavor and "body." Silage was blamed for unthriftiness, indigestion, tuberculosis and contagious abortion. Our friend had used a silo, but discarded it. On inquiry, it developed that his method of making silage was to cut and shock the corn, then, in a month's time, put it into the silo. The idea was to reduce the percentage of acid, which he probably accomplished all right enough, but at the expense of other changes more serious. Corn meal was the ideal grain for milk production, but, he asserted, no cow should be given over a quart a day. Alfalfa, he admitted, was a good thing, if one could get the cows to eat it, but his wouldn't. It turned out that he let the stuff go till in full bloom, at which stage, of course, it makes rather woody and not very palatable hay. In the breeding of cows, his idea was to cross his Jersey grades with Ayrshires, then their progeny with Holsteins, and possibly Shorthorn on top of that—an ideal way to breed "thoroughbred mongrels." This, and a great deal more heresy, he unloaded, with the assurance of one who had, as he said, "learned it all by practical experience," while the members of our staff who chanced to be present, listened with amusement. Presently we ventured to inform him that we had all fed silage, and our experience, as well as our methods, had been different from his. We filled the silo within reasonable time after cutting the corn. Likewise with alfalfa, which, if cut when a tenth in bloom, makes the richest and most palatable hay we have. As for affecting the richness of milk by feed, exhaustive experiments had proved that it could not be done permanently, except to a very slight extent. The feed will affect the color, though, and that is what he judged richness by. He had never tested a bottle. Of course, silage has nothing to do with causing either tuberculosis or contagious abortion, which are germ diseases. To our great surprise, he began to give in, apparently convinced that we must have known what we were talking about, and that his own imperfectly-interpreted experience was not, after all, the arbiter of truth and dairy knowledge.

It was a splendid example of how misleading a limited personal experience may be. One can go out into the country and prove (?) almost any absurd nonsense with the APPARENT results of somebody's experience. The fact is, very few people are qualified to draw general conclusions from experience, especially from a limited experience. Unseen factors bias results, and make them seem to indicate what they really do not indicate at all. It is the careful, systematic and scientific deduction by a trained mind working on a large accumulation of representative experience, that we should seek to acquaint ourselves with. That is the kind of broad, thorough knowledge we get in good books, bulletins and the agricultural press. To be sure, there are poor books, superficial bulletins, and untrustworthy papers. We should select our reading, choosing only the best. But the right kind of reading will broaden our outlook, deepen and strengthen our understanding, stimulate our minds, and quicken our wills to action. Of that kind of "book-farming" we need a great deal more.

THE FARMER'S ADVOCATE AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE
DOMINION.

PUBLISHED WEEKLY BY
THE WILLIAM WELD COMPANY (LIMITED)

JOHN WELD, MANAGER

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

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

It is impartial and independent of all cliques or parties, handsomely illustrated with original engravings, and furnishes the most practical, reliable and profitable information for farmers, 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, agate. 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 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.

Notes from Ireland.

IRELAND AND KING EDWARD.

The world-wide sense of sorrow and loss occasioned by the lamented death of His late Majesty King Edward VII. has found in no country a more spontaneous and sincere expression than in Ireland. A wonderful outburst of sympathy has gone forth from all warm Irish hearts to the Royal Family in their sudden and sad bereavement, and many even of those whose political views might bias their attitude, on such an occasion, have vied with each other in the eloquence of their heartfelt tributes to the supreme tact, unflinching sympathy and personal charm of our dead monarch. It is safe to say that no occupant of the throne ever enjoyed so much popularity or received so fully the love and esteem of the Irish people as King Edward did. His close identification with sport and farming, combined with his personal accomplishments of head and heart, gained for him a hold on the affections of the agriculturists of the Emerald Isle.

Many times did His Majesty honor Irish shows by sending high-class exhibits from his choice-bred herds, and, when, shortly after coming to the throne, he competed at Cork show, he performed a kingly act in requesting the promoters of the event to accept as a donation to the funds of the Society all the money, amounting to £17, won as prizes by the Royal exhibits.

RIVAL BREEDS IN IRELAND.

The recent spring show of the Royal Dublin Society was as notable a function as any of its predecessors, and an analysis of its features enables us to make a few deductions as to the progress of pedigree stock-breeding in the country, and also as to the ups-and-downs of the different varieties. Auction sales were introduced this year on a wider scale than usual, and special classes were set apart for animals intended for the auction ring. These far outnumbered in entry the open sections, and many, jealous of the dignity of the exhibition, have since been feeling that this departure is calculated to reduce the status of a national, indeed, international, exhibition to that of a commercial show and sale. Numerically, Shorthorns, with an entry of 196, were by far the strongest feature among the breeds, though there was a decrease of 77 on the previous year. They also realized, by a long way, the top price of the sales, viz., 330 gs., obtained by the Co. Wexford breeder, R. G. Wordsworth, for the second prize two-year-old bull, Orphan Stamp, while as much

as 390 gs. was bid for Mr. Harrison's Irish-bred Prince Olaf II., which stood first in Orphan Stamp's class, and was reserved at 500 gs.

Of Aberdeen-Angus, the entries numbered 149, and a very uniform muster they made from the standpoint of quality, this being in keeping with the introduction by enterprising Irish admirers of the blacks of high-priced bulls from Scotland; in fact, the pick of the Scotch sales. Hence the young doddies are now displaying a far better tone, with more breed character and finish than those seen four or five years ago. Milking qualities of course, are not a strong feature of the blacks, and this drawback will seriously restrict their popularity with Irish farmers, but as Aberdeen crosses are always at the top of the beef-market quotations, the breed will continue to make headway for this purpose. The display at the recent show was most gratifying to all its admirers. Herefords totalled 88 entries, and, unlike the Aberdeen-Angus, did not impress one with any advance in merit, and were it not for a fine lot of Whitefaces from leading English herds, the section would have been below the previous best standard. At the sales they were chiefly asked for by buyers from the great grazing districts, which they suit admirably.

The Kerries and Dexters (Ireland's native cattle), held their own well, both the beef and dairy types being well balanced. Ayrshires made a distinctly disappointing turnout, and it would appear as if the breed had very poor prospects in Ireland. In years gone by they were pretty extensively kept, but the fact that they are now seldom seen would go to prove that, in spite of their deep-milking powers, they do not suit Irish conditions.

In the pig classes at Ballsbridge we had a remarkably fine show, particularly of the Large Yorks. The Large Blacks, though they were well in the running last year, and the year before, showed a very sharp decline this season. In the dairy classes the entries were only half those of last year, this being the regrettable sequel of a long-standing dispute between the creamery managers and the Department of Agriculture, in which quarrel the Royal Dublin Society did not, perhaps, remain quite neutral.

THE IRISH BUTTER TRADE.

Considerable interest attaches to the voluminous report, just published, containing the findings of the Dept'l Committee on the Irish Butter Industry. The value of our exports amounted to well over £4,000,000 in the year. Next to Denmark, Ireland is the largest supplier to the British markets, but whereas the Danish trade is constant, the Irish output is practically confined to six months of the year. For geographical reasons it can be understood that most of the Irish butter goes to the big towns and cities in the western districts of Great Britain. Merchants in England state that some of the Irish butter is superior to that from any other country, but what is at fault is the regrettable irregularity of the supplies both in quantity and quality.

The Committee hold that it is creamery butter that must be relied on to raise the reputation of Irish butter to the first position, and they believe that creamery proprietors as a whole have not yet attained as great proficiency as is within their power. Combined action among the creameries for the ruthless rejection of unsuitable milk is strongly recommended. Pasteurization is also suggested as a means of securing uniformity of flavor in creamery butter. The evidence also would indicate that the texture of Irish butter could be made more even, there being complaints that sometimes it is too soft and open. Packing is another essential point to which attention is directed, but in this matter a great improvement has been effected since a conference, in 1905, drew up a standard specification for the 112-lb. kiel and the 56-lb. pyramid box.

Next to creamery butter, factory and dairy butter are the principal features of our export. They also are adversely affected by irregularity, and to improve them, efforts must be put forth at the farmstead, and owners of factories are urged to encourage improvement by discriminating between good and inferior samples offered by farmers, and paying a remunerative price for the better qualities.

Of course, covering all classes of butter, is the strong appeal presented by the contents of this report, on behalf of winter dairying. I make bold to say that if this appeal were heeded and responded to properly, the greatest of all obstacles in the way of advance would be removed. We have had numerous experiments carried out to demonstrate the profitableness of winter dairying, and unless Irish farmers rise to the occasion, they will, by their inactivity, only continue to nullify the many natural advantages which the country possesses for dairying. With its adoption, irregularity would be removed, tillage would increase, and the cow stock of the island become more numerous.

The report suggests additional powers of creamery inspection and authority to make regulations for the Department of Agriculture, and these

have created some controversy. It is also proposed to arrange, in conjunction with local associations, a scheme for the establishment of a special Governmental brand for Irish creamery butter, and it is recommended that in the appointment of creamery managers the greatest importance should be attached to technical and commercial qualifications.

Although I mention it last, one of the most important functions of the inquiry was to arrive at a definite understanding as to the proper meaning of trade terms used to describe Irish butter. This is most essential, because of the frequent frauds to which our dairy produce is liable at the hands of retailers, and hitherto the utmost confusion has existed when legal proceedings were taken. As a result of the evidence laid before them, the Committee drew up clear definitions of what is to be understood in the future as "creamery," "factory" and "dairy" butter—the three principal trade descriptions of Irish butter. In summarized form, these are:

The term "creamery butter," according to the custom of the trade, means unblended butter, made from cream separated by centrifugal force from the commingled milk supplies of a number of cow-keepers, in premises adapted and utilized for the manufacture of butter in commercial quantities.

The term "dairy butter," as understood in the trade, means butter made at the farmer's homestead, whether from whole milk, hand-skimmed cream, or cream extracted from the milk by means of a separator.

The term "factory butter," as understood in the trade, means any butter blended, reworked, or subjected to any other treatment, but not so as to cease to be butter.

Butter made at the farmer's homestead, from cream extracted from the milk by means of a separator is properly described as "dairy separator butter."

Steps should be taken to prevent the use for dairy butter and for factory butter, of names which are suggestive of the term "creamery."

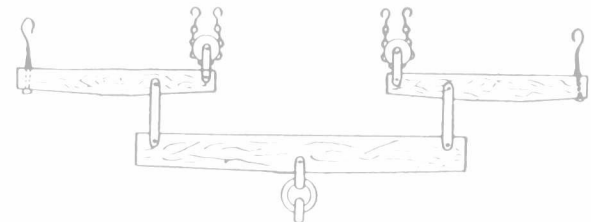
"EMERALD ISLE."

HORSES.

Three-horse Evener.

Editor "The Farmer's Advocate":

I append herewith a drawing of a three-horse whiffletree, to be used on a plow without a tongue. I have used one for about fifteen years,



A Three-horse Evener.

and find it very much lighter than ordinary three-horse eveners, and very simple. There are pulleys on the short ends of the eveners, with a chain about a foot long with a hook on each end.

Lennox & Addington, Ont. L. F. BOGART.

The Orphan Colt.

"When a mare dies, or has no milk for her foal, it may be raised on cow's milk, if the attendant conducts the work patiently and intelligently," says Dr. A. S. Alexander, of the Agricultural Experiment Station of the University of Wisconsin. "The milk of a cow that has recently calved should be chosen," says Dr. Alexander, "preferably of one which gives milk low in butter-fat, for mare's milk, while rich in sugar, is poor in fat. The milk should be sweetened with molasses or sugar, and diluted with warm water.

A little of this prepared milk should be given at short intervals from a scalded nursing bottle with a large rubber nipple. Care should be taken to keep the bottle and nipple scrupulously clean. An ounce of lime-water should be added to each pint of the prepared milk, and half a cupful allowed once an hour at first.

As the foal grows, the feeder should gradually increase the amount of milk fed, and lengthen the intervals between meals. In a few days, food may be given six times a day, and, later, four times daily. The foal will soon learn to drink from a pail, if allowed to suck the attendant's fingers at first.

Until the bowels move freely, rectal injections should be given night and morning. If the foal scours at any time, two to four tablespoonfuls of a mixture of sweet oil and pure castor oil, shaken up in milk, should be given, and feeding of milk stopped for two or three meals, allowing sweetened warm water and lime-water, instead. The foal may lick oatmeal as soon as it will eat, and

POOR COPY



Walter Winans' Miniature Pony, 24 Inches High.

To be at the International Horse Show, at Olympia, London, England, June 6th to 16th.

gradually the amount may be increased, and wheat bran added. In five or six weeks some sweet skimmed milk may be given, and the amount gradually increased daily, until, in three months, or so, it may be given freely three times a day, in place of new milk. The foal at this age, also, will be eating freely of grass, grains and bran.

At all times, pure, cold drinking water should be supplied. The foal should run out in a lot or grass paddock for exercise. The feeder should accustom it to be handled daily. Small quantities of nutritious food should be fed often, keeping all food vessels clean, and the foal should thrive and develop well."

The Beam and the Mote.

Editor "The Farmer's Advocate":

In your issue of May 12th, under the heading, "Our Scottish Letter," appeared the two following paragraphs:

AN UPSTART STUDBOOK.

"Recently, the press in this country has been invited by a gentleman resident in a remote town in the extreme South of England, to announce that a private stud of his own, called the 'Imperial Hunter Studbook,' has been placed by the Department at Ottawa on the list of studbooks, registration in which gives a title to free entry into Canada. It is difficult to believe that such inquiry was made into the nature of this so-called 'studbook' before this intimation was authorized to be made by your Department. If any individual resident anywhere in England can start a register of horses, call it by a high-sounding title, and get it placed upon your Department's list, there is no use for breed societies. To anyone acquainted with the facts in this country, the action of your Department in this matter is fully more astounding than that of your Clydesdale Association with respect to Sir Henry and Braidlie Prince. To be superlatively strict in the latter case, and cast an undeserved slur upon a body of men representing a society of over 1,300 breeders of Clydesdales, who publish all their transactions to the world, and to put its stamp upon a studbook run as a purely personal venture, without responsibility to anybody, is one of the strangest inconsistencies an experience of over 30 years in these matters has ever unveiled. There is urgent necessity for some overhauling of the details of registration in the National Live-stock Records Office at Ottawa."

BRAIDLIE PRINCE AND SIR HENRY.

"Some time ago, reference was made in the editorial columns of 'The Farmer's Advocate' to the determination of the Clydesdale Association of Canada not to recognize the decision of the council of the home society regarding the identity of the horse known in Canada as Sir Henry (13200), which was in reality Braidlie Prince (12871). Since that time, formal intimation has been made that the Canadian Association adheres to this resolution. Those who have knowledge of all the facts can only express utter astonishment at this resolution. Nothing in connection with horse-breeding can be more certain and is better established than that Smith & Richardson's horse was Braidlie Prince (12871), and to have made the correction and returned erroneous certificate when the fact was first intimated to those interested in Canada, would

have entailed no hardship on anyone, would have disqualified no animal bred in Canada, and would have prevented a slur being cast upon the public society in Great Britain, which, in view of all that it has done to promote purity and the integrity of those engaged in horse business, is utterly undeserved. Knowing, as I do, the whole facts, and as I will likely be called upon in an official way to refer to the matter, I add nothing more now. The whole affair leaves a bad taste in one's mouth."

Now, as to the first paragraph, "An Upstart Studbook," without going into details with which the public are scarcely interested, the Imperial Hunter Studbook was placed on the list of recognized Foreign Records, which means that any stallion or mare recorded in it was entitled to enter Canada free of duty. The information to hand, contained in Volume 6 of the Imperial Hunter Studbook showed that it had been established in 1901, and that it numbered among its life and annual subscribers many prominent people, among whom may be mentioned the Earl of Minto, Sir R. P. Cooper, Lord Howard de Walden, the Duchess of Hamilton, and Earl Stanhope. Representations were made to the National Rec-

ord Committee jointly by the secretaries of the English Hackney Horse Society, the English Shire Horse Association, the Polo and Riding Pony Society, and the Hunter's Improvement Society, that the Imperial Hunter Studbook should not be on our recognized list. It is sufficient to say that on these representations the Imperial Hunter Studbook was immediately struck off.

"The Scottish Farmer" and the Clydesdale Studbook of Great Britain and Ireland are both edited by Archibald MacNeillage. The Clydesdale Society of Great Britain and Ireland, through its secretary, did not take the kindly course of the secretaries of the other above mentioned societies, and seek to set the Record Committee right in a matter in which it was considered it had erred. The Scottish Farmer, a few issues ago, published a whole-column article similar to the paragraph entitled "An Upstart Studbook."

Import certificates issued for animals recorded in recognized foreign records are taken up by the customs authorities, and the matter ends there. The record is not perpetuated the same as in the case of Clydesdale, Hackney or Shire records. Although it is generally known, it may not be a little to mention here that no pure-bred import regulations exist as far as Great Britain is concerned, and the very horses which your correspondent and the "Scottish Farmer" are making such a fuss about would be entitled to enter Great Britain without restriction, if Canadian-bred, and recorded in a book similar to the Imperial Hunter Studbook.

Your correspondent might, perhaps, if he applied himself assiduously, clean house nearer home, before suggesting the "urgent necessity for some overhauling of the details of registrations in the National Live-stock Records Office at Ottawa."

Take the case of Clydesdales imported from Great Britain to Canada. I am safe in saying that a large percentage of the certificates issued from the office of the Clydesdale Society of Great Britain and Ireland do not describe horses with any degree of accuracy as to color and markings, especially markings. In the case of Braidlie Prince and Sir Henry, those who have followed the matter through the agricultural press know that these two horses are almost identical in color and markings, but are described differently in the Scottish Studbook. I might say a great deal about this matter, but it is unnecessary; the Clydesdale Horse Association of Canada are satisfied that Sir Henry was imported in 1906, and that ends it, as far as they and we are concerned. It is now an issue between Messrs. Smith & Richardson and the Clydesdale Society of Great Britain and Ireland, if the former consider that their business or good name has been injured in any way.

Notwithstanding the fact that the Clydesdale Horse Association of Canada had refused to cancel the Canadian registration of Sir Henry, Mr. MacNeillage issued an export certificate for a horse called Gallant Gray, sired by the Scottish Sir



Moss Rose (6203).

Clydesdale mare. Bay. Winner, at leading Scottish shows, of 25 first prizes, three champion cups and eleven other cups. Owned by Sir John Gilmour, Bart.

Henry. He will say that he is compelled to do so if requested. That may be, as far as the ordinary "export" goes, but it does not apply to the following certificate, which is issued especially to conform to the rules regarding eligibility for the Canadian book:

THE CLYDESDALE HORSE SOCIETY OF THE UNITED KINGDOM OF GREAT BRITAIN AND IRELAND.

Certificate of Record and Pedigree. To Conform to Canadian Regulations re Importation of Animals for Breeding Purposes, and to be Placed on File in the Office of the Canadian National Records.

Pedigree of Stallion **Gallant Gray** (15092). Sire, Sir Henry (13200). Dam, Maggie of Barmoorhill (23268). Sire, Prince Thomas (10262). Dam, Gem (16116). Sire, Rathillet (11870). Dam, Maggie (16800).

I hereby certify that the above is the correct pedigree, as registered in the Clydesdale Studbook. (Sgd.) ARCH'D MACNEILAGE, Secretary of the Clydesdale Horse Society of the United Kingdom of Great Britain and Ireland. Dated at Glasgow, Scotland. 18th December, 1909.

Again, as late as April 15th, 1910, he issued for a gentleman who had never before imported a horse into Canada the following certificate:

THE CLYDESDALE HORSE SOCIETY OF THE UNITED KINGDOM OF GREAT BRITAIN AND IRELAND.

Certificate of Record and Pedigree. To Conform to Canadian Regulations re Importation of Animals for Breeding Purposes, and to be Placed on File in the Office of the Canadian National Records.

Pedigree of Mare **Alston** (21700). Sire, Lord Lothian (5998). Dam, Doll (Vol. XXIX, p. 10). Sire, Top Gallant (1850). Dam, Jessie Rankin (3855). Sire, Scottish Banner (9671). Dam, Fanny.

I hereby certify that the above is the correct pedigree, as registered in the Clydesdale Studbook. (Sgd.) ARCH'D MACNEILAGE, Secretary of the Clydesdale Horse Society of the United Kingdom of Great Britain and Ireland. Dated at Glasgow, Scotland. 15th April, 1910.

A casual glance will show the most ordinary observer what the pedigree lacks. Although the dam Doll is recorded, she is not numbered; the grandam Fanny is neither recorded or numbered.

Duty had to be paid on both Gallant Gray and Alston, or the animals had to be returned to Scotland. Besides, these animals or their progeny will never be eligible for registration in Canada.

While Mr. MacNeilage possibly could not refuse to issue the ordinary export certificate, he had no right whatever to issue the originals of the above, knowing, as he did, that the horses would not be accepted for registration in Canada, and that the Clydesdale Horse Association of Canada demanded that the Scottish Society issue these certificates as a guarantee of the eligibility of Scottish horses for the Canadian book. "O consistency, thou art a jewel."

The following certificate shows the breeding necessary to entitle a Clydesdale Horse to registry in Canada and free customs entry:

THE CLYDESDALE HORSE SOCIETY OF THE UNITED KINGDOM OF GREAT BRITAIN AND IRELAND.

Certificate of Record and Pedigree. To Conform to Canadian Regulations re Importation of Animals for Breeding Purposes, and to be Placed on File in the Office of the Canadian National Records.

Pedigree of Stallion **Baron Rothes** (15001). Sire, Baron Elliot (12447). Dam, Nance of Brunlands (21754). Sire, Full of Promise (10753). Dam, Baron Polly (15494). Sire, Urieside (11569). Dam, Nelly of Trochail (13925).

I hereby certify that the above is the correct pedigree, as registered in the Clydesdale Studbook. (Sgd.) ARCH'D MACNEILAGE,

Secretary of the Clydesdale Horse Society of the United Kingdom of Great Britain and Ireland. Dated at Glasgow, Scotland. 24th September, 1909.

Importers should demand that all horses bought in Great Britain are bred as shown in the certificate of Baron Rothes; that colors are as described, and that all markings are correctly given.

JNO. W. BRANT, Secretary. National Records Office, Ottawa.



Bob, the Old Favorite with the Children. Contributed by Arthur L. Currah, Oxford Co., Ont.

LIVE STOCK.

Our Scottish Letter.

Only one subject at this date (May 14th) engages men's thoughts here—the death of King Edward VII. The end came so suddenly that few quite realized the fact, and only now, as new arrangements are being made, do we begin to know how great the loss has been. King Edward had many kingly qualifications. His occupancy of the throne was comparatively short. Scarcely one decade was given to him whose august mother held the seat for six decades. Hers was a wonderful reign in respect of all that was crowded into it of advance in science, art, trade, politics, and religion. The Victorian era, like the Elizabethan era, in British history, was a time of phenomenal progress and striking national growth. Names among the greatest in all departments of human knowledge flourished in those reigns, and he would be bold who would seek to appraise the value of the two eras to the human race. But during his short reign of scarce ten years, Edward VII. did much. He added fresh lustre to the British throne by his liberal interpretation of the meaning of "constitutional monarchy." He was essentially a democratic ruler, and it would be interesting to trace the influences which went to the making of his character in that regard. The fact that he favored Gladstone and Campbell-Bannerman, and disliked Salisbury, among statesmen, is suggestive. He had a keen sense of justice and equity, and was as far as possible removed from the attitude of the French monarch who, when asked about the people, said, "Let them eat grass." It is reported that when the Boer war was wearing to its sad close, he said, "The Boers are gentlemen—let us treat them as such." His commanding characteristic was tact, and in respect of consideration for those under him, King Edward VII. was in the best sense of the term a thorough gentleman.

But those engaged in agriculture had a special interest in the late monarch. From both his father and his mother he inherited a love of rural pursuits. The lamented Prince Consort, husband of Queen Victoria, was a farmer—far in advance of his time, a stock-breeder, and a patron of agricultural development in every form. Queen Victoria's grandfather, old George III., was known as Farmer George, and the late King Edward VII. was thus, as it were, born in the agricultural purple. He was interested in agriculture in all its branches, and his visits to showyards, like those of the Royal, the Highland, and the Smithfield Club, were not mere perfunctory outings. He looked at everything, and asked about everything. On his last visit to the Smithfield Club Show, in December, 1909, he did what no Royal visitor had ever before attempted: he ascended the stairs and inspected the implement and produce stands which crowd the galleries. His own successes with cattle, horses, sheep and pigs were always pleasant to him. He never won when he did not deserve to

win, and he always delighted to be fairly beaten. His Shorthorn herd at Windsor would rank next to that at Collynie in respect of the quality of the stock bred and reared there. The Royal family were splendidly served by their stewards. The late Henry Tait, an Angus man, was appointed by the Prince Consort to manage the Shaw and Flemish farms at Windsor. He was succeeded by his son, William Tait, who only died a few years ago, leaving no one of his own family to succeed him. King Edward VII. appointed to the honorable post a young Scotsman, William McWilliam, son of J. McWilliam, Stonytown, Keith and Garbity, Fochabers, and under his skillful management the Royal farms and herds have continued to hold their own against all-comers. At these farms the King bred Shorthorns, Herefords and Devons. At his own seat, Sandringham, in Norfolk, he bred Shorthorns, Southdowns, Thoroughbreds, Shires and Hackneys. He always had a large collection of Highlanders in the parks and policies at Sandringham, and at his Aberdeenshire farm of Abergeldie Mains, in the Ballater district, he bred Aberdeen-Angus cattle and Clydesdales. The Prince Consort founded a Clydesdale stud at Windsor, and Clydesdales have always been kept there. Of the Royal successes on the turf, enough will be said by others. King Edward VII. was a thorough Englishman in his love for racing, and it is said one of the proudest moments of his life was when he led in Persimmon after he had won the Derby. The owner of four such racing notables as Florizel, Diamond Jubilee, Persimmon and Minora had no reason to be dissatisfied with his luck on the turf. Doubtless, the proletariat loved King Edward VII. because of his sporting proclivities. It made them feel that he was human like themselves.

The weather has been a trying problem during the past month. March gave us one of the best seed-times on record. April seemed to have changed places with March, and between cold east winds, heavy rains, snowstorms, frosts, and what not, it was difficult to believe that the year was not a month younger than the calendar proved it to be. Now we have had about a fortnight of a May in whose lap winter has undoubtedly lingered. One day we have had of delightful summer weather, but generally it has been cold and most ungenial. I see you have had bad frosts in Alberta, with threatened if not realized loss of winter wheat. This will be an unfortunate experience for the new settlers, and some of them may lament the change they made. However, all will come right in time, and we will see good harvests, and plenty of food for man and beast.

The export trade in Clydesdale horses and Ayrshire cattle is unusually brisk. Seldom have so many horses been exported at this early season of the year. Ayrshires, with the advent of publicly-kept Milk Records, are coming to their own, and Robert R. Ness, of Howick, Quebec, has taken away a most valuable shipment, while other purchasers have been much in evidence. Nothing has done more to deepen the belief of the Canadian farmer in the Ayrshire than the system of public Milk Records. The class of cow most likely to build up a Milk Record has been more in favor this year at the spring shows. At Kilmarnock, Ayr and Glasgow we had first-rate displays of dairy cattle—big, roomy cows, with bags and teats that suggested quantity of milk and easy extraction of the same. The championship at Kilmarnock for the best female Ayrshire was awarded to the first-prize two-year-old heifer. This was an unprecedented result, and those responsible for it are to be congratulated on their courage. A few years ago such an award would have been impossible.

So far as Clydesdales are concerned, this has been a year of triumph for young stock. At Kilmarnock the female championship went to a yearling filly by Baron o' Buchlyvie (11263), the stallion concerning whose ownership a case is pending in the courts. He is breeding splendid stock, and is quite easily the best breeding horse of the day, apart, possibly, from his sire, Baron's Pride and Hiawatha. It is dangerous to prophesy what the finals may be; the present would indicate possible supremacy for Baron o' Buchlyvie against all-comers. The weight of years is beginning to tell on the older sires, and a good return may be looked for in favor of the younger horses. Mr. Kilpatrick's Oyama, a Cawdor-cup winner, is promising well, and Scottish Crest, the champion as a two-year-old at the H. & A. S. Show, at Peebles, in 1906, is promising to rank among the foremost. He is a son of Baron's Pride, and his own brother is somewhere in Canada, having been imported thither by Mr. Ness, Howick, Quebec, some years ago.

Ireland is flourishing agriculturally. The annual spring show at Dublin was this year an unqualified success. There was a very large entry of Shorthorns, but the greatest advance in quality was seen in the Aberdeen-Angus cattle. The Hereford is bred in some parts of Ireland, and as grazing cattle they are not easily beaten. Shorthorns, however, hold the field, and throughout the length and breadth of the Island they hold sway.

A great age men... The sys... a notal... quality... er, who... which r... case to... in Grea... ly treat... They h... often b... driven f... the num... land... are Dub... shipped... on the... and Irel... watch t... every ni... nine of... there ca... siderabl... Advan... tention... creasing... and the... great a... next gen... The r... de Belle... of its n... to this... seems a... whether... better n... I cherish... cause I... intellect... educatio... cannot l... theory i... let the... this may... race. T... is strong... of hand... the cons... let me g... gentlemen... fiance a... brain wi... nimble r... greatest... abyss... Here... things t... veloped... Develop... has been... Its title... Board is... supremac... ear and... is to ma... motorist... must loo... will be... red lamp... maimed l... culturist... battle... everythir... obedient... which us... animal... all these... spect is... of rates... The or... be styled... living cou... the Coun... shire. I... tury, it... breeders... tween th... Southern... the main... ket value... the quali... size of th... formity a... policy th... ain prom... tioned G... Gillett, o... Norton, a... sheep, In... Oxfordshi... are print... some rest... wools wi... be noted... fords hav...

A great improvement has taken place in the average merit of Irish cattle during the past decade. The system of distributing premium bulls has been a notable influence for good in this direction. The quality of the stock has impressed the British feeder, who finds himself now in possession of cattle which respond more rapidly than used to be the case to the better "keep" bestowed upon them in Great Britain. Irish cattle are not too kindly treated on their way to the British market. They have to submit to much hard usage, and often bear marks of severe handling, as they are driven from fair to fair, until they are shipped at the numerous ports which dot the coasts of Ireland. The chief ports for the Clyde and Mersey are Dublin, Belfast and Derry. Cattle are also shipped from Limerick, on the Shannon, and Cork, on the Lea, and the traffic between Great Britain and Ireland can best be estimated by those who watch the sailing of the great channel steamers every night from Belfast and Dublin. Eight or nine of these are constantly on the move, and there can be no doubt that all this indicates considerable prosperity in the Emerald Isle.

Advanced agriculture is receiving increased attention on both sides of the Atlantic. The increasing number of training colleges and farms, and the extended equipment of these point to a great advance in knowledge on the part of the next generation of farmers.

The report of Macdonald College at Ste. Anne de Bellevue has just come to hand. As one reads of its many-sided activities, he marvels whereunto this thing will grow. Training in the family seems almost at a discount, and one wonders whether, with it all, the next generation will be better mothers than those whom we have known. I cherish a wholesome skepticism on the point, because I do not think any training so develops the intellect as moral training. The old Scots idea of education was, "Train the moral nature, and you cannot but train the intellect." The modern theory is, "Train the eye, the brain, the hand; let the conscience go as it pleases." The end of this may be a smart race; it will not be a strong race. The only race that abides is the race that is strong in the moral virtues, and all the deftness of hand that one may acquire will never educate the conscience. My ideas may be out-of-date, but let me give them vogue: Educate the conscience, gentlemen. Show the youth of Canada the significance and greatness of moral distinctions, and the brain will be educated in the process. The most nimble race in Europe is the least moral, and its greatest teachers are declaring its descent into the abyss.

Here we are receiving from politicians many things that we never asked. We are to be developed agriculturally by gentlemen who are called Development Commissioners, and a new authority has been constituted to look after our highways. Its title is the Road Board. The chief end of this Board is to demonstrate and provide for the supremacy on our public highways of the motor-car and motor traffic of every kind. The purpose is to make roads safe and comfortable for the motorists. The man in charge of cattle and sheep must look after himself. In all probability he will be condemned to send one in front with a red lamp, so as to prevent his sheep being maimed by the modern Juggernaut car. The agriculturist does not count for much in the road battle. He pays his taxes, his road rates, and everything that is charged against him. He is an obedient and subservient ass, and has the reward which usually falls to that patient and useful animal. It is not easy to say what the end of all these changes will be, but meantime the prospect is that the farmer will have a heavier share of rates to pay than hitherto.

"SCOTLAND YET."

Oxford Down Sheep.

By H. S. Arkell.

The early home of the sheep that later came to be styled Oxford Downs centered around the low-lying country on the banks of the River Thames in the Counties of Oxford, Gloucester and Hampshire. In the first quarter of the nineteenth century, it apparently occurred to a number of breeders simultaneously to attempt a cross between the Down sheep of Hampshire and of the Southern Country with the long-wooled Cotswold, the main idea being an improvement in the market value of the sheep they raised, by bettering the quality of the Cotswold and by increasing the size of the Down. Breeding methods lacked uniformity at first, but gradually settled into a fixed policy through the predominating influence of certain prominent breeders, amongst whom may be mentioned Samuel Druce, of Fynsham; William Gillett, of Southleigh; John Gillett, of Braize Norton, and J. T. Twynam, of Hampshire. The sheep, known first as Down Cotswolds, later as Oxfordshire Downs, and finally as Oxford Downs, are primarily, therefore, cross-breeds, combining in some respects the characteristics of the medium-wools with those of the long-wools, and it may be noted that from the beginning, breeders of Oxford Downs have rather prided themselves that their

sheep have originated in this way. Certain it is that the strength and vigor of new blood has been, as it were, a heritage to them, and under a favoring environment the breed has developed size, constitution and individuality, together with early maturity, and a capacity for mutton and wool production such as has given it a very wide and favorable recognition, notwithstanding the comparatively short period of its history.

Previous to 1860, the new race of sheep had been bred without infusion of fresh blood for a period of perhaps twenty years, and were then recognized as a distinct breed. In 1862 they were accorded separate classes at the Royal Show. At Smithfield, since that time, they have made a particularly good showing in the market classes. The first importation was brought to America in 1846, and other importations followed intermittently up till 1880. Since that time, Shafor, of

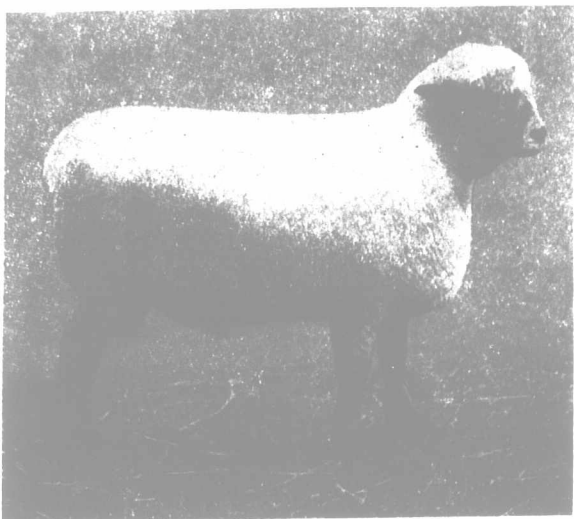
and have practically ousted other Down breeds for crossing purposes upon the Cheviot, half-bred and cross-bred ewes in the South of Scotland. Thousands of lambs are raised in this district, and shipped annually to London, and the Oxford crosses are finding large favor with feeders and butchers. Some years ago, at the Scottish National Fat-stock Show, in a class of 25 entries, Oxford crosses took all the prizes. They have found recognition for crossing purposes upon grade flocks in many countries, their size, natural vigor and good mutton form promoting quick growth and economical feeding capacity in their offspring. Of late years, importations to America have largely increased in numbers, and a useful Western trade has been developed where Eastern-bred rams have been sent to serve as flock-heads in localities where improvement in mutton-producing capacity was desired. Competition is bringing these handsome, sturdy sheep to the front, and farmers are finding satisfaction in their use.



Two-year-old Oxford Ram.

Ohio, Stone, of Illinois, and McKerrrow, of Wisconsin, have been prominent importers to the United States, and Miller and the Arkells to Canada. The American Oxford Down Record Association was organized in 1881, and the British Association in 1888.

Oxford is the largest and heaviest of the Down breeds, though they are closely approached by the Hampshire in size. The head of the ram is bold and masculine in character, and is set firmly on a strong neck. The face is of moderate length, dark brown in color, and may be with or without a spot of gray on the nose. Width is desired between the ears, and the poll should be covered with a strong topknot of wool growing well down to the eyes. Dark wool is objectionable behind the ears. The ears may be dark gray or brown, but not spotted. The neck swells out uniformly over the shoulder, the legs are short, the chest wide below, and the heart-girth is full behind the shoulder, giving a strong constitution. The barrel is deep, and of good length, with straight underline, the back level, ribs well sprung, loin broad, rump carrying out well to



An Oxford Down Shearling.

tail, and thigh thickly fleshed down to hock. The ram should stand straight on his legs, and be well up on his pasterns. The mutton should be firm, of good quality, and evenly distributed, and the fleece should be of moderate length, heavy, of even quality, and cover the body uniformly throughout. Ewes are finer about the head than the ram, and present a characteristically feminine appearance, an indication of their capacity as breeders.

The Oxford sheep are now widely distributed, having been imported into France, Germany, Russia, South America, Australia, New Zealand, United States, and Canada. They are popular in the Southern Midland Counties of England,

A Quebec Live-stock Show.

A semi-annual live-stock show, the initial one, was held by the District of Beauharnois Live-stock Association, at Ormstown, Que., on May 18th and 19th. The promoter of the show and sale, Dr. Duncan McEachran, proprietor of Ormsby Grange, where a splendid stud of Clydesdales is kept, was ably assisted by Dr. A. McCormick and a number of stockmen within the district. An association is being formed to carry on this work, and we look for splendid results.

Over 200 entries of horses, 150 of cattle, 60 of sheep, 50 of swine, and 250 of poultry, graced the stalls, pens and coops. The quality was such as any section of Canada might be proud of.

Clydesdale horses were shown by Dr. McEachran, whose stallions and mares made a fine display; Robert Ness & Son, whose Clydesdales, Coachers and Hackneys were much admired; H. Lebarge, S. McGerragle, Nussy Bros., and others. Drafters were a typical lot, of heavy weight, combined with quality. In this class the above had exhibits, as well as D. J. Greig, Wm. Cullen, A. Cullen, and others. Light drafters were the strongest department of the show. In some of the classes there were from 10 to 14 entries. In the team class there were 11 pairs.

James Bryson and Nussy Bros. were exhibitors of French-Canadian horses of good stamp.

In the carriage classes, as well as in the driving classes, there was close competition, and many fine carriage and driving horses were exhibited.

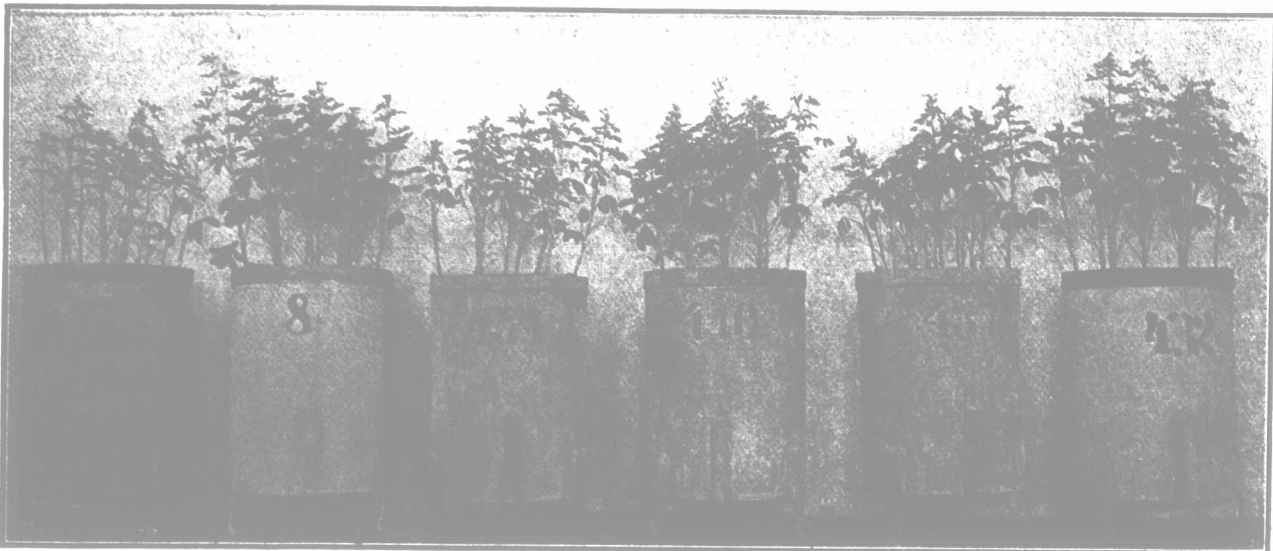
Saddle horses and hunters were out in larger numbers than at any previous show in the district.

The judging of light horses was done acceptably by Dr. C. McEachran, D. V. S., Montreal. As the judging extended over the two days and both evenings, the interest of the spectators was held until the close.

The display of cattle far surpassed the expectations of its promoters, thanks to Neil Sangster, James Bryson and other energetic stockmen of the district. Naturally, an Ayrshire center would be expected to make a good display, and visitors were not disappointed, for no such display had ever been seen in Quebec. This popular breed was shown by H. Gordon, J. P. Cavers, J. Bryson, J. W. Logan, W. T. Stewart, R. R. Ness, D. T. Ness, Wm. Hay, P. D. McArthur, and R. M. Howden. The aged-bull class was made up of four of the best Ayrshire bulls ever brought into the district. Ness's Gay Cavalier, a champion in Scotland, at Seattle, and in the West, won first place. His massive frame, strong constitution and splendid mammary development won for him first place. McArthur's Netherhall Milkman, champion at Ottawa, of finer quality and true type, won second, and Logan's Netherhall Good Time, with his deep middle, was third. The young-bull classes were well filled, and had some rich blood. The aged-cow class contained a lot of fine matrons. The young classes were all well filled, and had from 10 to 14 in every section. The aged-herd prizes were won by Ness, Logan and Gordon; young herds, Ness, Bryson and Logan. Silver cup for best female, Ness, with Finlayson Maggie. Prof. Grisdale made the awards in a satisfactory manner.

The Black-and-Whites made a creditable showing. Holsteins are replacing some of the inferior dairy cattle in this section. This breed has a warm advocate in Neil Sangster, Ormstown, who has a herd that has made some grand records of milk and fat. He put the first Holstein cow through the Canadian Record of Performance test. Mr. Sangster was the largest exhibitor. Others were F. Murphy, Huntingdon; T. Rutherford and D. Cowan, Ormstown. Prof. Barton judged the Holsteins, and showed his capacity as a judge of dairy cattle. He also judged the Jerseys. These were exhibited by James Winter and Dr. D. McEachran, whose yearling bull, purchased from Bull & Sons, Brampton, Ont., is a peach.

Sheep of the Shropshire and Leicester breeds were out in goodly numbers. In every case the quality was up to a good average.



Pots and Plants of White Lupines with Nitragin.

- | | | | | | |
|-------------------------------------|---|---|--|--|--|
| 1. Unfertilized.
Not inoculated. | 2. Potash and Phosphate.
Inoculated with Nitragin for White Lupines. | 3. Unfertilized.
Inoculated with Nitragin for White Lupines. | 4. Potash and Phosphate.
Inoculated with Nitragin for Blue Lupines. | 5. Unfertilized.
Inoculated with Nitragin for Blue Lupines. | 6. Potash and Phosphate.
Inoculated with Nitragin for Blue Lupines. |
|-------------------------------------|---|---|--|--|--|

Swine of the Tamworth, Yorkshire, Berkshire and Duroc-Jersey breeds were shown. Nearly all were of the improved bacon type.

Arsene Denis, St. Norbert, Que., judged the sheep and swine, and also the French-Canadian horses.

The poultry was divided among various breeds, the Rocks and Rhode Island breeds predominating. These were judged by Arch. Thompson.

W. F. S.

THE FARM.

Soil Inoculation Experiment with Nitragin and Nitrobacterine.

Recognizing the great importance of soil inoculation with nodule bacteria of legumes for sterile soils, the Royal Hungarian Agricultural Experiment Station, at Magyar-Ovar, Hungary, arranged in the year 1908 a series of comparative experiments in pots with these inoculating materials, for Hungary possesses extensive areas of sterile sandy soils, on which legumes, especially the lupines, grow indifferently.

Both the above-named inoculating materials are procured from pure culture from the nodule bacteria of legumes (*Rhizobium radiculicola*, or *Rhizobium Beierinckii*), yet their appearance and manner of their application differ widely.

Nitragin, prepared according to the recipe of Prof. Hiltner, by the Biological Chemical Laboratory of Dr. A. Kuhn, in Bonn, Germany, is put on the market as a fluid, and the method of its application is simple. Shortly before applying, the fluid is poured into newly-boiled skim milk, and, after thorough stirring, this is sprayed on the prepared seed-bed.

The application of the Nitrobacterine is not so simple. It is put on the market by Prof. Bottomley, Mowbray House, Norfolk Street, London, W. C., in the form of a powder, and each dose is put up in three paper bags. Just before application, one takes a gallon of distilled water or rain-water and boils it. After cooling, the contents of paper bag No. 1 are added, the water being stirred until the salt is dissolved. Now the contents of paper bag No. 2 (cotton with inoculated soil) are added to the solution and thoroughly stirred; thereafter, the preparation is kept for 24 hours at a temperature of 75 to 80 degrees Fahrenheit. After this time, the contents of No. 3 are added, and the solution is ready for use as soon as it becomes muddy or turbid. By the above temperature, this takes place in about 24 to 26 hours, but by lower temperatures it may be delayed one or two days. So long as the solution is not muddy, it remains ineffective. The serviceable solution also loses its capability of action within 48 hours.

This preparation, as well as Nitragin, may be applied either by sprinkling the seed, or by mixing with earth. In the latter case, the inoculated earth is sown out broadcast and harrowed in.

In the experiments under discussion, the seed was first inocu-

lated, and the remaining solution equally distributed amongst the pots immediately after seeding, being poured on the surface soil. All the experiments were conducted according to the following plan:

1. Unfertilized.
2. Unfertilized, inoculated.
3. Potash and phosphate fertilizing.
4. Potash and phosphate fertilizing, inoculated.

Each experiment series consisted of four pots. The potash-phosphate fertilizing was equal to 75 pounds phosphoric acid and 50 pounds actual potash per acre.

Both inoculating materials were tested against each other on a very poor quartz sand, with a lime (carbonate of lime) content of 17.7 per cent. The experiments were conducted with sand peas in earthenware pots, having a superficial area of 706 square centimeters, and with white lupines in metal pots, having a superficial area of 490 square centimeters.

Besides these, another experiment, exactly according to the above plan, was conducted with Nitragin on clover, and one on white lupines, grown on a sandy soil, poor in lime (0.2 per cent. carbonate of lime).

Of the experiment with clover, nothing can be reported until the second year, but the effects of the inoculation and of the potash-phosphate fertilizing were already noticeable in the first year.

All the experiment plants were seeded on April 2nd, and the harvesting took place just after the setting of the first pods, on the 26th of June. On the second of July the pots were again seeded, and the second harvest took place on September 15th, except in the case of sand peas, which were har-

vested on September 20th. The second crop showed in its development the same differences as the first. The photographs show the first crop.

1. Inoculation Test with White Lupines on Quartz Sand Soil Rich in Lime.—In this experiment, Nitragin, as well as Nitrobacterine, were employed as inoculating materials for white and blue lupines. The yields of the green plants in fresh condition are given in tabular form.

It shows that the potash-phosphate fertilizing increased the yield of green substance more than did the Nitragin without such fertilizer; but, on the other hand, the Nitrobacterine, without the fertilizer, produced a larger yield than did the potash-phosphate without the inoculating material. Both inoculating substances in these pots gave the best results when the potash and phosphate fertilizers were added. The efficacy of the Nitrobacterine, in comparison with that of Nitragin, was superior in every test series.

2. Inoculation Test with Sand Peas on Sandy Soil Rich in Lime.—In this experiment, Nitrobacterine was more efficacious than Nitragin.

The potash-phosphate fertilizing increased the yield more than seven times. While the plots to which Nitragin was applied showed an increase in yield, it was not very high; on the other hand, those inoculated with Nitrobacterine have given a very much larger yield than those which were not inoculated.

Nitragin gave better results in assisting the development of the root nodules than in increasing the growth of the plants above ground, for, with the potash-phosphate fertilizing almost the same results were obtained as with such fertilizer and Nitragin. In this respect, also, Nitrobacterine showed its superiority. It is highly probable that the plant food, which is applied with the Nitrobacterine (an organic nitrogenous substance, probably Asparagin), is the cause of this very favorable action. This appears all the more probable when one considers that the pots in the sand-pea test, which received the Nitrobacterine, but no potash and phosphate, gave on this poor soil a considerable increase over the unfertilized and uninoculated plots.

SUMMARY.

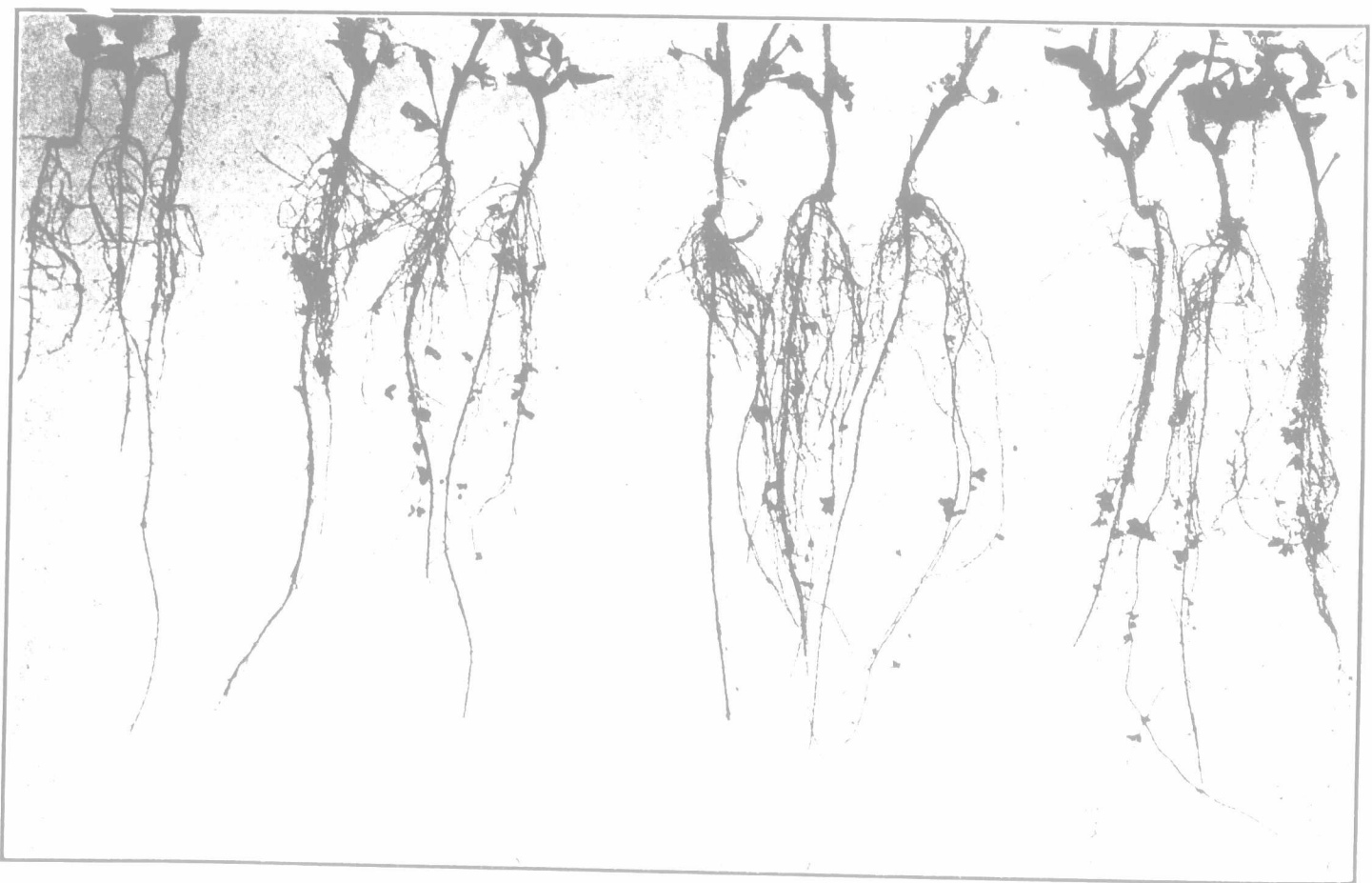
Both inoculating substances were efficacious, especially when used in combination with the potash and phosphate fertilizer, but the Nitrobacterine showed a greater efficacy than the Nitragin; the latter had a weak action, especially on sandy soil poor in lime.

Whether the superior efficacy of the Nitrobacterine will also be shown on the open field, must be determined by further experiments.

[Translated from the "Deutsche Landwirtschaftliche Presse" (German Agricultural Press).

B. L. E.

Isolation, hard work, and small compensation, is too often the lot of the farmers' wives. These are burdens that need lifting.



Roots of Sand Peas Treated with Nitrobacterine.

- | | | | |
|-------------------------------------|---|---|---|
| 1. Unfertilized.
Not inoculated. | 2. Potash and Phosphate.
Inoculated with Nitrobacterine. | 3. Unfertilized.
Inoculated with Nitrobacterine. | 4. Potash and Phosphate.
Inoculated with Nitrobacterine. |
|-------------------------------------|---|---|---|

Producing Large Corn Yields.

Editor "The Farmer's Advocate":

The cultivation of corn in this section of Kent Co., Ont., commences with the plowing. We much prefer clover sod for growing bumper crops of corn; however, corn will grow in any kind of soil, provided that there is good drainage, though stubble land, as well as lands that have just been in hoed crops, are not very suitable, since the supply of humus is likely to be small, and, as corn requires a soil rich in vegetable matter, the crop would probably fall short on account of the lack thereof.

After a clover sod has been carefully plowed to a depth of five or six inches, about the end of April or beginning of May, we usually roll and leave it for ten days, during which time the action of the sun and air has caused the soil to become mellow. After this, we keep a twenty-foot, four-horse harrow going, often harrowing over the same ground eight or ten times, getting a perfect seed-bed. Corn is fond of heat and air and the endless amount of harrowing given before planting conserves the moisture, destroys young, growing weeds, and warms the ground before planting.

We are also very particular about planting as straight and as shallow as possible. The disk planters are replacing the shoe planters, and are giving much better satisfaction. Great care should be taken not to plant corn too deep.

When weather is warm, and corn growing rapidly, we very seldom use a weeder or harrow on our deep, mucky land, but when soil is inclined to become hard, we frequently harrow about five days after planting to break the crust.

Corn is often injured by being cultivated when weather is cold and ground damp, and it would be better to keep out of the corn fields until sunny days return. We have often noticed corn getting a setback by being cultivated during dark, cloudy, cold weather. We firmly believe in deep cultivation, and as close to the young plants as possible at first, gradually lessening the depth and drawing the cultivators away from the corn with each successive cultivation, until corn is four or five feet high. We try to go over our corn three times one way, and four times the other, leaving last cultivation the way the ridges run. We use three-horse cultivators, with twenty-three shovels, one man with three horses cultivating twenty acres a day.

Last year we produced one hundred and eighty-five bushels of corn to the acre, and it is quite possible, under favorable conditions, to grow 200 bushels per acre. It costs us from ten to twelve dollars to produce an acre of corn, including use of land, taxes, etc., and the harvesting costs from eight to ten dollars an acre, according to yield.

Kent Co., Ont. J. A. FLETCHER.

Summer Tillage in New Brunswick

Editor "The Farmer's Advocate":

The first object of tillage is, to my mind, the killing of weeds. Incidentally, we secure, also, other benefits. We pulverize the soil, and make the plant food it contains more available; we save soil moisture by checking evaporation; and, by the absence of weeds, and by keeping the space between the rows empty, and in a fine state of tilth, we encourage root-growth. These objects are best secured by frequent shallow cultivation.

We plant both corn and roots in drills, and with the corn we usually practice level culture. We start a boy with a one-horse cultivator as soon as the plants appear above ground, and continue to cultivate once a week as long as weeds appear. We have tried hoeing the corn, but did not notice any advantage from the practice. We cultivate about 2½ inches deep at the beginning of the season, and towards the end the cultivator is run as shallow as possible.

The number of hours' labor required for the summer cultivation of an acre of corn varies considerably, but a fair average would be 16 hours, with a boy and horse. In addition to this, we go at least once through the field with a hand hoe to make sure there are no weeds left in the corn. I am aware that our implements of tillage could be improved on, and when new ones are required, we will get those of the most approved pattern. We have been quite successful in raising good crops by these methods. Last year our mangel crop averaged 1,200 bushels per acre, and the cornfield averaged 22 tons of green ensilage corn per acre.

Charlotte Co., N. B. J. R. OASTLER.

When the farmer considers that a ton of well-cured alfalfa hay is worth approximately as much as a ton of wheat bran, he ought to see that it is profitable to protect it from the rain and dew. He would scarcely hesitate to provide suitable covering if he had several tons of bran in the field exposed to the elements. Hay-caps will soon pay for themselves by the finer quality of the hay they assure, aside from the larger quantity of the best grade that their protection guarantees. [From Coburn's "The Book of Alfalfa."]

Round Dairy Barns.

"The points of superiority that the round dairy barn shows over the rectangular form are convenience, strength and cheapness." Such is the claim made in a bulletin by W. J. Fraser, of the Illinois Agricultural Experiment Station, Urbana, Illinois.

These barns are usually built in two stories, the lower for stock, and the upper for feed storage, and almost without exception have a silo in the center. Where there is but a single row of cows, they stand in a circle, with heads toward the center. Between the manger and the silo is the feed passage. It can readily be seen that

lap nailed horizontally on studs being the siding ordinarily used) forms a hoop that holds the barn together. Every row of siding boards running around the building serves also as a brace, as do also the roof boards and the arched rafters.

Not only is strength thus secured, but the wind pressure which exerts such force on the side or gable-end of a rectangular building gets no such hold on a circular structure. The wind glances off the rounded sides and the arched roof from whichever quarter it may blow.

COMPARATIVE COST.

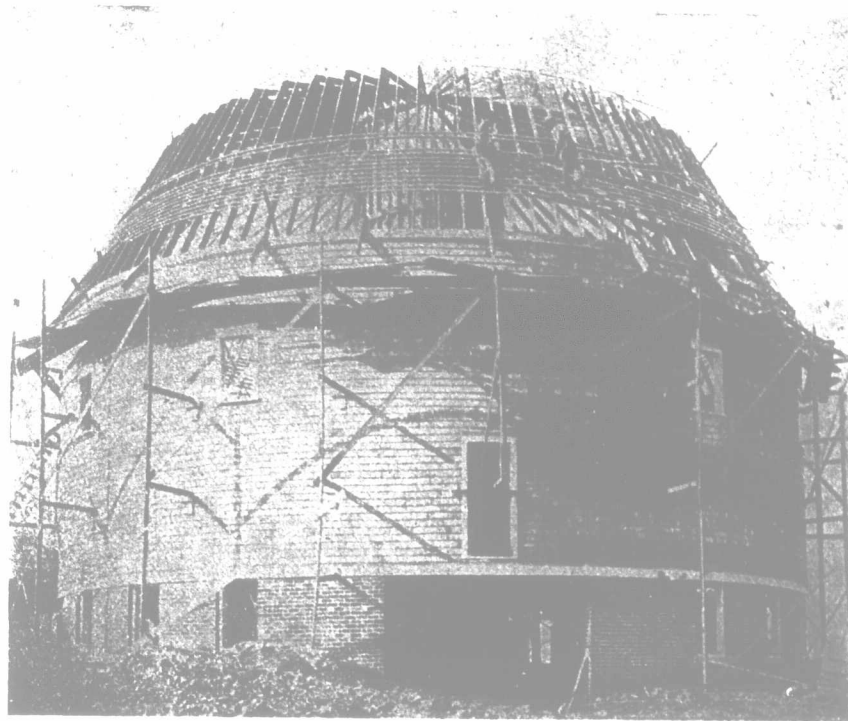
While extra convenience and strength are claimed for the round dairy barn, yet it is in the matter of economy that the strongest part of the case in its favor is made out in the bulletin.

The upper story of a round barn in which there is a silo in the center for roof support, with roof of proper design, requires no brace timber. The side studs are braced temporarily while siding is being nailed on, but that is all that is required. It can be seen that, in consequence, much less frame timber is required than for a building of rectangular shape. A comparison of cost of round barns of different sizes with rectangular barns of the same capacity, is given, in every case the round structure being more economical. One only, that of superstructure of round barn 60 feet in diameter, as compared with superstructure of a rectangular barn 36 x 78½ feet, need be given here. The capacity is almost exactly equal.

Round Barn.—Framing lumber, \$349.40; sheathing, siding and flooring, \$285.36; shingles, \$165. Total, \$799.76.

Rectangular Barn.—Plank frame, \$495.83; sheathing, siding and flooring, \$337.81; shingles, \$168.75; bolts, \$20.88; total, \$1,023.27. A mortise frame, at the same value per thousand feet, would cost much more; other supplies would be equal, the total being given at \$1,233.41.

A saving on such a structure of from \$224 to \$434, if it can actually be made out, is certainly worth considering. It will be remembered that estimates are made out for new material all through, and at prices for lumber at present prevailing. The bulletin makes out a very good case for the round dairy barn, and its advantages should not be ignored by builders; but where there is old timber to be worked into new structures, as is the case on Ontario farms generally, the rectangular form of barn, in which such timber can be used, will doubtless continue to be most popular.



Round Barn, Showing Rafters in Place and Method of Sheathing Roof.

such a barn "has a special advantage in the work of distributing silage to the cows. The feeding commences at the chute, where it is thrown down, and is continued around the circle, ending with the silage cart at the chute again, ready for the next feeding. The same thing is true in feeding hay and grain." Where the barn is made so large that it contains two circular rows of cows, economy in handling is lessened.

The roof in the center is supported by the silo, and if roof is made with a double pitch, it is self-supporting, so that there are no timbers obstruct-



Round Barn Completed.

ing the hay mow. The hay carrier runs on a circular track around the mow, midway between the silo and the outside wall, and drops the hay at any desired point, so that labor is saved by not having to move hay more than a few feet in any case.

CIRCULAR CONSTRUCTION THE STRONGEST.

The circular construction, it is claimed, is the strongest, because it takes advantage of the lineal, instead of the breaking strength of lumber. Each row of boards running around the barn (ship-

pounds clover, and about six pounds timothy to an acre. It took well, and looks fine. I have a few acres that I am going to seed the same this year.

Addington Co., Ont. W. I. S.

There is always a best way of doing things on the farm, but it often takes study to find it. The result is worth the effort. If someone else is getting better results than you are, find the reason.

Seeding with Buckwheat.

Editor "The F. A.":

I saw in your valuable paper some time ago where a man was speaking of seeding clover and timothy, along with buckwheat. Well, I can speak from my own experience of last year. I sowed a piece of buckwheat, and seeded it with clover and timothy. I sowed three pecks of buckwheat, three pecks of clover, and about six pounds timothy to an acre. It took well, and looks fine. I have a few acres that I am going to seed the same this year.

Fertilizer Problems.

Editor "The Farmer's Advocate":

Without the opportunity of studying the facts that furnish the premise for the argument in the first paragraph of the article, "Fertilizer Questions for Professors," appearing in your issue of May 12th, it will be possible to say only a word or two with respect to the theory that "production is limited by the element most deficient in the soil." As a working basis, its correctness must be admitted, but the results of its application may be modified under certain soil and seasonal conditions, and with different crops. Thus the requirements for growth vary somewhat with the crop, and, consequently, we could have a soil in which for one class of crop phosphoric acid would be the limiting factor, while for other crops nitrogen or potash would determine the yield. It would necessarily be a somewhat poor soil. Further, when the amounts of the available plant-food constituents are all low, it would seem that the application of any one of the three elements may in a favorable season increase the yield somewhat, though a complete fertilizer would effect a much larger increase. The character of the season undoubtedly affects—and more especially in poor soils—the amount of plant food set free, and thus it is that the limit of production of any particular crop may vary from year to year. The "limit," then, is no fixed thing, but is affected by the nature of the crop and of the season. On soils generally poor—in other words, when the available amounts of all the essential fertilizing elements are low, as is frequently the case—a complete fertilizer is, of course, desirable, and our experience goes to show that in much the larger number of instances a complete fertilizer is the one most profitable on worn or exhausted lands.

And, further, it may be pointed out that there is an indirect effect of a fertilizer, in addition to its direct function of feeding the crop. It is quite possible, and, no doubt, frequently the case, that the application of a "one-element" fertilizer increases by chemical action the amount of the available store of another element, and thus the limiting degree of the latter is raised. It is for this reason extremely difficult at times to determine what the limiting factor—nitrogen, or potash, or phosphoric acid—may be.

And now, coming to the second paragraph, we find first certain observations and statements which call for no particular comment; and then an account of the manuring and cropping of a certain two acres of rather low land, which we may now briefly discuss. Taking the case of the turnips, which gave such an excellent crop where the pig manure had been applied, and such a poor yield from land dressed with barnyard manure, most probably the explanation lies in the richer character of the pig manure. If the pigs were being well fed, and were for the most part fairly-mature animals, there is little doubt but that the barnyard manure would contain smaller percentages of the fertilizing constituents than that from the pigen. Turnips are much benefited, especially in the earlier stages, by a forcing manure, and respond particularly to dressings containing available phosphoric acid, which, however, is not usually a dominant constituent in pig manure. On fairly good land, an application of superphosphate (available phosphoric acid) is all that should be necessary, according to English practice for this crop. Rape is a gross feeder, and better able to forage for its food than turnips; hence, it might thrive, when turnips failed. The heavy grain crop that followed, and was equally good all over, might go to show that at that time the soil had a sufficiency of nitrogen, partly from the manure applied the previous season, and which was now setting free its plant food, and partly as a result of feeding off the rape, etc., on the ground. The rape crop is highly nitrogenous, and I have no doubt the better crop of timothy and clover on the soil it occupied is to be accounted for by the large percentage of nitrogen in its residue.

And in conclusion, to answer briefly the inquiries towards the end of your correspondent's letter. The acid phosphate (superphosphate) would benefit the turnips more than the rape, the latter requiring a fertilizer more particularly rich in potash and nitrogen. Mangels are not like turnips in responding specially to phosphatic fertilizers, but do best with a complete brand, containing goodly amounts of nitrogen. Hen manure may be very poor or very rich, depending very largely on the character of the feed used. Like all other farm manures, its composition or quality is largely affected by certain factors, and in this we have at least one explanation for the varying experience met with in its use.

FRANK T. SHUTT,
Chemist Dom. Exp. Farms.

The Seed Branch of the Department of Agriculture at Ottawa reports the encouraging fact that the feature of the trade this spring has been the heavy demand for alfalfa seed. Many retailers state that their stock was sold out early, and they were unable to secure further supplies from the wholesalers. Prices ruled high

THE DAIRY.

Cow-testing: Reasons and Results.

II.

Written for "The Farmer's Advocate," by C. F. Whitley.

NET PROFIT PER COW.

The main object in view in all cow-testing is not simply to arrive at a knowledge of what each cow produces, but it is definite action resulting from that knowledge. Such action means the rapid building-up and steady maintenance of a dairy herd that will produce a large quantity of milk and butter-fat at a low cost of feed, thus insuring a satisfactory profit from each cow in the herd.

Two cows, side by side, in the same herd, near St. Mary's, Ont., illustrate what differences are to be found in virtually every herd where no discrimination has been exercised concerning this vital question of individual profit. These two cows, of the same age, calved on the same day; one gave 7,749 pounds of milk and 285 pounds of fat; the other gave 5,759 pounds of milk, and 208 pounds of fat. Valuing fat at 25 cents per pound, the income from the first was \$71.25, and from the second \$52.00. Deducting \$40 as the estimated cost of feed, the profit stands at \$31.25 in the first case, and \$12.00 in the second.

The point on which it is desired to lay emphasis is this: It does not follow that because one cow gives twice as much milk or fat as another, she is, therefore, twice as valuable or profitable. For, just taking into account, for the sake of simplicity, only the value of the product, and the cost of feed, the real comparison lies in the calculation of net profit. Thus, the first cow referred to above, while giving not even one and a half times as much butter-fat as the second, made more than two and a half times as much profit.

It is by closely watching this capacity of production, and by adjusting the feed in proportion to the ability to make good returns, that the net profit per cow can be greatly and quickly increased. Stated in other words, this means it can scarcely be considered the best type of feeding to give all cows in the stable just the same weight, or even the same kind of feed, if the yield of milk and fat shows much variation. Those dairymen obtain the largest profit who study the individual preferences of the cow for certain feeds; and, further, give each one just as much as she can profitably convert into milk and fat. Thus, instead of feeding each cow precisely the same, giving each one six or eight pounds of meal per day, it will often be found that some cows will give practically as much milk or fat if fed a pound less grain, because their dairy nature or temperament is such that they are not able to utilize more grain or produce more milk, hence the extra grain is thrown away on them. On the other hand, some one or two cows in the herd may possess stronger dairy characteristics, and will produce more if given the opportunity; that is, if given the extra grain that the other type cannot use profitably.

Even, however, if it is not found necessary or advisable to lessen the grain ration for any cow, it may still be found profitable to increase it for two or three animals. It is somewhat on the principle of the difference between only just keeping a stove alight with a small amount of fuel, thus obtaining practically no warmth or comfort, but materially increasing the heat, to the profit of everyone concerned by just an extra stick or two of wood.

In view of the high prices of meal, it needs but a moment's reflection to see what an enormous difference can be made in the net returns and in the total profits if the meal ration is adjusted to individual requirements, so as to increase the distance between cost and selling price. The latter can hardly be altered by any farmer, but every individual dairymen has it in his own hands to lower the cost of production of his most remunerative commodity, milk.

Following this a step further, it is in this manner that excellent dairy type and performance may be developed, and some cows coaxed up to particularly heavy yields. Our skillful feeders know this, and act on it, startling us now and then with wonderful quantities of grain consumed per day, and butter-fat produced at a profit.

But this truth is worthy of far wider application and adoption by the average dairymen. Many a good cow is still undiscovered, because she has not been studied by her owner and fed liberally enough for her to do her best, but it is just lumped in with the rest, and considered only as one of the herd—her yield is just a part of the general "average." That unilluminating result that most milk producers are content to calculate. This truth has to be repeated and reiterated till every dairymen comes to act on it. Cows are not mere machines; they are instinct with marvellous, thrilling life, all ardent and answering with nervous energy, sensitiveness, and well-requiring

thoughtful study of their varying individuality and capacity. A few minutes' study of milk and feed records will open up new vistas of thought for every intelligent dairymen, adding immensely to the profit and pleasurable interest in the handling of selected specimens of the dairy cow, with here and there a perfect jewel, worthy of good setting in more appropriate surroundings.

Not for a moment should there be allowed any submerging of promising individuals by the deadening weight of mere "averages," conspicuous merit might be snowed under by an avalanche of figures that deal with the herd as a whole; the light of many an excellent cow should not shine in vain, being clouded by dealing only with totals divided by the number of cows kept; give each one separately a fair and patient trial, with a view to utmost development.

CHAS. F. WHITLEY.

Testing a New York State Herd.

The New York State Experiment Station at Geneva has a herd of Jersey and Jersey grades that average 6,000 pounds of 54-per-cent-fat milk per year. By weighing and testing the cows, it was discovered that the best cow of the herd held her place for four years, gave three times as much milk as the poorest cow in each of three seasons, and it cost only one-tenth more to feed the good cow than to feed each poor one. Even the poorest cow in this herd, according to Bulletin No. 322, probably paid for her feed, for she produced butter-fat at from 25 to 33 cents a pound; but the Station has records of herds in the State that average only 80 pounds butter-fat per cow, bringing in a gross return of \$26 per head. How much it cost to feed those herds, probably no one knows, but the least the Station could carry any cow through a year on, for feed alone, was \$47.50. If these poor herds gave an average of only \$26 worth of product in a year, \$20 less than it cost the Station to keep its lightest-cost cow, how much did the poor cows of those herds lose their owners? Any cow-keeper will be interested in this bulletin, for it gives very accurate data for production and food cost of that production, of 19 cows yearly for three years.

GARDEN & ORCHARD.

The Brown-tailed Moth in New England.

Editor "The Farmer's Advocate":

The recent discovery that the nests of the Brown-tailed moth were being brought into the United States upon nursery stock imported from Europe, has brought this pest to the front again, and has interested the whole country in what had previously been more or less of a local problem in a small section of New England, and, during the past three years, of Nova Scotia. Everywhere the pest is being discussed vigorously, and its serious character seems to be admitted by all.

During the writer's nearly three years' residence in Massachusetts, since leaving Nova Scotia, he has taken every opportunity to study this moth, and to talk with those who have had experience with it. Practically all agree that it is not as an orchard pest (that is, for its leaf-eating) that it is most to be dreaded, though it ranks along with the tent caterpillar in this respect, and does not seem to have that insect's character of nearly disappearing during some years. But it is the irritation caused by the hairs getting into the skin which make it so serious. Two instances will serve to illustrate this. A few weeks ago the writer visited Newburyport, in the north-east part of the State, where the Brown-tails are very plentiful, and, in talking with an orchard-owner, asked if he considered them a serious factor in taking care of his orchard. "Not so far as keeping them from eating up the leaves," said he. "I can do that all right by spraying in the spring when the leaves first come out, with arsenate of lead. But the trouble comes in the fall, when harvesting comes on. Many of my neighbors don't spray, and their orchards furnish an abundance of moths, which, being strong fliers, come to my orchard from a distance in large numbers, and deposit their eggs. These hatch some time in August, and the little caterpillars feed on the leaves before going into their winter quarters. They are too small to be noticed, but when men are picking the fruit, they get the hairs from these little fellows onto their hands, and frequently have to lay-off from the effects of them."

Another man said that in his section, when the caterpillars were plentiful, either before pupating, in May and June, or in the fall, when young, the motormen on trolley cars found them a very serious pest, causing severe irritation about the face, neck and hands, and often crawling up under the clothing, where they became crushed, and caused still more serious trouble.

In going from Boston to Portland, Maine, last winter, the writer noticed along the line, especially in southern New Hampshire, many orchards which were so full of the nests of the Brown-tails

that the taken for And every of them. the writer out. Pe- tainly see in New F the State ever entir H. L. Fro does an i est and o (using las tons of a that it is or losing ravages o Frost said land near in Decem- two moth near Bost time of o marked o where the will not it is only Mr. Frost plan can

The w as it is d seem that the multi country v more of t in New F ought to while it here, and matter in unreturned and preve

Massach In pea it is nec the propo is especia peach bei dips in th proximity is essentl orchard s in the ho thermome buds are the Niaga base of t shore of o must be s can't star best; ar the Niaga Michigan put in sh a clay lo

produce g

I prefe when set early, spr down wit oats, bar add humu early spri peach wel Prune an stances o vent glut machinery duction, i the best an adres Peninsula

The Pe cultural C an offer o the broile This is ce dressed, from now figure wit

As to tells us t hatched th try Instit White Leg to be got time, in fr ped, prob gether.

that the apple trees might readily have been mistaken for oak trees with their leaves still on them. And every roadside apple, oak or elm tree was full of them. Under such circumstances, it seems to the writer a hopeless task to try to stamp them out. Perhaps he is mistaken, but it would certainly seem that, with all the rough, wild lands in New England, which must be looked after by the State, if at all, it is out of the question to ever entirely eradicate them. On the other hand, H. L. Frost, the head of the Frost Company, which does an immense business in caring for shade, forest and orchard trees for cities or private owners (using last year in their spraying operations 20 tons of arsenate of lead), expresses the opinion that it is a choice between spraying our forests or losing them in a very few years through the ravages of the Brown-tail and Gypsy moths. Mr. Frost said he had seen a thousand acres of forest land near Arlington as bare of leaves in June as in December, from the combined work of these two moths. And friends of the writer who live near Boston, and visited Amherst last year at the time of our College Commencement, in June, remarked on what a relief it was to get to a section where the trees were still green. Of course, trees will not stand that sort of thing very long, and it is only a question of a very few years when Mr. Frost's prediction will be fulfilled, unless some plan can be devised to put a check on these pests. The writer is deeply interested in this problem, as it is developing in Nova Scotia, where it would seem that conditions are even more favorable for the multiplying of the Brown-tail moth, since the country where it has gained a foothold has even more of the wild, waste lands than are found here in New England. Certainly, everything possible ought to be done to deal with this problem there while it is yet less serious than it has become here, and the Province is fortunate in having the matter in charge of men who will leave no stone unturned to stop the spread of the Brown-tails, and prevent the Gypsy from gaining a foothold.

F. C. SEARS, Prof. Pomology.
Massachusetts Agricultural College.

Peach Growing.

In peach-growing, as in all other occupations, it is necessary to start right. In peach-growing, the proper location is absolutely necessary. This is especially true in our State of Michigan. The peach being tender in the fruit-bud, the severe cold dips in the winter often kill the fruit-buds. Close proximity to the moderating influence of the lake is essential. This, in Michigan, means get your orchard started on elevated land near the lake, for in the hollows at the base of these elevations the thermometer drops down so much lower that the buds are killed, and no fruit results. Not so in the Niagara District. Your peach belt is at the base of the hill, and extends from there to the shore of Lake Ontario, on the north. The soil must be fairly dry or well drained, as the peach can't stand wet feet. Naturally-drained soil is best; artificially-drained soil is good. Here in the Niagara you grow peaches on sandy loam; in Michigan we grow good orchards on drift sand put in shape, sandy and gravelly loam, but prefer a clay loam.

Grow the varieties your markets demand, and produce good crops of good fruit.

I prefer low-headed trees, pruned to a whip when set out, and 18 inches high. Cultivate early, spray well, ripen your wood by seeding down with a cover crop in the end of July, as oats, barley, clover, or hairy vetches. This will add humus to the soil when plowed under in the early spring, helping the soil hold water, and a peach well grown contains 95 per cent. of water. Prune and spray your trees; under no circumstances neglect to thin. It means just as many baskets of fruit, better fruit, and tends to prevent glutting of markets. Use all labor-saving machinery in cultivation. Lessen the cost of production, increase the crop in quantity and quality the best way you can, and sell it right.—From an address by T. A. Farrand before the Niagara Peninsula Fruit-growers' Meeting.

POULTRY.

Broilers.

The Poultry Department of the Ontario Agricultural College, Guelph, received early last month an offer of 45 cents a pound, live weight, for all the broilers they had to spare up till May 20th. This is considered equivalent to at least 50 cents dressed. Of course, the price declines rapidly from now on, but broilers always maintain a fair figure with us until after the Jockey Meet.

As to the weight of the chickens, Prof. Graham tells us they shipped one lot of 31 that had been hatched the first of Feb. (the week before the Poultry Institute), realizing from them \$28.67. Some White Leghorns, hatched about March 20th, were to be gotten rid of shortly—may be gone by this time, in fact. Not a great many have been shipped, probably not more than 100 or 150 altogether. Prof. Graham considers there are too

many risks in going into the broiler business extensively. Winter chickens are much harder and more expensive to rear than those hatched later, and the percentage of fertility in the eggs is often low.

Three drums of desiccated egg product, shipped into Maryland by a Chicago Company, have been condemned and forfeited under a charge of adulteration, because it consisted of filthy, decomposed and putrid substance.

THE FARM BULLETIN.

Farming in Waterloo.

Confidence and progress are the watchwords of farming in the grand old County of Waterloo, Ont. Peopled by a steady-going type of farmers, there has been in their methods somewhat of the unflinching steadiness of the rock-ribbed hills that confront them as obstacles to be overcome, and stepping-stones to success by processes that make men great, whether on the farm or in the foundry. They have confidence in their business, in the soil, in intelligent methods, in good cattle and horses, in clover, in alfalfa and roots, in corn and silage, in unity of effort, and a properly-educated youth. In area, it is not a large county, compared with many others in the Province, but its soil is strong, and its farmers are remarkably advantaged in having at their doors the consumers for all sorts of products needed by a splendid bunch of towns like Galt, Berlin, Waterloo, Ayr, Preston, Elmira, Hespeler, and several other places, crowding along in population, most of them humming with manufacturing and other enterprises. Several of them will shortly have their position materially strengthened by the advent of Niagara-generated electricity for power and lighting purposes, through the means of the Hydro-Electric Commission, thus freeing them from dependence upon Pennsylvania coal mines or private power monopolies, and assuring more efficient service. And when home consumption is fortified with the strong outside demand which Canadian farm products are enjoying generally, it can readily be seen that undreamed possibilities lie ahead for more diversified agriculture, including dairying, garden products, apple-orcharding, together with the production of Canadian-grown vegetable, field, root and flower seeds, in which some sixty-five acres are this year under promising culture near the town of Waterloo by the Ontario Seed Company.

Under such circumstances, and alive to the desirability of any agency that might make for the progress of farming in the county, its municipal and other leaders were not slow to endorse the proposal for the presence of a County Representative of the Provincial Department of Agriculture, and the institution of a High-school or Collegiate Institute class in agriculture, under his direction. The choice of location fell to Galt, in every way a model town, possessing a Collegiate Institute of which any city might well be proud, including, as it does, excellent departments in manual training, domestic science and commerce, as well as the new agricultural feature. The excellence of the building and equipment; commodious halls, adorned with portraits and other pictures calculated to awaken the student-interest and patriotism; the spacious grounds overlooking the beautiful valley of the Grand River—all naturally arrest the attention of the visitor. F. C. Hart, B. S. A., undertook the position in June, 1907, and an assistant, in the person of R. S. Duncan, B. S. A., was required by March, 1909, to cover the steadily-developing work. The public eye looked for the Agricultural Class, but this was the slowest to develop, for the simple reason, as "The Farmer's Advocate" has often pointed out, that the cur-

riculum, methods and teacher-training for the public schools all tend to gravitate the rural youth away from agriculture to other professions. On the part of the local authorities, every encouragement has been shown the work at Galt, and from the first a fair number have taken up special subjects, such as entomology, horticulture, dairying, demonstrations in buttermaking, milk-testing, etc., being given in the school. Three have been taking a full course, preparatory to second-year work at the Agricultural College, Guelph. The classes have varied from 8 or 9, to over 20, and a dozen or more have been going out for stock-judging in cattle, horses, and other classes, two afternoons a month. Most of the students taking agricultural subjects have been drawn from those in the Collegiate commercial course. In time, it is expected that the outside work of the County Representative in the public schools, farmers' clubs and short courses will develop stronger classes in the Collegiate Institute. The attendance at the Ayr, Elmira and Galt short courses ranged from 70 to 450. They proved popular and useful. Some orchard-demonstration work in spraying and pruning and fertilizer and other plot trials, including about an acre on the fair-grounds at Galt, have been started, and special attention given to alfalfa culture, which, during the past two years, has been bounding ahead throughout the county.

Last year, the pupils of a group of three rural schools had a home-garden competition in growing grains, vegetables and flowers, weed and insect collections, and descriptive essays for individual and school sweepstake prizes, winding up with a grand union school fair that proved an enthralling success, as described by Prof. H. L. Hutt in "The Farmer's Advocate." This year, six rural schools near Ayr have also inaugurated a similar scheme, and the results and part of the crop will be shown at the local autumn horticultural show. The interest in and love for the country by the young people is being steadily aroused.

The farmers'-club movement is a notable feature of Waterloo agriculture, about a dozen clubs being in existence. They hold meetings at the homes of members, discussing farm and other topics, conduct joint debates with other clubs, and have union meetings with Women's Institutes; establish seed and stock judging courses; promote the formation of rural-telephone lines; secure rural mail delivery; railway sidings for the use of members; conduct plowing matches; inspiring enthusiasm, good fellowship, and altogether a new and higher-class spirit among the members in relation to the business of farming, winding up the affairs of the season with banquets that would make any town festivity look to its laurels.

A Waterloo field once won renown for British arms, but the fields of the Canadian Waterloo, like scores of other counties in the premier Province, are to-day covered with the luxuriant green that tells of the triumph of intelligence over the soil for the comfort, sustenance and happiness of men. This is the victory of peace.

Death of W. H. Hunter.

The demise of William Henry Hunter, which occurred at his beautiful home, The Maples, in Dufferin County, Ont., on May 24th, in the 74th year of his age, has removed from the ranks of the progressive and prosperous farmers of the Province a prominent figure. He was a man of fine character, a striking personality, a successful farmer, a leading importer and breeder of pure-bred Hereford cattle, and a successful exhibitor at the principal fairs in the Province. He had acquired a large tract of land, and had accumulated a very considerable fortune. He took an active interest in public affairs, was an effective platform speaker, and was influential in the district in which he lived. His fine herd of Here-



Agricultural Class in Stock-judging.
Galt Collegiate Institute.

fords at the Canadian National Exhibition, at Toronto, in 1909, furnished the grand-champion male animal of the breed, and won the first prize for the best herd, repeating the record at the Western Fair at London.

Our Australian Budget.

Vegetable matter in wool is a nightmare to the world's manufacturers. Its evil reputation comes to Australia in almost every newspaper; it rises like a spectre at every market-place. Hundreds of men have puzzled their brains to supply a solution. Conferences have debated the matter; scientists have wrestled with it. Yet the jute-in-wool spectre remains. Just now there is a ray of hope. A Melbourne firm has patented a plan which they expect will get over the difficulty. The packs are treated with a solution which it is claimed will not only lay the fibre and leave a smooth surface, but also permeate the whole pack, and thus stop any extraneous matter of any kind gaining entry into the wool, even although there may be cuts made while sampling the bales. A great feature is that the ordinary packs may be used, instead of the expensive paper-lined packs which the London committee suggested, and the cost of dipping them in the solution will not be excessive. The only danger is that the company may take advantage of the discovery, and put up the price inordinately, which would be a great pity. The greatest trouble now is caused by the rough surface of the inside of the packs. Often, when the bale is stripped, the exterior of the wool is covered with thousands of fibres of the jute, which have been forced there by the dumping process.

It has been proved beyond doubt that Queensland was justified in passing a regulation a few years ago in compelling the supervision of all glassware used in butter factories and dairies. It was at the time found that many of the measures and instruments were absolutely erroneous, many robbing the farmer, and many the factory, while the thermometers told the wrong temperatures. According to the Department's last report, despite the knowledge the manufacturers had that the regulation was in force, condemnations were made as follows: Cream flasks, 2 per cent.; cream pipettes, 5.5; milk pipettes, 12.3; acid burettes, 10.6. If the percentage is so high in a country where the system of inspection is in force, what must it be where there is no check?

Victoria lately carried out a scheme of recruiting slum boys for one of its State farms, with great success. Left to their own devices, many of these lads would undoubtedly have gone to join the ranks of the criminal classes. Some of them were veritable Ishmaelites. A medical examination before entry into the institution showed they were stunted in growth, weakened in constitution, and half-starved. Regular habits and good food, of course, worked wonders. Physical development was rapid. Each boy has a separate room, and is provided with equipment of the best. The taste displayed by them in the adornment of their quarters amazes strangers. The lads are trained in the various operations of the vineyard, orchard and farm. At vine-grafting, they turned out as many as 1,500 grafts in a day each. Regular lectures are given by the experts during the evenings, and the boy who formerly went to work listless and sullen, regarding his task as a drudgery, now takes a pride in it. The aptitude which might have developed into a skilled pick-pocket is turned to nobler ends. The lads who have gone out of the institution at the age of 18 years have all done well, and some of them, at least, are at work on their own farms.

Word has been received officially in Australia that sheep entered in the Australian flockbooks will be eligible for inscription in the Argentine books.

Several of the Australian States are now granting monetary help to farmers for silo-building. The farmer must agree to grow the proper kinds of crops, and conduct ensilage operations as advised.

The wet-wool problem is a source of endless trouble in Australia. The point is to decide when it is really too wet to shear. If the men think it is on the wet side, they simply cease operations. To obviate the difficulty, a tester has been invented, and it is now on trial. The machine is a modification of the Richardson-Gillespie moisture estimator. The principle upon which it works is that calcium-carbide, absorbing free moisture, decomposes to form acetylene gas. The amount of gas made, where the carbide is in excess, is in direct ratio to the amount of free moisture with which it comes into contact. In the chemical action, the hydrogen of the water combines with the carbon to form gas, and the oxygen of the water, combining with the calcium-carbide, forms slaked lime as the residue. The instrument consists of a spherical metal vessel, with a gas-tight screw-top, to which is attached on the inside a small holder for the carbide. This metal vessel is connected by an India-rubber tubing to a gauge glass, which is marked off in percentages. The wool is weighed and placed in the metal sphere. A small bottle of

powdered carbide is emptied into the container, and the cap screwed down. The vessel is then well shaken, and the carbide comes into contact with the wool. If free moisture is present, gas is generated, and the amount is indicated by the position of the mercury in the glass gauge. The carbide has no effect on the yolk of the wool, water only being taken up, and the wool, after the test, is left quite dry. The percentage limit of moisture at which sheep are considered too wet to shear has been fixed at 8 per cent. in the case of Merino wool, and 10 per cent. for cross-breeds. But this is purely an experimental standard, and the value will be judged in the tests now being made.

As matters stand now on the wet-wool problem, however, the position is most unsatisfactory. In the award delivered by the Arbitration Court three years ago, there was a clause inserted that "No shearer shall be compelled to shear sheep he has reasonable grounds to consider wet, on reporting same to the manager of the shed immediately." It was thought by both parties at the time that this would do away with wet-wool arguments; that all a shearer had to do if he considered the sheep too wet for him to shear was to report the matter, and that those who considered the sheep dry enough could go on. But an appeal to the police court in a wet-wool case resulted in a decision that everything depended upon the interpretation of the word "reasonable." The shearer found he had to prove to the satisfaction of the manager that the sheep were too wet. The Full Court upheld this view, so the shearer is now called upon, before he can knock off work, to prove that the wool is wet to the satisfaction of his mates and the manager. Thus, the position is exactly as it was before the Arbitration-court award. Meanwhile, awaiting the result of the tester on trial, the men decide what the majority think, and this the manager abides by.

Sydney, Australia.

J. S. DUNNET.

A Token of Honor to the Greatest Industry.

Upon the occasion of receiving his doctor's (D.L.D.) degree from McMaster University, Toronto, President G. C. Creelman, of the Ontario Agricultural College, had occasion to make a four-minute speech upon agricultural affairs in general. Following is the text of his address:

"I trust that I have sufficient modesty to appreciate the fact that this honor has not fallen upon me as an individual, but, first, on the institution of which I have the honor to be the responsible head, and also upon the Profession of Agriculture, to which I belong.

"It is perhaps unique in the history of university convocations that a farmer has been singled out for such distinction. Perhaps the present high price of farm produce has made him an exalted personage in the land. Or, perhaps, Sir, and I believe this is your real motive—you and your Board have seen the real progress that has been made in the agriculture of this Province during the last few years. When, some years ago, high-tariff walls were raised by the politicians at Washington, our farmers were compelled to find other markets for their produce, then we naturally turned to old England for a solution of our difficulties. It was not found to be profitable, however, to export our coarser grains such a distance, so we began to manufacture on the farm, and in the cheese factory and creamery, a finished product, and to feed the coarser grains to our live stock on the farm. Our farmers changed their methods of farming. The Agricultural College, the Experimental Farms, and the Farmers' Institutes all assisted in the work, until to-day we count our farm exports from this Province by the tens of millions. Cobalt, Sir, may fail, Gowganda become exhausted, liquor licenses may be cut off, timber limits may be burned down, manufacturers may go out of business, banks may be suspended; even the Government may cease for a season to make or amend our laws; but, if the time ever comes when the Ontario farmer suspends his business for a single season, the country will be bankrupt indeed.

"It is our aim, Sir, together with those who are associated with me, in the Department of Agriculture, to remove even the possibility of such a calamity; and when I say to you that our farms, instead of decreasing in their output, are gradually improving in fertility, and are producing from the same average more and more bushels each year, you will realize, Sir, to some extent, the importance of our work.

"I am sure, therefore, that it is with a knowledge of the work being done that you have seen fit to single me out and honor me in this way.

"I accept, then, this degree as a token of fellowship, as another bond between the city and the country, and as a recognition of the place agriculture has made for itself in the sphere of practical science, and the position which agricultural education has assumed in the realm of higher education."

Good Horses and Clover Lead.

Editor "The Farmer's Advocate":

We must admit that, as a whole, Ontario West is more progressive than Eastern Ontario. The conditions in these two sections are widely different in many respects. First, I might mention soil conditions, or, better, geological conditions, the most of Ontario east of Belleville being a very rocky country, soil very shallow, and large portions of the farms used for pasture purposes only. This has a tendency to keep the amount of farm products down to a low average, as compared with Western Ontario, where a very large percentage of the land is arable. Certain it is that climatic conditions are largely favorable to Western Ontario, and have a great deal to do with the progressiveness of its people, allowing of a wider range of products, and consequently better prices for them.

Comparing the values of farm lands, East and West, we find the East close up to the West, which I think speaks well for the dairy industry of Eastern Ontario.

The horse industry is one in which the East is sadly lacking in point of quality. The farmers do not seem to think they require the heavy breeds to work their smaller fields and shallower soil, and so are contented with the smaller and lighter and less valuable horses.

Ontario East has certainly been denied the close affiliation with the Ontario Agricultural College that the West has enjoyed. Many of the Eastern farmers do not know what the institution looks like. They have never seen it. They have been deprived of the privileges of the summer excursions that the West have had. Some of the Institutes of Eastern Ontario have tried to arrange excursions there, but are refused them by the railway companies, for some reason not satisfactorily explained to them.

There is also the fact that Ontario West has a number of cities where the farmers get good prices for all their marketable products, while Eastern Ontario farmers have not this advantage.

There is also another reason which I think is an important fact. The farmers of Western Ontario are growing clover more extensively than in the East, which keeps the land open and loose, and in better condition for producing larger yields of a better quality. Their system of rotation is better, as well. Also, I believe they take a deeper interest and more pride in their work, because of the better conditions and better means afforded for the exchange of agricultural opinions.

Nipissing, Ont.

G. C.

Death of Dr. Koch.

Readers of "The Farmer's Advocate" have been long familiar with the name of Dr. Robert Koch, chiefly, perhaps, because of his researches in bovine tuberculosis. On May 27th he died at Baden-Baden, Germany, and the world mourns one of its two greatest bacteriologists. He was born in Hanover, in 1843, and in 1876 won his first remarkable scientific triumph in isolating the anthrax bacteria. In 1882 he discovered the tubercular germ, and during the next year the cholera bacillus. In 1885 he became a professor at the University of Berlin, and in the course of his work there produced tuberculin, so valuable in diagnosing incipient cases of tuberculosis. For many years, Dr. Koch has alone opposed all other bacteriologists in his contention that bovine tuberculosis is distinct from human tuberculosis, claiming that no authenticated case was on record where human pulmonary tuberculosis had been traced to a bovine origin. In 1905 he was awarded the Nobel prize in physiology. He was the author of many works on bacteriology.

Crops in Essex.

Crops reached a stage of development far in advance of 1909 during the last week of May. Rye was out in head two weeks past (May 28th). Wheat is beginning to put in an appearance. Barley, although checked by frosts in early part of month, is rapidly recovering. Oats are looking most excellent, and, if nothing unforeseen occurs, should produce a bountiful harvest. Copious showers of past week hindered somewhat corn-planting, but most of it is in the ground at time of writing. Cool weather, while well suited to wheat and oats, is retarding the growth of corn. Tens of thousands of tomatoes and cabbage plants are being placed in ground these days. The Heinz pickling factory is advertising for men to assist in handling prospective crop.

A. E.

Western estimates place the 1910 wheat area of the Canadian Provinces at 8,192,000 acres, distributed as follows: Manitoba, 3,000,000; Saskatchewan, 4,642,000; Alberta, 550,000 acres. The area in Saskatchewan is according to the spring estimates of the Provincial Department of Agriculture, and shows an increase of over half a million acres. The oat area in the Province, however, shows a decrease.

N. S. Government Promoting Underdrainage.

The officials of the Nova Scotia Agricultural College are endeavoring to launch a scheme to encourage the more extensive underdrainage of the farms of that Province. Many of the best farms are already well underdrained, and many other farms do not require an artificial system of drainage, but the vast majority of the arable lands of the Province are sadly in need of systematic underdrainage. Climatically, Nova Scotia is splendidly adapted to a high type of agriculture, and the soils are suited to almost all crops that will grow in any other part of Canada. The one drawback is that, owing to the cold winds which blow in from the Gulf of St. Lawrence, to the north, in the early spring, seeding is delayed some two or three weeks later than, for example, in the Province of Ontario, and while this is partly offset by the more humid conditions of the summer and a long fall season, yet, on wet, heavy lands, it makes the growing season too short for the best development of crops. The need of underdrainage, it will, therefore, appear, is even more urgent than in the inland Provinces.

At the 1910 session of the Legislative Assembly, in Halifax, an act entitled "The Tile, Timber and Drainage Act," was passed, similar to the like act for the Province of Ontario. According to this act, municipalities are empowered to borrow money and to advance it to farmers who purpose underdraining land, on a basis of between 7 per cent. and 8 per cent. per annum, which includes interest and sinking fund which will redeem the debt in a period of twenty years. This means that, for an expenditure of \$8.00 per year for a period of 20 years, farmers can have \$100 worth of drainage on their farms. Those who have had even a very little experience will appreciate the percentage return which may be had from this comparatively small investment; for, with \$100 worth of drainage, it is easily possible to increase the crop-producing power of the land on a given farm anywhere from \$25 to \$100, or more, per year. According to the act, this interest and sinking fund is to be collected along with the ordinary taxes. The act is a good one, but we doubt if at present there is sufficient public sentiment to urge the municipal councils to move in the matter. It is hoped, however, that, as public sentiment grows, this objection will be offset.

As another means to encourage underdrainage, the Agricultural College at Truro has advertised the fact that they will send men to make drainage surveys of farms if it is purposed to underdrain. All that is required of farmers who wish such surveys made is that they pay the travelling expenses and entertain the men while they are engaged in the work.

What is at present, however, proving the most effective means of encouraging underdrainage is the purchase by the College of a traction ditcher, which has been in operation some four weeks or more, giving excellent satisfaction. The College is taking contracts to dig drains with this machine at about one-half the cost of doing the same by hand, with the added advantage of the work being accomplished with quick despatch. The machine is under the management of F. L. Fuller, Superintendent of Agricultural Societies. During the past two weeks this ditcher has been operating in the vicinity of the College, but in a few days it will move to the Stewiacke Valley, where a number of farmers have given contracts for the draining of their land. For the present year, at least, the price of drainage with this machine is made so low that the College will lose money. But, in the classic phrase, "What is our loss is the country's gain." The main idea in view is to get as much land underdrained as possible during the ensuing summer, and thus afford an extensive demonstration of the advantages of the process. Should the College-operated machine prove popular, it is hoped that it will pave the way for private enterprise to take hold of the matter.

Irish Interests Anticipate Removal of Embargo.

F. A. C. Bickerdike, Canadian Trade Commissioner at Belfast, Ireland, in a report to the Department of Trade and Commerce, at Ottawa, says that there is a growing belief in Ireland that the embargo which the British Government imposes on Canadian cattle cannot much longer be maintained, and that its removal is certain to be attended by serious consequences for the Irish cattle trade.

As a consequence of this belief, the establishment of the dead-meat trade is being advocated in both Belfast and Dublin. It is urged that, in addition to putting the Irish cattle trade in a better condition to compete with Canadian cattle, the removal of the embargo being removed, the establishment of a dead-meat trade would mean better prices for cattle, and would give additional employment to the people of Ireland.

An Orchard Survey in Ontario.

The Ontario Department of Agriculture is making an orchard survey in certain fruit sections of the Province, working along much the same lines as the investigations carried on by the States of New York and Oregon, with some changes in the schedules to suit Ontario conditions. The information obtained will be used for special reports on orchard and other occupations in the respective districts. At present, the Department is publishing the results of last year's work. This is expected to prove of considerable value, not only to the growers in the localities surveyed, but to those in all parts of the Province.

In all cases the work is being taken up by townships. The men engaged in the work make a farm-to-farm call, getting in touch with the owner in every case. If he is not at home, they return again at some later date. In addition to obtaining information, they are all men who can give information along certain lines, and are thus able to aid the fruit-grower. The following men are engaged in orchard-survey work this season:

W. H. Robertson is working in Prince Edward County; P. E. French and H. K. Revell in Northumberland County; Vernon King and F. M. Clement in the Niagara District. Mr. Robertson is including in his observations the various canning-factory crops, which are largely grown in Prince Edward County. The two men in the Niagara District are completing the work started last year in the western part of the peninsula. They will, of course, obtain information in respect to all of the fruit crops grown there.

In addition to these five men, survey is being made by Mr. Waddle, of the southern part of Ontario County, which would include the best parts of the orchard country. He is working along somewhat different lines to the other men, as the Department had sent him in there to make a personal visit to the different fruit-growers, with the idea of giving them information about spraying and pruning. He has already conducted a number of demonstrations, and is following this up, as stated above, by visiting each man personally. It was thought that he would be able, incidentally, to obtain information such as is being gathered in these other sections, so he has been supplied with the required schedules.

June Excursions, 1910.

Following is a list of Farmers' Institute excursions to the O. A. C., Guelph, for June, 1910:

Monday, June 6.—C. Wellington, S. Huron, W. and N. Bruce, and N. Grey.

Tuesday, June 7.—N. Wentworth.

Wednesday, June 8.—C. Simcoe, E. Huron, Welland (T. H. B.).

Thursday, June 9.—E. and W. Peterboro and E. Durham; Prince Edward and E. Hastings.

Friday, June 10.—Haldimand, N. and S. Perth, W. Huron.

Saturday, June 11.—Lincoln, Welland.

Monday, June 13.—N. Ontario.

Tuesday, June 14.—W. Middlesex, W. Kent, E. and W. Lambton.

Wednesday, June 15.—E. Elgin, W. York, N. York.

Thursday, June 16.—E. and W. Victoria, S. Norfolk.

Friday, June 17.—S. Gray and E. Wellington, W. Simcoe.

Saturday, June 18.—Halton (C. P. R.).

Monday, June 20.—N. Oxford, W. Wellington, E. Simcoe.

Tuesday, June 21.—Dufferin and E. Wellington, E. Middlesex, N. Middlesex.

Wednesday, June 22.—S. Oxford, N. and S. Brant, S. Ontario, and West Durham.

Thursday, June 23.—N. and S. Waterloo, Peel, Parry Sound.

Friday, June 24.—E. York.

Saturday, June 25.—S. and C. Bruce and Union, C. Grey, Halton (G. T. R.).

Coming Shows.

International Horse Show, at Olympia, London, England, June 6th to 16th.

Royal Society of England, at Liverpool, June 21st to 25th.

Alberta Provincial, at Calgary, June 30th to July 7th.

Highland and Agricultural Society, at Dumfries, July 19th to 22nd.

Winnipeg Industrial Exhibition, July 13th to 23rd.

Brandon, Man., July 25th to 29th.

Canadian National Exhibition, Toronto, August 27th to September 12th.

Toronto Fat-stock Show.

Arrangements are being made for holding a big Fat-stock Show at the Union Stock-yards, Toronto, on December 12th and 13th, 1910. It is understood that very liberal prizes will be offered, some running as high as \$200, which will invite strong competition among the leading feeders and dealers in cattle, sheep, hounds and hogs.

The object of the show is to interest farmers and breeders of live stock generally from a commercial point of view, whereby the producers could reap greatly-increased returns from their efforts, through the production of animals more suitable for the requirements of the butchers and packers, a point which is lost sight of to a great extent.

The King's Plate Winner.

The King's Plate winner at the Woodbine race-course, Toronto, on May 24th, 1910, was the three-year-old bay gelding, Parmer, from the Valley Farm Stables of Hon. J. S. Hendrie and his brother William, at Hamilton, Ont. Parmer was bred by Joseph James, Windsor, Ont. His sire was The Commoner, and his dam, Placena, is a daughter of Loyalist, son of Sterling. Parmer, and also Commola, the second horse in this year's King's Plate race, were purchased as yearlings, together with their dams, by the Messrs. Hendrie. Ten horses started in the race, distance a mile and a quarter. Time, 2.12 2-5, track slow. Value to first horse, \$3,090, and the fifty guineas; second, \$700; third, \$300.

The report that a combine to force up prices exists in the wholesale meat trade of Toronto is denied by the wholesale butchers. They say that increased prices are but the working out of the law of supply and demand. They have agreed, however, to cease giving to retailers perquisites, such as heart, liver, tail, etc., free, and to allow a pound tare on every quarter of beef, as has until now been the custom in Toronto. There is no reason, they say, why concessions such as these should be given in Toronto, when they are not allowed in other places.

British Columbia is said to conduct the most rigid inspection of imported fruit trees of any country in the world. It is said that, owing to this, the Province is practically immune from injurious orchard pests. No trace of codling moth or San Jose scale was to be found on careful inspection in the Okanagan and Kootenay districts recently. A bonfire of 30,000 insect-infested trees from European and American nurseries was held last week in Vancouver by the Provincial Fruit Inspector.

Prof. B. E. Fernow, Dean of the Faculty of Forestry, Toronto University, accompanied by two members of the faculty and three students, has gone to complete the work of forest survey of Nova Scotia, begun last year. Dr. Fernow was employed by the Nova Scotia Government to have this work done, and last year the western half of the Province was surveyed. It is expected that this year the survey of the eastern half, including Cape Breton, will be completed.

Owing to the engagements of the Prime Minister, Hon. W. S. Fielding, and other members of the Cabinet, who will be absent from Ottawa the greater part of the summer, the opening up of tariff negotiations between United States and Canada, on the invitation of President Taft, has been deferred until September. Negotiations looking to reciprocal trade arrangements between Canada and the European countries of Belgium and Italy are under way.

Wm. Whyte, second vice-president of the C. P. R., thinks that Western farmers should engage in winter fattening of cattle and the production of hogs. At present prices of meat, he says, poor-grade or damaged wheat could be made worth more if fed to animals than is got for the best grades, and profitable winter employment would be furnished.

Production of apples in the United States is becoming less, in proportion to consumption, each year, according to statistics gathered by commercial organizations. The crop of 1909 amounted to but 23,000,000 barrels—little more than a third of the crops of 1896 and 1900.

From Winnipeg to Edmonton by water is now said to be a possibility. A survey of the route via North Saskatchewan River and Lake Winnipeg is ordered by the Ottawa Government. Prospects for a six or eight-foot waterway, at low cost, are said to be good.

It is reported that a young farmer of Ontario Co., Ont., Frank H. Westney, rigged up a gasoline engine to take the place of one team on a plow. The cost for gasoline was about 30 cents per day.

Toronto, Ont. 22 July

No. 108

Keep a Checking Account

Put your private expenditures on a business basis, and pay your bills by cheques on the Traders Bank.

Then you are never short of cash to make a payment demanded unexpectedly. Nor do you need to bother with receipts—your cheques provide them automatically.

There's a prestige, too, in paying by cheque, that is well worth while.

THE TRADERS BANK OF CANADA

Capital and Surplus \$6,550,000

MARKETS.

Toronto.

LIVE STOCK.

At West Toronto, on Monday, May 30th, receipts comprised 108 cars, consisting of 2,363 cattle, 70 sheep, 96 calves, 18 horses. The quality of the cattle was good; trade active; prices a little firmer. Exporters were \$6.60 to \$7.40; bulls, \$6 to \$6.25; prime butchers', \$6.70 to \$6.90; good, \$6.40 to \$6.75; medium, \$6 to \$6.30; common, \$5.25 to \$5.80; cows, \$4 to \$6; milkers, \$4 to \$6.5; Sheep—\$4.50 to \$5.25 per cwt. for ewes; rams, \$4 to \$4.50; spring lambs, \$3.50 to \$6.50 each. Hogs—Unchanged, but easy, at \$9.85, fed and watered, and \$9.50, f. o. b. cars at country points. No distillery-fed cattle.

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

	City.	Union.	Total.
Cars	176	214	390
Cattle	1,969	3,838	5,807
Hogs	5,692	2,155	7,847
Sheep	758	70	828
Calves	647	310	957
Horses	6	59	65

The total receipts for both these yards for the corresponding week of 1909 were:

	City.	Union.	Total.
Cars	204	133	337
Cattle	3,069	2,389	5,458
Hogs	3,287	966	4,253
Sheep	784	143	927
Calves	726	154	880
Horses	5	122	127

The above figures show a total increase of the combined receipts of the City and Union yards, compared with the corresponding week of 1909, of 53 cars, 3,660 hogs, 77 calves, but a decrease of 551 cattle, 99 sheep and 92 horses.

At the City yards, there was a decrease of 28 carloads, 2,000 cattle, 26 sheep, 79 calves, but an increase of 2,405 hogs and 1 horse, in comparison with same week last year. This week's receipts of cattle, total 5,807, against 6,968 last week, and 6,358 a year ago.

REVIEW OF LAST WEEK'S MARKET.

Last week's receipts, while large, were not up to the previous week, although there was a larger run than many of the dealers were looking for. Should these heavy receipts continue, prices will surely decline. Prices for the past week were steady to firm, for good to choice exporters, but medium to common exporters were about 10c. per cwt. lower. The top for export steers was same as last week, \$7.55, which was for distillery-fed cattle, and \$7.35 was again the top for farmer-fed steers. Butcher cattle on Monday at the Union yards were firm, but since that day the market for them at both the City and Junction has been dull and draggy, although prices were not depreciated notably, but there was a decidedly indifferent feeling amongst the buyers in comparison with two or three weeks ago. The tendency of the trade was downward, and as the grassers are due soon, buyers expect to lower the common and medium kinds very materially. The prime picked cattle for butchers' purposes did not reach the \$7 mark last week, \$6.85 being about the top for this class. Some very choice heifers sold last week for export at \$6.75, such as would be classed in the prime-quality butchers' class.

Exporters.—Export steers sold from \$6.30 to \$7.55; export bulls, \$5.50 to \$6.25; export heifers, \$6.50 to \$6.85.

Butchers.—Prime quality cattle sold at \$6.50 to \$6.85; medium to good, \$6 to \$6.40; common, \$5.50 to \$5.90; cows, \$3.50 to \$6.20.

Feeders.—Several farmers bought quite a number of steers, 940 to 1,250 lbs., for short-keep purposes, at \$5.75 to \$6.75. These farmers seem to have faith in the future as regards cattle prices. Stockers were steady, at previous prices.

Milkers and Springers.—Receipts about equal to demand. Prices steady, at \$35 to \$65, with a very few reaching \$70 to \$75.

Veal Calves.—Receipts moderate; prices steady, at \$3 to \$7 per cwt.

Sheep and Lambs.—Receipts light; prices steady. Ewes, \$5 to \$5.50; spring lambs, \$4 to \$7 each.

Hogs.—Selects, fed and watered, \$9.85, and \$9.50, f. o. b. cars at country points.

Horses.—J. H. Smith, of the Union Horse Exchange, West Toronto, reports that the horse market has been very quiet, owing largely to the holiday, and many of the horsemen being at the races. Receipts were very light, and prices unchanged from those given in our last letter.

BREADSTUFFS.

Wheat.—No. 2 white or mixed, 99c. to \$1, outside. Manitoba—No. 1 northern, \$1.004; No. 2 northern, 98½c., at lake ports. Peas—No. 2, 70c. to 71c. Rye—No. 2, 67c. to 68c. Buckwheat—No. 2, 51c. Barley—No. 2, 51c. to 52c.; No. 3 extra, 49c. to 50c.; No. 3, 46c. to 47c., outside. Corn—American No. 2 kiln-dried yellow, 68½c.; No. 3 kiln-dried, 67½c.; No. 3 yellow, 67c.; Canadian, 61c. to 62c., Toronto freights. Oats—No. 2 white, 33c. to 34c., outside. No. 3 white, 32c. to 33c., outside, and 30c., on track. Toronto. Flour—Ninety per cent. Ontario wheat patents, for export, \$3.75 to \$3.80, in buyers' bags, outside. Manitoba flour prices, at Toronto—First patents, \$5.50; second patents, \$5; strong bakers', \$4.80.

HAY AND MILLFEED.

Hay.—Baled, in ear lots, at Toronto, No. 1, \$15; No. 2, \$11.

Straw.—Baled, in ear lots, at Toronto, \$2.50 to \$8.

Brass.—Car lots, at Toronto, \$20 per ton, and shorts, \$22 per ton.

HIDES AND WOOL.

F. T. Carter & Co., 85 East Front street, have been paying the following prices: No. 1 inspected steers and cows, 12½c.; No. 2 inspected steers and cows, 11½c.; No. 3 inspected steers, cows and bulls, 10½c.; country hides, 10c. to 10½c.; calf skins, 15c. to 15½c.; horse hides, No. 1, \$3.00; horse hair, per lb., 32c.; tallow, per lb., 5½c. to 6c.; sheep skins, \$1 to \$1.20 each; wool unwashed, coarse, 13c.; wool unwashed, fine, 14c.; wool washed, combing, 20c.; wool washed, clothing, 22c.; rejections, 15c.

COUNTRY PRODUCE.

Butter.—Receipts have been large and are increasing every day, which has caused a much cooler feeling. Creamery

pound rolls, 24c. to 25c.; creamery solids, 23c.; separator dairy, 22c. to 23c.; store lots, 19c. to 21c.

Eggs.—Receipts continue large; prices easy, at 20c. to 21c.

Cheese.—Receipts of new have been large, with prices easy, at 12c. for large, and 12½c. for twins.

Honey.—Extracted, 10½c.; combs, per dozen sections, \$2.25 to \$3.

Beans.—Market quiet. Prices unchanged, at \$2 to \$2.10 for primes, and \$2.10 to \$2.20 for hand-picked.

Potatoes.—Ontario potatoes lower; car lots, on track at Toronto, 25c. to 30c. per bag, and New Brunswick Delawares unchanged, at 43c. to 45c. per bag.

FRUITS AND VEGETABLES.

Strawberries, case lots, 14c. to 15c. per quart; potatoes, new, per barrel, \$6; onions, per sack, \$2.50 to \$2.75; cabbage, per crate, \$2.50 to \$2.75.

Montreal.

Live Stock.—Shipments of cattle from the port of Montreal for the week ending May 21, amounted to 2,501 head. The local market was favorable, from the standpoint of sellers, and prices were firm, receipts being limited. Sales of choice stock were made at 7½c. to 7½c. per lb., fine being about 7c., good selling at 6½c. to 6½c.; medium 5½c. to 6c., and common 4½c. to 5½c. Bulls sold at 5½c. to 6½c. per lb., according to quality. There seems to be very little demand for sheep for export, the result being a decline in prices here. Yearlings sold at 6c. per lb., and old sheep at 5c. to 5½c. per lb. Spring lambs sold at \$4 to \$6 or \$7 each, being, if anything, on the easy side, also. Offerings of calves were lighter, and, as a consequence, buyers had to pay slightly advanced prices, the range being from \$5 to \$10 each for good stock. The market for hogs experienced a further advance. Selects sold at 10½c. to 10½c. per lb. A good many buyers had contracted ahead, so that competition was not specially keen, notwithstanding the smaller offerings.

Horses.—Heavy draft horses, 1,500 to 1,700 lbs., \$250 to \$300 each; light draft, 1,400 to 1,500 lbs., \$200 to \$250 each; light horses, weighing 1,000 to 1,100 lbs., \$100 to \$175 each; inferior, broken-down horses, \$50 to \$100 each, and choice saddle or carriage animals, \$350 to \$500 each.

Dressed Hogs.—14½c. to 14½c. per lb., for fresh-killed, abattoir-dressed stock.

Potatoes.—It is reported here that there is now an outlet for potatoes, through the port of St. John, N. B., for Cuba, and that a steamer has been loading there for the destination mentioned. Carloads were changing hands here, on track, at about 40c. per 90 lbs., and smaller lots are bringing 50c., or even 55c.

Eggs.—Merchants declared that they were making purchases at lower figures than before, one reporting that he was buying at 17½c. to 18c., country points. These were selling at 19½c. to probably 20c. per dozen. Shorts, 22c.; some choice might bring 21c. A very good turnover.

Butter.—The butter arriving now is all-grass, and of excellent quality. The markets in the Townships ranged from 23½c. to 23½c. per lb., yet merchants reported that they experienced difficulty in making sales at 21c., wholesale, here. The range is from 23c. to 24c., according to quality. There are no shipments to the Old Country, but it is said that Americans have been buying a large quantity of cream. The make of butter, however, continues ample.

Cheese.—Quebec makes were quoted at 11c. here, Townships being 11½c., and Ontarios 11½c. to 11½c., white being most desired. Exports were 60,500 boxes, decrease of 6,000 as compared with the corresponding period of last year. Monday's quotations reported prices down a quarter cent to 10½c. for Quebecs, 11c. for Townships, and 11c. to 11½c. for Ontarios.

Grain.—Although some are quoting rather higher prices on oats, a dealer offered to sell any quantity of No. 2 Canadian Western at 37c. to 37½c., here, and No. 3 at 1c. less. No. 2 white were quoted at 37c., No. 3 at 36c., and No. 4 at 35c. store. No. 3 barley, 56½c.; No. 4, 55c., and feed, 54c. per bushel.

Flour.—The market for flour steady, at

\$5.60 per barrel for Manitoba first patents, \$5.10 for seconds, and \$4.90 for strong bakers. Ontario flour, \$5.25 to \$5.35 for patents, and \$4.90 to \$5 for straight rollers.

Feed.—Prices are steady, at \$18.50 per ton for Manitoba bran, in bags; \$21 to \$22 for shorts; \$19 to \$19.50 for Ontario bran; \$22 to \$23 for middlings, \$32 to \$33 for pure grain mouille, and \$25 to \$28 for mixed, cotton-seed meal being quoted at \$35 to \$40.

Hay.—Market about steady, at \$15 to \$15.50 per ton for No. 1 hay; \$14 to \$14.50 for No. 2 extra; \$12 to \$12.50 for No. 2; \$11.50 to \$12 for clover mixed, and \$10.50 to \$11.50 for clover.

Hides.—There was a slight advance in the price of lamb skins to 20c. each, the range being 15c. to 20c. Other lines were steady, hides being 10c. per lb. for unspined; 11c., 12c. and 13c. for Nos. 3, 2 and 1, respectively; 14c. and 16c., respectively, for Nos. 2 and 1 calfskins, horse hides, \$1.75 and \$2.50 each for Nos. 2 and 1, respectively, while rough tallow was 1½c. to 5c. per lb., and rendered 5c. to 6c. per lb.

Cheese Markets.

Woodstock, Ont., 10½c. bid. Madoc, Ont., 10 13-16c. bid. Winchester, Ont., 10½c. bid. Alexandria, Ont., 10½c. bid. Belleville, Ont., 10 13-16c. and 10½c. Brockville, Ont., 10½c. Kingston, Ont., 10½c. Victoriaville, Que., 10½c. Cornwall, Ont., white, 10½c.; colored, 10 3-16c. Iroquois, Ont., colored, 10½c.; white, 10½c. Perth, Ont., 10½c. Brantford, Ont., 10 9-16c. and 10½c. Ottawa, Ont., 10½c. Napanea, Ont., 10½c. and 10 15-16c. Picton, Ont., 10 13-16c. Chicago, Ill., dairies, 14½c. to 15c.; twins, 11c. to 14½c.; young Americans, 15c. to 15½c.; longhorns, 14½c. to 15c. Cowansville, Que., 10½c.; butter, 23½c. St. Hyacinthe, Que., tub butter, 22½c. to 23½c.; cheese, 10½c. Brantford, Ont., 10 9-16c. to 10½c. London, Ont., 10½c. to 10½c. bid. no sales. Elgin, Ill., butter, 28c.

Buffalo.

Cattle.—Prime steers, \$8 to \$8.60, shipping, \$7 to \$7.85; butchers', \$5.50 to \$7.75; heifers, \$5 to \$7.25; cows, \$3.25 to \$6.75; bulls, \$5 to \$6.75; stockers and feeders, \$4.75 to \$5.85; stock heifers, \$4.25 to \$4.50; fresh cows and springers, \$27 to \$68.

Veals—\$6 to \$9.

Hogs.—Heavy and mixed, \$9.75 to \$9.80; Yorkers, \$9.75 to \$9.85; pigs, \$9.80 to \$9.85; roughs, \$8.65 to \$8.85; stags, \$7.50 to \$8; dairies, \$9.50 to \$9.75.

Sheep and Lambs.—Yearlings, \$6 to \$6.50; wethers, \$4.75 to \$5; sheep, mixed, \$3 to \$4.75.

Chicago.

Cattle.—Steers, \$6.25 to \$8.60; cows, \$4.50 to \$6.50; heifers, \$4.25 to \$6.75; bulls, \$4.50 to \$4.90; calves, \$3 to \$8.35; stockers and feeders, \$4.75 to \$6.50.

Hogs.—Choice heavy, \$9.50 to \$9.60; butchers', \$9.55 to \$9.624; light mixed, \$9.50 to \$9.55; choice light, \$9.55 to \$9.60; packing, \$9.50 to \$9.55; pigs, \$9 to \$9.50; bulk of sales, \$9.50 to \$9.60.

Sheep and Lambs.—Sheep, \$4.25 to \$5.40; yearlings, \$6 to \$7; lambs, \$7 to \$8.75; spring lambs, \$8.75 to \$9.50.

British Cattle Markets.

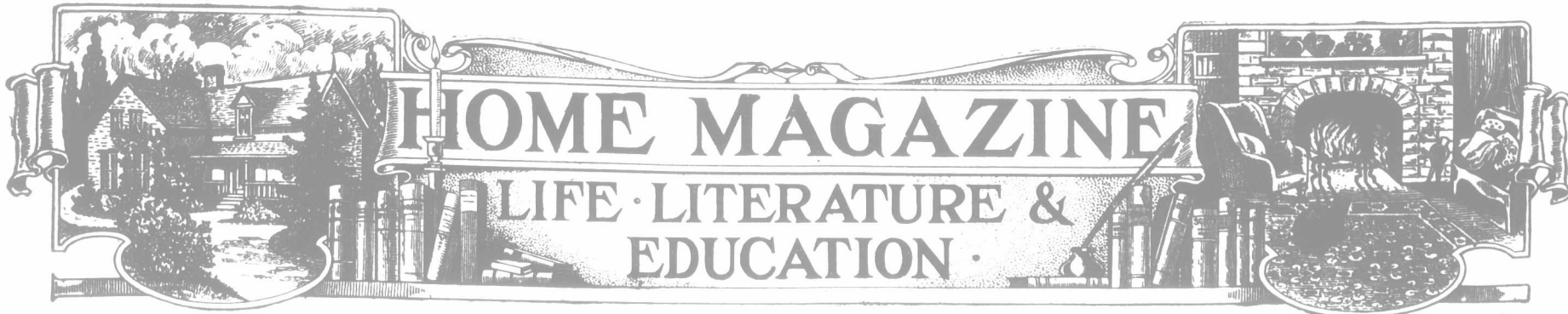
London and Liverpool cables quote live cattle (American) steady, at 11c. to 15c., dressed weight; refrigerator beef, steady, at 11c. to 11½c. per pound.

The wife of a literary man of the Indiana school, who had taken up chicken-raising as a side issue, was telling of the poor success she had with a brood of 11 chickens. They seemed to be doing all right for a few days, she said, and then, one after another, they all died in the coop.

"What did you feed them?" asked the wife of a farmer neighbor.

"Feed them?" exclaimed the author's helpmate. "I didn't feed them; I thought a healthy young pullet like that should have milk enough for her chicks."

At
in Lo
was l
that
beari
the l
his r
warm
ficient
speak
Germ
willin
inent
ing.
Sho
fact,
cernin
Presid
surpri
Edwa
especi
spons
an en
forces
appea
time
gard
sovere
has be
his po
Colon
Presid
little
the m
strain
Roose
himse
deeme
capite
And
has be
a mat
xious
place
nation
land.
mion
emper
he de
prove
of all
Poss
revele
ideal
change
tude t
rior v
great
promo
human
deeme
sit in
simply
others
time 2
helm,
his he
rather
Alro
still q
The
strike
in an
As a
to ran
Kingd
Two
manag
vate u
nion



At a meeting of the Peace Society in London, England, on May 24th, it was proposed by Sir William Mather that a world-wide peace movement, bearing the name of King Edward, the Peacemaker, be inaugurated in his memory. The proposal was warmly endorsed, and it was sufficiently striking that subsequent speakers expressed a belief that the German Emperor is now not only willing, but anxious, to take a prominent part in just such an undertaking.

Should this belief prove founded on fact, it will again appear that concerning a ruler, whether King or President, surprises need never be surprising. As Prince of Wales, Edward VII. for long enough was not especially promising. It took the responsibilities of position as head of an empire to develop in him latent forces which might otherwise have appeared non-existent. For some time there have been doubts in regard to King George, yet, now that sovereignty has come to him, and he has been able in some sort to define his position, there is a growing opinion that he may make good. When Colonel Roosevelt was called to the Presidential Chair, there was not a little uneasiness lest the Roughrider, the man of war, might precipitate strained relations with other nations. Roosevelt the President so conducted himself that he, of all the world, was deemed most worthy to be the recipient of the Nobel Peace prize.

And now, Emperor William? He has been popularly held an autocrat, a man of tremendous ambitions, anxious for aggrandizement, willing to place his foot upon the neck of any nation, most of all upon that of England, if Germany might grow in dominion and power. True, he has been emperor for two decades, but need it be deemed a miracle if he, too, should prove a paradox, acting in defiance of all seeming?

Possibly the explanation of such revelations lies in the fact that the ideals of the civilized world have changed. It has become a mere platitude to note that, whereas the warrior was once the hero, to-day the great man is he who does most to promote and secure the well-being of humankind. Then, why need it be deemed passing strange if those who sit in high places should prove to be simply human, respondent, as are others, to the heroic principle of the time? Why incredible, if even Wilhelm, the Kaiser, should choose as his hero Edward the Peacemaker, rather than William the Conqueror?

The Windrow.

Alfred Noyes is now being acclaimed as the first of living poets. He is still quite young.

The French mint is preparing to strike a whole series of minor coins in an alloy of aluminum.

As a shot, King George is believed to rank second only in the United Kingdom.—(Daily Mail (Eng.))

Two prizes for small and easily-managed aeroplanes, suitable for private use, are offered by the French National Aerial League.

The Eiffel tower of Paris, 1,000 feet high, is at last becoming more useful than ornamental. It is being metamorphosed into the largest wireless-telegraphy station ever set up.

A motor-car, specially designed for travelling over polar snow-fields, has been constructed at Birmingham, Eng., for the use of Captain Scott during his Antarctic exploration trip.

At a recent sale of the Yerkes art collection, in New York, forty-three paintings brought \$769,200. Turner's "Rockets and Blue Lights" sold for \$129,000; Troyon's "Going to Market" for \$60,500. The rest of the top prizes went to the artists of the Barbizon school, Corot's "Fisher-man" going for \$80,500, and his "Morning" for \$52,100; Millet's "The Pig-killers" for \$44,100, and Diaz's "Gathering Fagots" for \$30,100. During the lives of the artists these pictures sold for a comparative pittance.

Mr. Earl Cressy, writing in a Baptist journal, recognizes that the theatre is here to stay, but sets forth that it may be so influenced by the church as to render it a benefaction to humankind, instead of, as it now too often is, a hindrance to highest humanity. "The church," he says, "can furnish the sort of public sentiment and ethical judgment which the theatre needs for its renovation." Censorship, and subsidized national and municipal theatres will, he thinks, provide the way for the elevation of the theatre to the plane which it should occupy.

It is perhaps not generally known in Canada that "The Learned Blacksmith," Mr. Elihu Burritt, who, as the old readers used to tell us, learned eleven languages while going to and fro from work in his shop, and in all a reading knowledge of 50 languages, was one of the foremost world-apostles of peace in his time, and that he organized the first International Peace Congress in Brussels, Belgium, in 1848. The centenary of his birth was celebrated recently in the little city of New Britain, Conn., in which he was born. "Above all Nations is Humanity," was his motto.

Mr. Clement Shorter, writing of the recent Shakespearian "find" of Prof. Wallace, of Nebraska University, in London "Sphere," says that the precious parchments consist of four skins fastened together with thongs. There are twenty-six documents in regard to the Mountjoy case, nine of which mention Shakespeare by name, the most valued of all, of course, being the document to which he attached his name. Before coming upon these manuscripts, Professor Wallace examined a great number of rolls which had not been disturbed for 300 years, some of them fastened by the original hemp, which fell to pieces in his hands. Professor Wallace believes that Shakespeare lived in the house of the Mountjoys for a considerable time, but this view has been somewhat called into question.

A remarkable book of reproductions from photos taken in Africa by Mr. A. Radclyffe Dugmore, the noted "wild-life" photographer, has recently been published under the name of "Camera Adventures in the African Wilds." In taking the photos, Mr. Dugmore and his companion kept tedious vigils in trees and by water-tedious places, and yet more dangerous ones under the frail shelter of a thorn

but placed within twelve yards of a lion-bait. When the great animals came within satisfactory range, a flash was ignited, and the shutters of a series of cameras set in motion by an electric button. Upon one occasion he snapped a picture of a rhinoceros which was in full charge upon him, and then shot it dead. All together, the volume is a unique production, and will likely attain an extensive sale, notwithstanding the fact that the price had been placed at \$6.

Our English Letter.

XIII.

A NATION'S SORROW AND A NATION'S HOPE.

At the moment at which I write all hearts are being linked together as with an electric thrill, in a fellowship of pain and sympathy. Death within the last few days has visited palace and cottage alike, for this also is the week of the terrible catastrophe of the Whitehaven mine, under the sea, which has left so many women widowed, and so many children fatherless. You will have already read the message of sympathetic condolence from the Royal Widow in the palace to the stricken widows in the cottages at Whitehaven. "Let them know at once," telegraphs Queen Alexandra, "that even in my own crushing grief, my heart bleeds for them." Flashed also across the wires, will have reached you the touching message to the nation of the Queen Mother's gratitude for the boundless sympathy poured out upon her by rich and poor alike, sharers in her "overwhelming sorrow and unspeakable anguish," words uttered, as she tells them, "from the depth of my poor broken heart."

Since the passing away of King Edward VII., than whom no sovereign was every more sincerely mourned, what he has been to his country in his all too brief a reign, has been told in hundreds of eulogies. There has been no distinction of creed or class in the homage paid to the illustrious dead. The tributes in Parliament bore the stamp of deep personal feeling, and they came from statesmen who had learned to know him not only as King, but as man. All alike bore testimony to the wonderful power of our late King's personality, his keen sense of responsibility, and the utter unselfishness which was the rule of his life. The outward and visible signs of a nation's sorrow are to be seen everywhere. Flags half-masted, half-darkened windows, the sombre hues of black and royal purple in drappings, the poor in their poverty being as eager to wear "something black," if only a tie or a ribbon, or band of black cloth over the frayed sleeve of a much-worn jacket. It is a mourning not dictated by mere fashion or custom, but a mourning which is the outcome of reverent sorrow too deep for thoughts of mere utility or convention. Not "crape on the head only, but crape in the heart"; a "welling up," as one of our Bristol papers aptly puts it, "of genuine human feeling, in which no great gulf

is fixed between King and people. While such relations exist, the throne of this island, and of the world-wide Empire of Great Britain will stand square and firm against the most insidious attacks." Another writer, somewhat in the same strain, says: "This spectacle of a people in mourning, united not only by the touch of human feeling, but by the emotion of loyalty to its glorious dynasty, and by the sense of a common destiny in national life, has in it something that moves the heart like the waves of a sublime anthem."

Whilst mourning deeply for the king we have lost, there is, running through this sense of a national calamity, also a realization that the golden thread of continuity remains unbroken. The sceptre which passed from mother to son, but passes again from father to son, and with it, not only also its national obligations and hereditary traditions, but the valuable lessons learned by the experiences of the past. Therefore, there is nothing disloyal to King Edward, however it may sound as a somewhat discordant note in this symphony of a nation's sorrow, when, in effect, and almost as in the same breath, is uttered the cry, "The King is dead! Long live the King!" It is in this spirit that the nation will listen to, and not easily forget, the simple appeal of the Queen Mother, that the new King shall receive as his inheritance the trust and affection accorded to his father.

It is the cultivation of this spirit of loyalty to the Throne that the bringing together of the children to hear the proclamation of the accession of King George V. has been made a feature throughout the breadth and length of the land, and here in Bristol, a special service, which these young subjects of the new King are not likely ever to forget, was conducted in 220 departments, in the presence of 60,000 children, the programme consisting of the hymn, "O God, Our Help in Ages Past"; the reading of Scripture; a prayer of thankfulness for "our wise ruler and beloved King Edward VII.," and asking compassionate consolation to Queen Alexandra and the King and Queen and all members of the Royal Family in their sore bereavement. Then followed the hymn, "God of Pity, God of Grace," and the reading of Psalms, etc., by the Head Teacher, who then read the Proclamation. The service concluded with the prayers for the King's Majesty and for the Queen and Royal Family from the Book of Common Prayer; and the singing of the National Anthem.

I feel sure that some such a service will already have been held in our own Canadian schools.

Happily, the new reign bids fair to continue the brightest traditions of the rule of Queen Victoria and Edward VII. Already, George V., whose accession has been duly and officially proclaimed throughout England, has gained much of the affection and a great deal of the respect of his people. His first public utterances have been tactful and sensible, "couched in words of manly and kingly sincerity." He knows that in this double burden of filial sorrow and pressing State duties, he has the sympathy of his subjects, and this of itself will give him added strength to bear bravely responsibilities which might otherwise be almost overwhelming to a man less manly, or to a king less kingly.

H. A. B.

Hope's Quiet Hour.

Why People Do Not Attend Church.

Dear Hope,—I have read the letters concerning the above, and have been very much interested in the topic. People say, "Well, I think I can stay at home and read the Bible, and be just as good as the man that goes to church." Nine times out of ten, the man that says that doesn't read the Bible, he reads something else, or some other work takes up his time. It's only one of his excuses. That man is starving his soul; some day he will wake up and be hungry for his old love for God; he will wonder where it has gone. He is quenching the Spirit. God says: "My Spirit will not always strive with man." Not long ago, I heard of a man who, in a series of special services, night after night, was almost persuaded to make a stand for Christ; but the night he had the hardest struggle, he refused again. The following night, on invitation to try again, he said, "I don't want to go now. Nothing within me says 'Go!'" When we work six days in the week, surely we can take one day for Christ.

"But," you say, "we don't have time on weekdays for picnics and sports or pleasure of any kind, we are so tired on Saturday night we don't feel like going to church on Sunday." How much more rested will you feel on Sunday night with all the pleasure you had during the day? Did it rest you any? Did it renew your strength for work on Monday morning? If it did, keep right on; no one will try to hinder you. If anything would be a pleasure, I think it would be to go to church and get something from GOD that would renew our strength, both bodily and spiritually, for the coming week's work. It would help us on our way; we could think about it during the week.

Life is too short to go through carelessly, for eternity comes after; do we wish to have life eternal or death eternal?

I thank you very much for space for these few blundering remarks.

One thing more before I close, and that is, I do enjoy the "Quiet Hour." I'm sure it helps everyone that reads it.

A READER.

To-day if Ye Will Hear His Voice.

The Holy Ghost saith, To-day if ye will hear His Voice, harden not your hearts . . . take heed, brethren, lest there be in any of you an evil heart of unbelief, in departing from the Living God. But exhort one another daily, while it is called To-day; lest any of you be hardened through the deceitfulness of sin.—Heb. iii: 7-13.

"A Reader"—in the letter given above—has drawn attention to the fact that carelessness about sacred things can do deadly work in the soul of man. It seems such a little sin to neglect God's offered gifts of forgiveness for "confessed" sins, power gained through conscious fellowship with Him, spiritual food to be obtained from prayer, Bible-reading, sacraments, and other means of grace. It is such a common sin, and men are apt to shelter themselves by the excuse that nearly everybody is more enthusiastic and energetic in his pursuit of worldly advantages than of spiritual. But is it any real satisfaction to one who is in a slow "decline" to know that there are other sick people in the world? It is a matter of tremendous importance to me to have my soul, even more than my body, strong and vigorous. The most disastrous failure would be to gain the whole world and lose one's own soul. It would be as terrible a mockery as to be dying of starvation and thirst in a desert, surrounded by piles of gold and diamonds. The body can't be nourished by money. Misers sometimes die of starvation, clutching useless gold. And—as our correspondent points out—many people are allowing their highest selves to be slowly starved.

The prophet Amos sound a note of warning: "Behold, the day cometh, saith the Lord GOD, that I will send a famine in the land, not a famine of bread, nor a thirst for water, but of hearing the words of

the Lord; and they shall wander from sea to sea, and from the north even to the east, they shall run to and fro to seek the word of the LORD, and shall not find it." He says—and let us heed the warning—they shall seek all over the world that they may hear the word of the Lord and "Shall Not Find It!"

One reason people are so careless about spiritual privileges is because they fancy they can put out a hand to grasp them at any moment. They intend to climb nearer to God some day—but "there is no particular hurry!" So many things are pressing, and God is kind and forgiving. He will accept them any moment when they can find time to go and claim His help. That is the way many people act when an insidious disease is slowly taking hold of their bodies. Treatment by a skillful doctor can set the matter right—but "there is no hurry!" How often a doctor will say: "If you had only come to me before! Now it is too late; the disease has been neglected until there is no chance of a cure."

Are you listening for God's Voice To-day? If not, then you are slowly but surely hardening your heart. You are not as easy a case for the Good Physician to cure as you were a year ago. In a year more—if you pay no attention to His advice—a complete cure will be still more difficult. Indifference about invisible realities—which seems such a trifling neglect—is a slow soul-paralysis. Perhaps one who is too indifferent—or too busy with work or pleasure—to lift up his eyes to seek the Face of God, may find that his unused power of vision has died from lack of exercise. He may seek God and not be able to see Him; may listen for His Voice and find that his

garden in which He has placed us—the work or pleasure of everyday life.

Remember that it is utter folly to say, "I want my wife and children to go to church"; and then stay at home yourself. Indifference is not only a slow poison—it is very contagious. The influence of personality is bound to tell. People are always influenced by character rather than by words. As Emerson forcibly remarks: "How can I hear what you say when what you are is thundering in my ears."

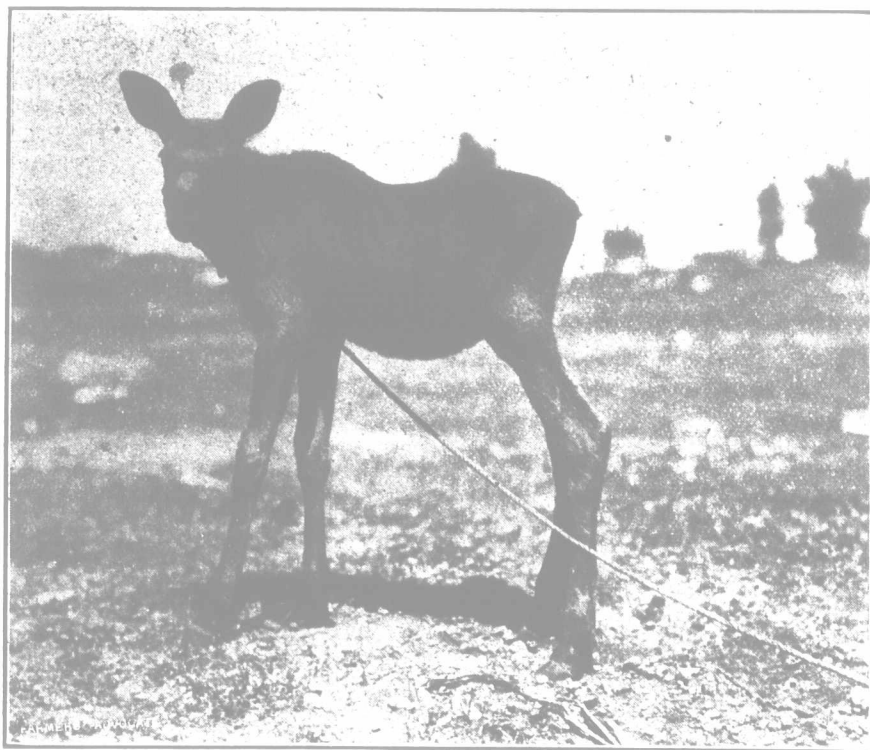
DORA FARNCOMB.

The Beaver Circle.

[All children in second and fourth books, will write for the Junior Beavers' Department. Those in third and fourth books, also those who have left school, or are in High School, between the ages of 11 and 15, inclusive, will write for Senior Beavers'. Kindly state book at school, or age, if you have left school, in each letter sent to the Beaver Circle.]

A Competition.

"Our next competition will be on drawing, subject, 'A Day in June.' Each picture must have 'life' in it, the girls to draw girls, the boys to draw boys. For example, a girl might draw a picture of girls in sunbonnets picking ox-eye daisies, while a boy might draw boys fishing. However, I leave the treatment of the subject to you. All drawings must, of course, be original—not copied from books. Now, get your friends to pose for you, and see what you can do.



A Baby Moose, Manitoulin Island. Have any of our Beavers ever seen a moose?

spiritual hearing has gone. Or—worse condition still—he may find that his spiritual hunger has completely died out. He cares only about earthly things. He gains no forgiveness and no help, because he does not want them.

There is a legion of a saint who had a vision in which he saw Satan standing before the Throne. The evil spirit said to God: "Why hast Thou condemned me, who have offended Thee but once, whilst Thou savest thousands of men who have offended Thee many times?"

The stern, unanswerable reply he received was: "Hast thou once asked pardon of me?" God is pledged to forgive to the uttermost all sinners who plead the merits of the Great Sacrifice offered for the sins of the whole world—penitent sinners who hate their sins and are struggling after holiness. Do you care? Are you honestly looking for help?

Let us listen for His Voice "while it is called To-day." Lest we be slowly hardened by the deceitfulness of sinful lukewarmness, until we do not even wish to hear, but try like Adam to hide from our Father among the trees of the

Junior Beavers—Draw either your favorite doll, or your gardening tools.

All drawings must be sent in within two weeks of the date of this paper.

Address: Puck, Beaver Circle, "Farmer's Advocate," London, Ont.

Bands of Mercy.

Would not some of our Beavers like to start Bands of Mercy; or, rather, might not the Nature Study Clubs all be Bands of Mercy Clubs also? There are hundreds of such clubs in the United States, why not in Canada?

The following, from "Our Dumb Animals" magazine, will show you the spirit that Bands of Mercy boys and girls possess:

A short time ago, as I was crossing a street, a boy not over ten years old, who had been walking just before me, ran into the street and picked up a broken glass pitcher. I was much surprised when he tossed the pieces into a vacant lot at the corner, and walked quietly on. As he passed me, whistling, I said: "Why did you pick up that broken pitcher?"

"I was afraid it might cut some horse's foot," he replied.

My next question was a natural one: "Are you a Band of Mercy boy?"

He smiled as he said: "O yes; that's why I did it."

The bands of mercy were drawn very closely around the dear little fellow's heart, I am sure.

Composition on Spring.

Dear Puck,—Nature is awaking. The grass is springing green in the fields under the meadow larks' tread. Even the hardened creature of the doorstep, the English sparrow, is touched by a wave of spring feeling, and many may be seen laboriously flying to the trees with straws and rags two or three times as long as themselves. We have evergreens by our home, and here is the place for sparrows.

The air is sweet with the perfume of the crab-apple blossoms from the orchard. Numberless wild flowers are to be found growing in the woods, or the beautiful little violet may be picked up anywhere by the roadside.

As I sit by my window writing to you, I am reminded of our garden luxuries, as the smell of the lilac and flowering currant is wafted into my room. The fields are covered far and near with grain. This is all green, and certainly all colors of green. The clover is not in bloom yet, and I was just thinking if you wanted to realize the beauties of the country you ought to come and make me a visit when the clover is out in bloom. It is certainly grand, and I am sure we could spend many pleasant hours together roaming through the clover and fields and listen to the birds singing. I will now close by quoting a few lines of poetry which will describe things to you better than I am capable of doing.

"This summer, once more in the meadows Kind Nature's warm fingers have spread In soft verdant beauty a carpet That lightly caresses our tread."

Well, I must close, or I will be taking up too much space in your precious corner. Bye-bye.

SPRING-BLOSSOM (Book IV.)
Warwick, Ont.

A Good Idea.

Dear Beaver Readers,—Can you make room for another Senior Beaver, as I wish to become one? I hardly deserve it, as I have been a reader of your corner for so long and have never written, though I wrote a couple of letters, and tried in some of the competitions when your corner went under the name of "Children's Corner."

I am sorry, Puck, I did not see that you were awarding prizes for best essays on gardening, else I might have tried. We have a very large garden in which we grow strawberries, raspberries, grapes (green, red and purple), thimbleberries, etc.

Now, readers, I wish to write on a subject new to the corner. Perhaps Puck will think it a very queer one, and not fit for our corner, but if so, toss it in w.p.b. and next time I'll do better. I must say that I attend High School, and am 14.

Do you not think, readers, that we greatly neglect our own health? We run after amusements so much we forget some of the necessities. I think scholars, especially, and also others, should be in bed by ten at least, and nine if possible, as the earlier hours of the night are best for sleep. We should have nearly ten hours' sleep, rise, bathe in cold water—or warm, if cold seems too hard to bear, though cold is best to bring a ruddy glow to one's cheeks—and go outside in the morning air for a little walk or run before breakfast. Some of the boys do this last, as they often bring the cows home to be milked.

Then at school, I think during the short passes, we should run and get as much life in us as possible, as it is very hard on us to be in the schoolroom all day. After four we should run and jump and enjoy ourselves, and I think most of our country readers do. Then when we get home some of us milk and get the cows. This, instead of being work, should be regarded as play.

Now, readers, perhaps you think me

foolish all try it an I would Tea and c gether. ers' sons cause they boys crav and you good heal moderation Well, I ing my le Your t Box 15-

Dear Pu hear more will tell y They m were so house, ea but comin for raisin ies was b kitchen, a one of th box eatin When t scratch a when the learned to nails in t One day them disa after the did not k as we tho to den up One mor I looked a woodchuck to eat. it came r something the house, a chair an also went It stayed went back came to p day a dog row and the next last saw Daniston

Ano Spring s growing s directly ov while in America) which spr 21st) the in such s the sun s of Cancer, longest da mer. Of directly ov about 42 sun never north tha further so corn. In the ro to life ag robin bec its nest a by its nu robin is cl and the re gone to th The farm wheat, oat turnips, in the garden and childre engaged in i 18 renewed the place Nature. I out flower saddest hou Creator! The trees come out i the woods, soon cut d evening to drink in th blossoms. Spring v and then w of summer Belmont. Puck we Beavers si of pen-nam

foolish about the cold-water bath, but try it and you will feel better.

I would also like to mention our diet. Tea and coffee should be abandoned altogether. I think a great many of farmers' sons and daughters abhor milk because they have lots, and city girls and boys crave for it. Learn to like milk and you will find it part of the key to good health. Cake should be eaten in moderation.

Well, I must close now, readers. Hoping my letter is satisfactory, I remain,
Your true Beaver friend and reader,
Box 154, Mt. Forest. DOROTHY.

Pet Woodchucks.

Dear Puck,—As you were wanting to hear more about our pet woodchucks, I will tell you about them.

They made very nice little pets, they were so tame. They stayed near the house, eating clover, grass and weeds, but coming to the house often to beg for raisins. Once when a box of groceries was brought home and left in the kitchen, a few minutes after we found one of the woodchucks sitting on the box eating at the raisins.

When they were hungry they would scratch at the door to be let in, but when the net doors were put on they learned to open them by catching their nails in them and pulling them open.

One day in the last of July one of them disappeared, and about a month after the other one disappeared also. We did not know what had happened them, as we thought it was too early for them to den up for the winter.

One morning in the last of March when I looked out I was surprised to see a woodchuck looking around for something to eat. We all ran out to see it, and it came running to us and sat up for something to eat. We brought it into the house, and it ran around, got up on a chair and jumped onto the table. It stayed around for awhile, and then went back to the bush. Every day it came to get something to eat, till one day a dog chased it, and it left its burrow and went over to another one on the next farm. It is a week since we last saw it. ETHEL TAYLOR
Daniston, Ont. (Age 15, Class V.)

Another Essay on Spring.

Spring is one of our nicest and best-growing seasons. When the sun shines directly over the equator we have spring, while in Patagonia (in Southern South America) has fall. During the time which spring lasts (March 21st to June 21st) the earth keeps revolving around in such a position that on June 21st the sun shines directly over the Tropic of Cancer, and on that day we have our longest day and the first day of summer. Of course the sun cannot shine directly over us, as we are at London about 42½ or 43 degrees north, and the sun never shines directly overhead further north than the Tropic of Cancer, nor further south than the Tropic of Capricorn.

In the springtime everything comes back to life again. The birds appear, the robin being the first to return to build its nest again and cheer up the people by its musical, springtime note. The robin is closely followed by the blackbird and the rest of the bird tribe that have gone to the warmer climates.

The farmers are busy sowing the spring wheat, oats and barley, and soon the turnips, mangels and corn. Soon come the garden seeds to plant, and the women and children as well as the men are engaged in it. Sometimes the flower-bed is renewed or started if the owners of the place are able to do it or love Nature. How lonely it would be without flowers to brighten us up in our saddest hours and make us think of the Creator!

The trees, bushes and shrubs begin to come out in leaf, and I must not forget the weeds, for they spring up, but are soon cut down. It is grand on a spring evening to walk in the orchards and drink in the sweet perfume of the fruit blossoms.

Spring will soon, too soon be over, and then will come the hot, sultry days of summer. "MAYFLOWER"

Belmont, Ont. (Class V.)
Puck would much rather that all Beavers sign their own names, instead of pen-names, in Beaver Circle.

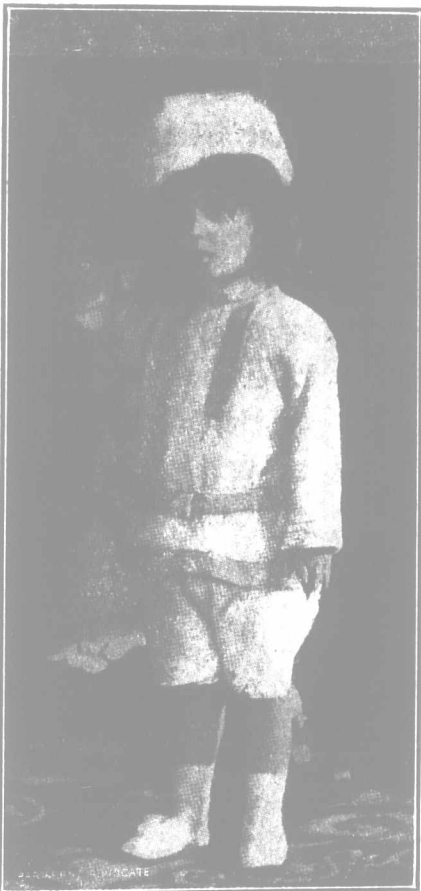
A Little Housekeeper.

Dear Puck and Beavers All,—Have any of the Beavers ever kept house for their mothers? My mother was away three months this winter, and I was housekeeper. I got along fine, with a few exceptions, one of which was my first pie. It came out of the oven looking fine, but, ah me! when I cut it the crust broke in all directions. It was so hard we could not eat it. But my next was dandy, for I took good care to put plenty of shortening in it.

I read your suggestions in the last "Farmer's Advocate" for a garden club. I had two gardens last summer. The flowers were marigolds, poppies and nasturtiums. They all grew to be very nice. My vegetables were onions, lettuce and radish. The lettuce and radish did fine; but some sort of a grub got at the onions. The tops would be all right and the bottoms worm-eaten. I intend having more flowers and vegetables this year.

I suppose all the Beavers are fond of reading? Lately I have read "Beulah," "Jo's Boys," and "The Bridge Builders." At present I am reading "The Lamp-lighter."

As most of the Beavers are telling about their pets, I will tell you what pets I have: A dog named Fido, cat named Lily Jean, black squirrel named



The Little Tsarevitch of Russia as a Tiny Laddie.

Darkie, and an unhappy specimen of chickenhood, which had its toes frozen in the winter. My dog is trained to pull me in my sleigh, but this winter I never harnessed him. When I was sleigh-riding he would pull the sleigh up the hill and then ride down on my knee.

Now, I must close, as my letter is already too long.

Your devoted Beaverite,
ELIZABETH WILSON
Age 15. (High School Student.)

Beaver Circle Notes.

Johnnie Gascho, age 11, Canboro, Ont., would like some Beavers to correspond with him.

Many letters are still held over, having been crowded out.

A farmer was asked to assist at the funeral of his neighbor's third wife, and as he had attended the funeral of the two others, his wife was surprised when he declined the invitation. On being pressed to give his reason, he said with some hesitation: "You see, Mirandy, it makes a chap feel a bit awkward to be always accepting other folks' civilities when he never has any of the same sort of his own to ask them back to."

The Roundabout Club

A Parting Word.

In closing the active work of our Literary Society for the season, we wish to thank again all who have contributed so greatly to its success and its interest. We ourselves have enjoyed the winter's work. We feel that we can congratulate our members on the excellence of their essays, and we dare to hope that the majority of our students, even those who did not win prizes, can conscientiously say, as did one of their number when writing to us not long ago, that "the study throughout has been delightful."

True it is, however, that few successes, few pleasures are without a strain of sadness. Last year we had to chronicle the death of Mr. Brillinger. Again we have to tell of a vacant chair. Probably many of our members have missed our clever and venerable "Milla" during the winter. At the close of the season last year, after winning one of the prizes, she wrote us that her study of Rabbi Ben Ezra had been carried on, for the most part, during times of physical suffering. She would not again, she thought, be able to attempt the work which she loved so well.

Her fears proved only too true. On November 6th she passed away, in a ripe and, indeed, fruitful old age. A friend has given us the following information in regard to her life, a life, as will be seen, of steady bravery and well-doing:

Mrs. Carter was born at Abbotsford, Que., where she lived till the time of her marriage. After a brief married life she was left alone, and found it necessary to do something to support herself. For this purpose she learned dressmaking. She worked at this for some years, at the same time taking an active interest in church and W. C. T. U. work, being President of the Band of Hope for some time. Later she gave up this to take up the duties of a Bible woman in one of the slum districts of Montreal, where she worked very successfully for some years. When worn out by the hard life, she came back to keep house for her brother, who was living on the old homestead. Here she remained till the time of her death. Always taking an interest in questions of social reform and philanthropy, she found her chief pleasure in the society of books.

Competition V.

The last competition of the season, it will be remembered, allowed choice of subject. The results are as follows:

- (1) Mrs. W. E. Hopkins, Russell Co., Ont., and Mrs. J. H. Taylor, Victoria Co., Ont.
 - (2) "R." (This address has been lost. Will "R." kindly forward it at once?)
 - (3) "Ellic," Huron Co., Ont.
- Honor Roll.—Sunbonnet Sue, A Lesser Spark, Honor Bright, A. H.

The Frog and Its Habits.

(Prize Essay.)

The frog is to me a strong proof in illustration of the truth of the Darwinian theory; for if nature is capable in the comparatively short period of a hundred days, to beget from a tiny mucilaginous egg, a living creature, and evolve it successively and successfully in that time through four different and contrasting conditions of animal life, namely: A fish, a tadpole, a lizard, and a frog; in other words, if the Wonderful Fashioner can, in a few hours, take the tail off a tadpole to make it a frog, why in the name of common sense could she not, in the course of centuries, have been able to take the tail off the monkey to make it a man? One fact is certain: A great many more men show plainly the earmarks of the monkey race than do frogs of the tadpole.

Another characteristic which the frog possesses in common with us higher animals lies in the conformation of the stomach, which is apparently very small, but is capable of great distention to accommodate greed, or the principle of "making hay while the sun shines"; in other words, to store up from the abundance of one day against a possible scarcity of the next. The comparison may strike some as far-fetched, but it

will only be those who have never seen how some people will gorge themselves so as to get what they call "the worth of their money," or who have never watched the free-sample booths at fairs or circuses; or again, who have never observed how some individuals will cram down what they do not like, or do not need, for fear of being hungry later on, or just because they happen to get it for nothing.

Besides, it is a well-known fact that you can go for a wonderfully long time without eating, if only you take the precaution to tighten your belt every day so as to keep your stomach, which is gradually reducing its proportions, from undue friction, and the danger of thus scratching fire on your backbone. And now I feel justified.

The frog, I think, must be a very happy animal. In the first place, he passes, as I said just now, through so many different phases of existence. To start with, he is a sticky little egg, one of many millions, in a still more sticky substance, at the bottom of a pond. In eight hours he has so enlarged and lightened that he is able to float to the surface, where he can feel the life-giving rays of the sun. On the twenty-first day he pips his shell and peeps out, tail first. On the fortieth day he begins to have motion. All the time he is feeding greedily on the sticky substance which envelops him and his brothers. Even if he falls to the bottom when he comes out of the shell, he is wise enough to rise to his meals when hungry. At about the forty-fifth day, he begins to grow the whiskers under his chin, which serve him as fins. It is at this period that he turns his appetite to vegetables, and eats with gusto of pond-weed and slimy grasses. About the hundredth day, he starts to show legs and rubs off his tail. It is at this time that he looks like a lizard, for his head elongates so as to form a neck, where before he had none, but then this state only lasts for a day. On the next he is a fully-defined frog, with a new set of teeth, a new appetite, and a new life before him. All the habits of the past vanish with his tail and fins. He is again a new, and altogether different, creature. He was a vegetarian; he is now carnivorous. He never left the water; he now takes to the land. He was peaceful and harmless; he is now a hunter of prey, and clamorous. Eagerly does he desert his nursery and declare wary and remorseless war on juicy slug and succulent insect, for the purpose of which he is now specially armed by an extremely long, gluey tongue of astonishing swiftness of motion, and that has resemblance to the fairy friends of our childhood:

"The goblins and elves
That swallow themselves,"

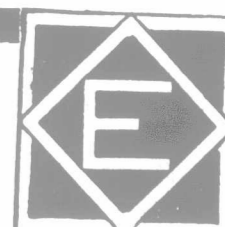
in the fact that it can turn and go down his own throat, there to be detached of the dainty morsel adhering to it.

I started to say that the frog must be a happy fellow. Who of us but would give a great deal to be thus able to sample out, exhaust, as it were, three or four different conditions of life? Say, to be a farmer to-day, a millionaire to-morrow, a king the next day? The only sad thing about it would be that if dissatisfied with our successive conditions, we were, as the frog, unable to come back to our first. And I feel that I, for one, would sadly want to come back.

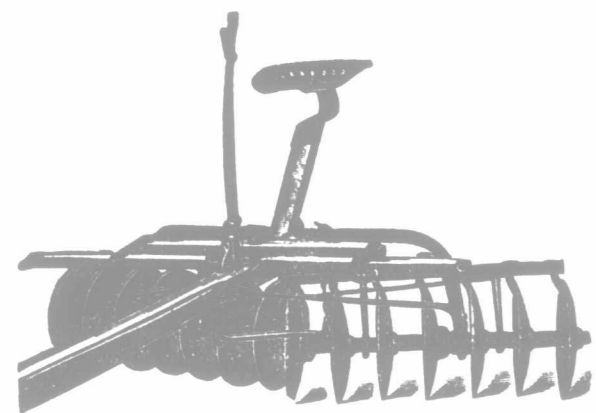
Then the frog is happy in the fact that he is a very loving and ardent wooer. Have you ever listened to his amatory chants rising from the wet marshes and pond-shallows in the chill of the early spring nights? Not strictly musical maybe, but then so full of life and vigor and perseverance! Two facts about the frog will always fill me with wonder, viz., the volume of his voice, and the extent of his leap, as compared to the size of his body; and this also: what does the energy, which, in the male, goes to keep the echoes awake, and advise you to take an umbrella (for froggie is the best barometer in the country), tell for in the female?—for all the "bric-bracs" that break so ungently on your ear, are really but a concert of male solos. Madam Frog is voiceless, and very, very modest. In the frog's calendar there are no leap years; the gentle-



EATON'S FARM IMPLEMENTS



"WORK WELL" DISC HARROW



Our Disc Harrow is made of the best of materials and embodies all the latest improvements. The Harrows are steel throughout, with ball and roller bearings. The Scrapers work freely (we use a patent disc cleaner). The Seat is within easy access of shifting and scraping levers. The Hitch is well back, leaving little weight on horse necks.

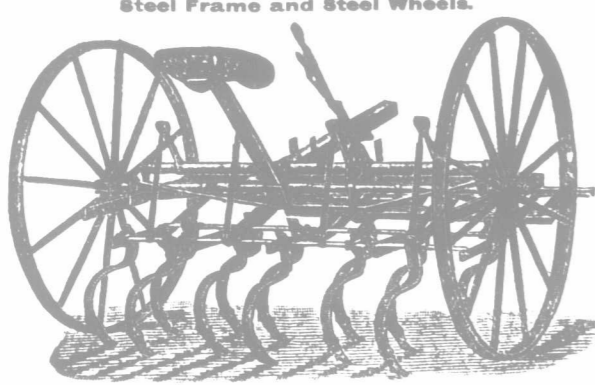
N2-214, 12 discs, 16 in. diameter, weight 400 lbs. Price delivered in Ontario..... 22.00
Delivered in Quebec and Maritime Provinces, extra..... 1.25

N2-216, 14 discs, 16 in. diameter, weight 426 lbs. Price delivered in Ontario..... 24.75
Delivered in Quebec and Maritime Provinces, extra..... 1.35

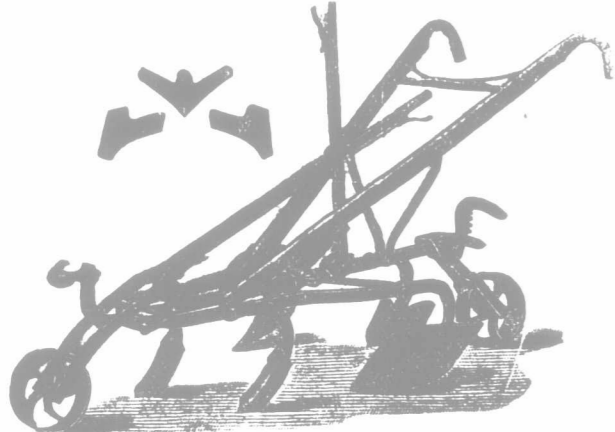
DIAMOND CULTIVATOR

The Frame is of channel steel. The Wheels are steel, well constructed and of good height. The Teeth are of finest tempered spring steel and fitted with double points, which may be replaced without buying whole new teeth. There are three rows of these teeth. The Pressure Springs are made of tempered steel wire, which are less liable to break than flat springs. This Cultivator is easily operated, and is specially built to do its work in the hardest and stiffest of soils.

N2-218, Weight 563 lbs. Price delivered in Ontario..... 32.25
Delivered in Quebec and Maritime Provinces, extra..... 1.75



THE SCUFFLER



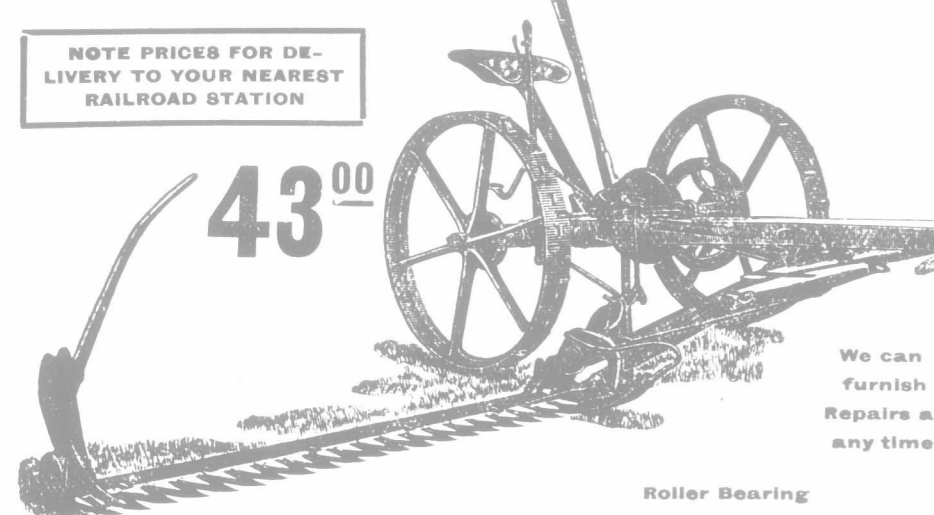
This Scuffler is made entirely of steel, excepting the handles, which are made of the best oak or white ash, and are finished with oil and varnish. This is absolutely the best value on the market today. It has five teeth, as shown in cut, also rear depth wheel and three extra teeth, making eight in all.

N2-222, Weight 85 lbs. Our price delivered in Ontario..... 7.00
Delivered in Quebec and Maritime Provinces, extra..... 95c

ACME MOWER FOR 1910

NOTE PRICES FOR DELIVERY TO YOUR NEAREST RAILROAD STATION

43⁰⁰



We can furnish repairs at any time

Roller Bearing

The Acme Mower has been thoroughly tested and has proved one of the best on the market. No expense has been spared in making it superior in every detail. The bars of cold rolled steel and is made with a smooth top, the nuts being below. It has a counter-balanced spring, which assists in handling the bar. The bar can be arranged not to engage in any of the ratchets. The pitman is extra long, has steel jaws and brass bearing. The cut is 5 feet wide and the gearing has only four wheels, a distinct advantage.

N2-200, Weight 715 lbs. Our price delivered to your nearest railroad station in Ontario..... 43.00
Delivered in Quebec and Maritime Provinces, extra..... 2.25

OUR COMPLETE LINE OF FARM MACHINERY IS LISTED IN OUR SPRING AND SUMMER CATALOGUE. WRITE FOR A COPY TO-DAY.

OUR VALUES ARE UNSURPASSED

WE CAN SAVE YOU MONEY

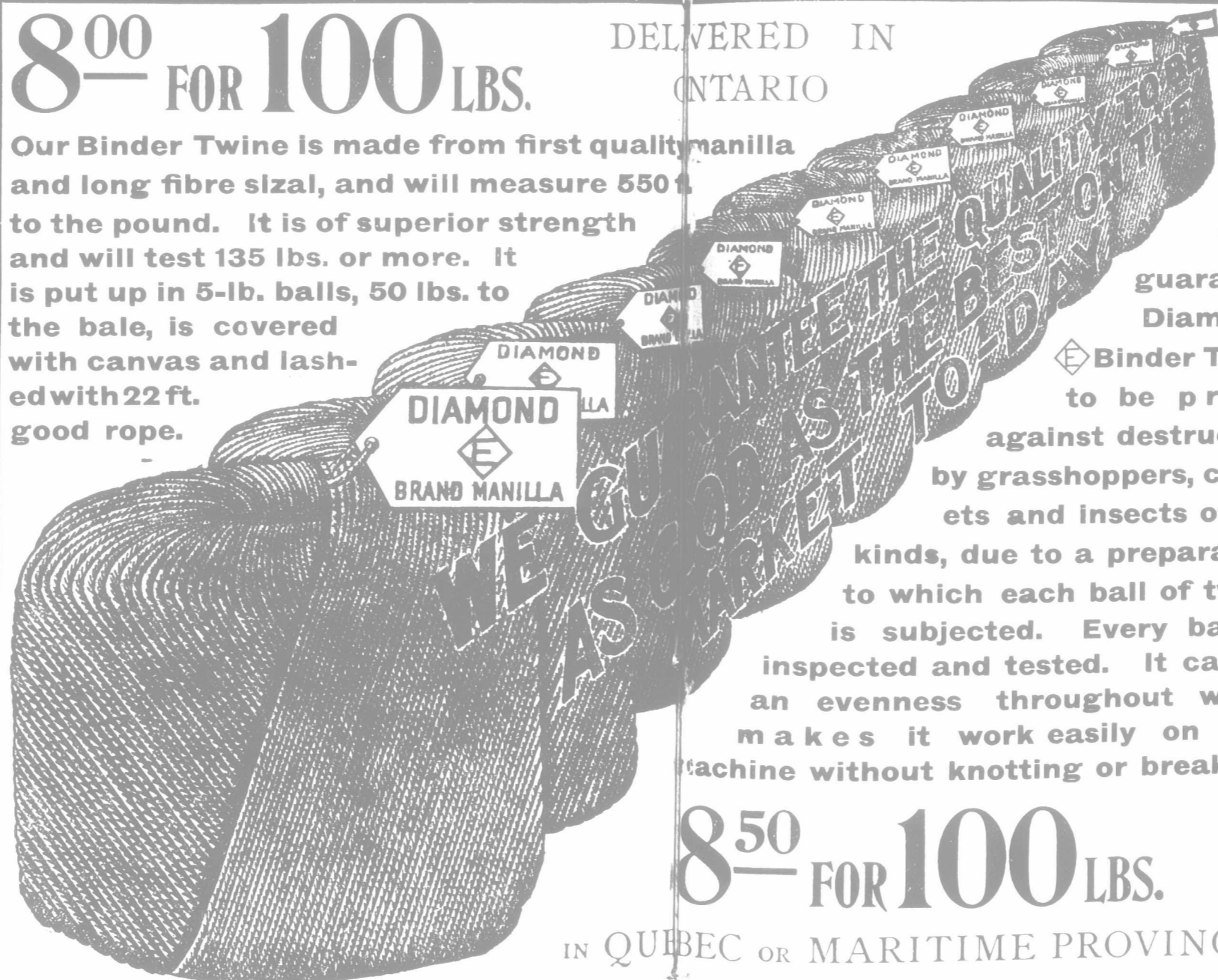
Coupled with the high quality of EATON farm machinery there is another equally attractive feature—namely, our low prices. They are easily accounted for and easily understood. We have no agents' commissions to pay or no expenses of any travelling salesman to provide for. We do not take your old machinery off your hands and run the risk of making too large an allowance for it and therefore lose money. We do not sell on credit consequently we never contract bad debts. We buy in enormous quantities for spot cash, and consequently save all cash discounts. When you buy from EATON'S you reap the benefit of all these advantages as they are reflected in the low prices we quote to you.

DIAMOND BRAND MANILLA BINDER TWINE

8⁰⁰ FOR 100 LBS.

DELIVERED IN ONTARIO

Our Binder Twine is made from first quality manilla and long fibre szal, and will measure 550 to the pound. It is of superior strength and will test 135 lbs. or more. It is put up in 5-lb. balls, 50 lbs. to the bale, is covered with canvas and lashed with 22 ft. good rope.



We guarantee

Diamond Binder Twine to be proof against destruction by grasshoppers, crickets and insects of all kinds, due to a preparation to which each ball of twine is subjected. Every ball is inspected and tested. It carries an evenness throughout which makes it work easily on the machine without knotting or breaking.

8⁵⁰ FOR 100 LBS.

IN QUEBEC OR MARITIME PROVINCES

SATISFACTION GUARANTEED OR YOUR MONEY BACK

Realize what this means—consider the protection it affords—think of its importance to you. If you are unfamiliar with EATON merchandise, EATON prices, EATON quality, EATON values, or EATON service, send us your order and take advantage of them. After you receive the goods you have 10 days to test them in every conceivable manner. While doing so ask the opinions of your family, your friends, your neighbors, and if a single person says that by article which you have purchased from the T. EATON Co. is not absolutely and positively a genuine value, send it back to us at once and we will refund your money in full, without hesitating, without quibbling, without questioning. Your word is law, your word is final; from this rule there is absolutely no exception.

THE T. EATON CO. LIMITED
TORONTO CANADA

1910 MODEL TOP BUGGY

65⁰⁰

Our 1910 Model Top Buggy is made by men who know all the requirements that go to make a buggy strong, durable and easy running. The finish is of the very best and all parts are made in proper proportions, nothing but the best of seasoned woods being used. It has 1,000-mile dust proof axles, metal rail around dash top, leather trimmed, bellows back and belly loop. Shipping weight 475 lbs.

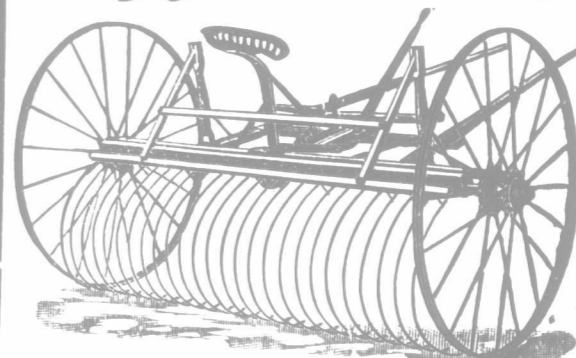


DELIVERED TO YOUR NEAREST RAILROAD STATION IN ONTARIO

N2-112, Complete, with enamelled tipped, patent leather trimmed, quick shift shafts and steel tires. Delivered in Ontario..... 65.00
Delivered in Quebec and Maritime Provinces, extra..... 2.25

N2-114, For pole, well braced and including whiffrees and neck yoke, add to above prices..... 7.50

ACME STEEL SULKY RAKE



This Rake is made with steel wheels. It has 26 teeth, and where the teeth are fastened angle steel is used. The shafts on our rakes may be used for either one or two horses.

N2-285, Width 8 ft.; No. of teeth 26; Weight 410 lbs. Delivered to your nearest railroad station in Ontario..... 21.75
extra..... 1.25

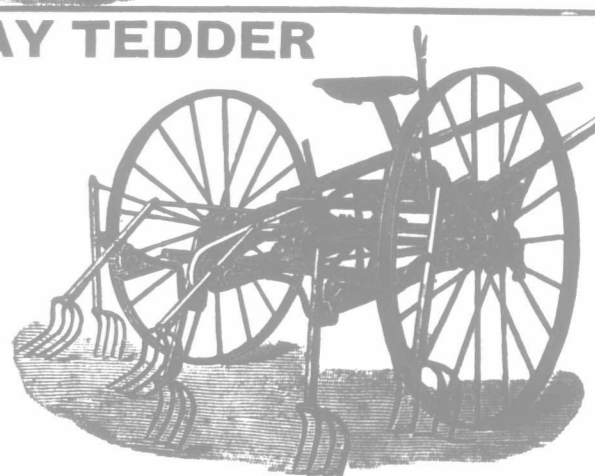
N2-208, Width 10 ft.; No. of teeth 32; weight 465 lbs. Delivered to your nearest railroad station in Ontario..... 24.00
Delivered in Quebec and Maritime Provinces, extra..... 1.40

ALL STEEL HAY TEDDER

Note Prices for Delivery to your Nearest Railroad Station

By using the Hay Tedder, hay that has been cut in the early morning can usually be dried and put under cover the same day, thus avoiding much labor and a possibility of loss from bad weather. It has been thoroughly tested, and is highly recommended by those who have tried it as a perfect machine.

N2-220, Shipping weight 570 lbs. Price delivered to your nearest railroad station in Ontario..... 37.00
Delivered in Quebec and Maritime Provinces, extra..... 1.75



WOVEN WIRE FENCE

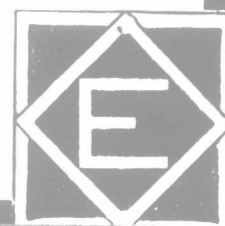


This Fence is all No. 9 galvanized wire. It has the only one-piece lock on the Canadian market. The upright wire starting at the top lateral extends to the bottom lateral, forming the lock and completing the stay in one unbroken piece of wire.

No.	No. of Horizontal bars	Height in inches	Shipping weight per rod	Price per rod delivered in Ontario
N2-225	5	35	7 1/2 lbs	26c
N2-226	6	42	9 "	30c
N2-227	7	48	10 "	35c
N2-228	8	54	11 "	42c

For delivery in Quebec and Maritime Provinces, add 2 cents per rod to above prices.

TAKE ADVANTAGE OF OUR WONDERFULLY LOW PRICES AS THE QUALITY OF EVERY ARTICLE IS FULLY UP TO THE EATON STANDARD.



men frogs do all the courting, ever and always.

Another factor in the happiness of the frog is that he but keeps in action when nature is at her best, when green things are growing; when fat worms are fairly wriggling in their eagerness to become part of higher animal life; above all, when snakes and small boys are swarming all around to give him the excitement of the chase and the exultation of hair-breadth escapes. True, he does not always escape. When but a brown bit of femininity with bare toes, I remember making good little pots of money selling frogs' legs at forty cents a dozen. It's so simple, too. You first catch them, of course, then you hold them between your finger and thumb, pressing firmly on each side of their body, which makes them stiffen their hind legs in one straight line; then a light blow with a hatchet at the belt line, and the stripping off of the skin as you would the glove off your hand, and the job is done.

Sometimes, too, you will meet a snake with a knot-like lump just back of her collar. If you are kind-hearted, you will take the trouble to press with your foot just behind that lump and towards the mouth, which will then open as if by magic, to reveal a froggie coming out hands first, like a swimmer prepared for a dive, long, sticky, and melancholy-looking, but, like Jonah from the whale, none the worse for his experience, and hopping away, let us hope, a great deal wiser than when he was sucked in.

In the winter the frog returns to his native element, the stagnant water of pond or riverbed,—for in spite of his land enjoyment, he's a truly amphibious animal, having a heart with but one ventricle, which enables his circulation to go on without the assistance of the lungs when under water,—and there passes the time in torpid slumber and repose until the leavening power of spring comes again to swell his loving emotions, and stimulate his froggish appetite.

And now, before closing, let me tell you how far back dates my interest in frogs. I was just a little girl, I think about six or seven, and I caught a half-dozen big frogs, papa and mamma frogs I called them, and tied each of them by the hind leg to the bars of the upstairs veranda with a long thread. My idea was that with so many big frogs, I would soon have a whole menagerie of little frogs. Alas! for human hopes, be they childish or matured! for when I saw my frogs again, they were all hanging by their long threads over the edge of the veranda, blistering under the hot summer sun.

Four were dead, and the other two died as soon as I tried to put them into ice water to both cool them off and swell them again to their natural condition, for they were sadly dried up; which story goes to prove that the frog does not breed hastily under confinement, nor can he thrive under hot and dry climatic conditions; for the frog is fastidious, and changes his whole skin about every eight days, and as he takes it off in the form of a mucus, it naturally follows that he must first soak it well.

MRS. W. E. HOPKINS,
Russell Co., Ont.

Weeds.
(Prize Essay.)

"There's more of beauty in a field of weeds Than in the choicest treasures of the gardener's art."

Yes! Weeds! But the trouble they give! The way they have of reappearing when you think you have given them a warm berth, is a fright.

There's wild convolvulus. Her habits are simply atrocious, but the pure bell-like flowers of the white variety are dainty enough to ring in the advent of Aurora, and the blossoms of the pink variety are fair enough to form her crown. But woe to the unlucky individual who harbors her for her beauty. She is selfish. She possesses more lives than the renowned cat. You may hoe convolvulus off, pull it up, burn it by handfuls, but it bobs up seemingly as ever if one inch is left.

Then there's purslane. It can't be said to aspire to anything very high, but the way it spreads over the ground would shame even the man who spreads him-

self and his belongings over two seats of a crowded car. It does not bear more than about two million seeds on each plant, and every seed is guaranteed to grow. Frenchmen and pigs are said to be fond of it, and I believe our garden would supply a whole family of either.

Thistles! Yes, Canada possesses a few, and their dainty blossoms are as beautiful as the silky tresses of a pretty girl, and, like a pretty girl, you must clasp them close if you want to handle them, but you would probably prefer to sit closer to the girl than the thistle. Beware the dainty tresses (it's the thistle, girls, not you I mean now), for they are a foe more to be dreaded than Germany. Each dainty beauty carries an aeroplane that antedates that of Count Zeppelin by several centuries, and when they are old they are worse than viragoes.

Marshmallows spread like purslane. You attack a good-sized specimen. You pull, you haul, you jerk. One or two stems give way and you sit down suddenly—to rest, probably. Another hold, and two or three more stems give way! You are on your guard this time. The wind takes your hat to the foot of the garden, where it lights on a good-sized burdock, but you are going to have that marshmallow out or know the reason why. You go to the tool-house, bring the tile-spade, jab it in about a foot and pry. The root gives way, and after seeing it you are surprised that it is not more than a foot and a half long, and conclude that somebody unmentionable must have had hold of the lower end when you lost your hat.

Once upon a time, we lived on a farm that had been sadly neglected. There were burdocks here and burdocks there, and burdocks everywhere on that farm. When I stepped out of the door, I was sure of a follower that stuck closer than a brother, and if I went for a walk in the lane, I came back with a fringe on my skirt that occupied my attention for an hour or two.

We have all made the acquaintance of Miss Chickweed. She is a dainty, frail-looking little chick. Her tiny starlike blossoms and pale-green leaves, are surely too tender to withstand the wooing of Jack Frost. "Beware, beware! She's fooling thee." After the hardy maples have blushed at his caresses, and the stout oaks have turned scarlet at his touch, she laughs up at you, fresh, dainty and fair as ever, occupying your garden with a serene indifference to the rights of others.

Now, Mr. Editor, please don't mention ox-eye daisies, ragweed, twitch grass, or some dozens of others, or this pen of mine will forget itself entirely, and, like the brook (or the weels), "go on and on forever."

MRS. J. H. TAYLOR,
Victoria Co., Ont.

The Rural School Teacher.
(Prize Essay.)

I wonder if there is anyone in existence who deserves more praise, and yet receives more censure, than the rural school teacher. You may look at my statement carefully, and say it is a rash one if you wish, but, nevertheless, I think you will agree with me, that in the majority of cases it is correct.

In the first place, he or she who occupies the position of teacher carries a great responsibility. She has the moulding of thirty or forty small lives in her care. She it is who has the training of their minds, bodies, and in many cases, their souls. They carry through life just whatever she teaches them. They learn their A, B, C's, and from there go on until they are studying the geographical and historical life of all nations. At school, they oft-times have to fight some of their first battles of life, under the teacher's watchful eye. At home, the child has had no one to contend with. His toys have been all his own. But at school, he meets with other children who are just as determined to have their own way. The consequences are, that he learns there to give and take, as he will have to do in the outer world when he grows older. In such cases, the teacher has to use great tact, and while not allowing things to go too far, leave them to settle their troubles alone.

I think everyone will agree that children look up to a teacher who is worthy of the name at all.

They imitate her. Have you ever watched your children play school? If you have, you will find them using her methods and expressions. If they imitate in this, they will in other things. If the teacher scorns to be at all dishonest with her pupils, they will be ashamed to tell her a falsehood. If she keeps herself neat and tidy, the children also have a greater desire to come to school clean and attractive. In the play-ground they find her a sympathetic, yet enthusiastic, playmate. In every way her actions have an influence over them in some small way. I repeat, that a "real" teacher deserves great praise, for she is spending her time, giving all her energies, for the life moulding of our future nation.

Although so deserving, there is no one who receives so much censure. A girl goes out to teach. From the first she is severely criticised. Her clothes—she is too extravagant. Everyone in the school section thinks he is paying high school taxes to buy her nice dresses. In actions, she must be very sedate and prim. If she is seen in friendly converse with more than one young man in the neighborhood, she is a flirt. She has too many holidays. But worst of all, she is a poor teacher. One finds fault because she gives the children home work. If she fails in this, others find fault at the lack of home work. Another sends a note which reads: "Willie was late getting home to-night. I do not wish this to occur again."

Another listens to every story her children bring home, and says: "Well, that teacher is no good, or she would not let that Tommie Brown act like that." If mothers would only turn a deaf ear to tales from school! They seem to forget that there are two sides to every story. Others think the teacher does not visit enough. I wonder if they would find it very pleasant to visit a home and be made to feel that they were a sort of information bureau. I know some people who make a practice of always trying to bring up some question which the teacher will have difficulty in answering. Others say she is cross and loses her temper too easily. Put yourselves in her place, you mothers who get annoyed at two little hands which cause trouble, and see if you would always be serene with thirty to annoy you. If you would "observe" in a class-room for half an hour, you would see that there is always the annoying child there, be the teacher ever so good a disciplinarian.

If I were addressing a meeting of the mothers in a school section, I would say, get acquainted with your teacher. Use her as you would like to be used yourself. When she visits you, remember that she has had your children all day, and does not want them all evening as well. Visit her school. Find out for yourself what kind of teacher she is, and do not depend on hearsay. Above all, do not allow your children to tell tales out of school. They never tell their own side, you know.

Be sympathetic with the girl who presides at the desk. Remember that her work, at its best, is trying on her temper and nerves. Remember that when four o'clock comes, she has spent nearly all her stored-up energies, and when in a critical mood, ask yourself how you would like to entertain thirty of the neighbors' children, and keep them all in the proper temperament. When your boy fails in an examination, do not forget that everyone does not find him as smart as you thought he must be. It is not always the teacher who is dull.

And I would turn to the tired little school teacher and give her all the cheer I could. Hers is the noblest work on earth (if her motive for teaching is the proper one). I would have her remember that she is fashioning the lives of our ministers, doctors, farmers, and the girls who are to be the future home-makers, and that her teaching will leave an impression on every life she has come in contact with. I would have her be on friendly terms with the children, joining in their play as well as their work. Study to understand their young minds, and ever endeavor to lift yourselves up, so that you may be better fitted for the responsibilities you have undertaken, remembering that:

"Men may come, and men may go,
But influence goes on forever."

Wild Birds: Their Relation to the Farmer.
(Prize Essay.)

Canadian wild birds are numerous, though perhaps classed as useful, more often than ornamental. Not having the variety of song [Will you not reconsider this statement?—Ed.], nor brilliancy of plumage, they are not to be despised on that account, as every farmer can testify to their great value to all rural communities.

Winter resident birds are not very plentiful in this locality. The downy and hairy woodpecker, blue jay, chickadee, nuthatch, brown creeper and junco being our common winter residents, though in very mild winters we have a few others. The very severe winter of 1905, we had flocks of pine grosbeak, the only time I ever saw or heard of them in the neighborhood.

The migratory birds begin to arrive early in March. Though the order of their arrival varies slightly with different years, I have noticed this to be the general order of their coming: First comes the crow, then in succession the horned lark, wood-pewee, American robin, killdeer plover, some varieties of the sparrow (I am not familiar with all the varieties found even in this neighborhood), hawk, bluebird, meadow lark, song sparrow, bronzed grackle and red-shouldered blackbird. Then they begin to arrive in such numbers, that the order of arrival is lost track of. But continuing through April and May, we have the flycatchers, warblers, kinglets, vireos, and all summer residents. Many of these nest here, while others must be closely watched for, as they remain only a day or two, and then pass on to more northerly nesting-grounds. But the time of their arrival varies so slightly from year to year that one soon knows when to look for them.

Though our birds, as a whole, are not noted for their brilliancy of plumage, still we have some worthy of note. Amongst these are the woodpeckers, nearly all a pleasing black and white, enlivened by crescents or splashes of red, mostly on the head. Some have markings of yellow as well; while our red-headed woodpecker, with his white body, black tail, black and white wings, and all red head and neck, is a very conspicuous, as well as beautiful bird.

Of blue-colored birds, we have the blue jay and kingfisher, very clean and tidy looking in their blue and white; the chickadee and nuthatch shading more into the blue-gray; the bluebird with his ruddy breast, and the indigo bunting.

Others of conspicuous plumage are the warblers, of which many are very beautiful, notably so the Blackburnian and magnolia. Then there are the meadow lark, American robin, Baltimore oriole, goldfinch, kinglets, redstart, humming birds and scarlet tanager.

Many of our birds lacking in the brighter colors are gifted with song. Amongst these I may mention the wood thrush and the brown thrush, the fox, song and vesper sparrows, and, best of all, I think, the bob-o-link. Others have very sweet, though much shorter songs. Such are the meadow lark and canary, the robin and the Baltimore oriole, with their whistling, cheer-up songs; the bluebirds and the catbird.

These wild birds bear a very close relation to the farmer in his character and in his work.

I have heard it said that manual labor has a tendency to coarsen and deteriorate the character. If that is so, then we need something to refine and elevate along with it. No one, I think, can become a student of nature and her methods, without deriving an element of refinement, in proportion to the time he devotes to this study. The farmer is a busy man; but there are few who will not pause to listen to a sweet bird-song, and, as a consequence, his thoughts will, for a time, at least, be lifted above his cares. He finds himself rested and refreshed, and prepared to return to his labor with renewed vigor. He may be, and often is, by song or conspicuous color, induced to follow after, merely to hear or see more distinctly. After a time he becomes interested in the birds themselves, and finally is led to study the habits of these and all other birds. Besides the elevating effect this study has upon his character, he learns what good friends the birds are to him.

It does one that the farmer only, say will see limbs and into crevices hunting the wrens, brown rows, and leave, cat! Then in s gone, we others, but posed ab stalks of t Almost a small bird many have the largest blackbirds, bird, and cause the eggs, pull of their fr do these v from very the examin these birds the farmer caterpillars sects of noxious w worth of t stry: A coupled w be got fro able one to ful and th of preserv called dest A few ye erod with chicks. S began build orchard tre the vine and chased they drove entirely. the neighb some of o the birds a some corn blackbirds, years, we and the cr ngly hold. "Stinging birds to th add to the by song a some what ndaving re They lessen to his succe words and for these t the birds t in his pow Heron Cr Editor R Let me I have long it appears write on talents as a make plain young peop not all the education l bers have, y most of us think, and, atmosphere, those enge die with think and did as our not treat o we are doi on the farm horses, and nest to ple as often the horses duri probably fo driving eas happens, to feed, and an seems how a hors Of course and show he can. I was a very s fant from not pleas

It does not take long to convince anyone that the birds are real friends to the farmer. Let him watch even one only, say of our winter birds, and he will see how minutely it searches the limbs and trunks of the trees, peering into crevices, and under pieces of bark, hunting the hidden insect or larva. And in spring or summer we constantly see wrens, pewees, swallows, kingbirds, sparrows, and others, darting out from limb or eave, catching flies and other insects. Then in spring, before the snow is all gone, we see the larks, buntings, and others, busy where any weeds are exposed above the snow, stripping the stalks of their seeds.

Almost everyone assumes that these small birds do them no harm, but very many have no hesitancy in declaring that the larger birds—owls, hawks, crows, blackbirds, and even the flicker, cherry-bird, and robin, ought to be shot, because they destroy some poultry and eggs, pull up some corn, or eat some of their fruit. No one denies that they do these things, and yet I have read, from very good authority, based upon the examination of the crops of many of these birds, that the benefit they are to the farmer, by destroying mice, moles, caterpillars, grubs, and destructive insects of all kinds, together with the noxious weed seeds, far overbalances the worth of the poultry and fruit they destroy. A little personal observation, coupled with the information that can be got from books and papers, would enable one to discriminate between the useful and the harmful, and be the means of preserving many of our unjustly, so-called destructive birds.

A few years ago, we were much bothered with the crows taking the young chicks. Soon the blackbirds came and began building their nests in poplar and orchard trees, and one pair even built in the vine on the house. They attacked and chased the crows so vigorously, that they drove them from the poultry-yard entirely. Whether they went to some of the neighbors' I cannot say. However, some of our neighbors, because they saw the birds in their corn fields and found some corn pulled up, began to shoot the blackbirds. Now, during the last two years, we have very few nesting about, and the crows have become correspondingly bold.

Summing up, then, the relation of the birds to the farmer, I find this: They add to the attractiveness of country life by song and cheeriness. They detract somewhat the thoughts from sordid cares, anding research of nature's methods. They lessen the farmer's labors, and add to his success by the destruction of noxious weeds and injurious insects. In return for these benefits, the farmer owes it to the birds to protect them by every means in his power.

Horon Co., Ont. "ELIC."

A Timely Subject.

Editor Roundabout Club:

Let me bring forward a subject which I have long wished to see discussed, but it appears that no one has attempted to write on such a subject. Having no talents as a writer, I fear I cannot really make plain what I wish to say. We young people living in the country have not all the opportunity of getting an education like our city brothers and sisters have, yet we have eyes, and although most of us cannot write well, we can think, and, living in a clear and healthy atmosphere, we can think better than those caged in their rooms, but the trouble with us is, we don't. If we did think and use a little common sense, and did as our conscience bids us, we would not treat our domestic animals the way we are doing. The average young man on the farm is accustomed to driving horses, and they (the horses) do their best to please their masters. Now, as is often the case, these young men use horses during the evenings or Sundays, probably for the reason that he finds driving easier than working. It often happens, too, that he goes to see a lady friend, and on just such occasions the man seems to lose his head and forget how a horse ought to be used.

Of course, the nice gentleman will try and "show off" by driving as fast as he can. I know for a fact that a girl has a very soft heart, and I have seen them faint from seeing the blood flow from a corolla, and still a girl will enjoy a

ride seated behind a horse having its head held in a very unnatural position by a cruel overcheck, and have the driver jerk the reins till the froth dropping from the mouth is red with blood. She will also see the swollen streaks where the whip had left its mark, and still call it "fine and lovely" when asked how she enjoys the ride. In winter, that very horse is probably left to stand on the warm side of a wire fence in zero weather, while John and Mary spend another few hours in the parlor near a bright, warm fire.

I am not exaggerating any. There are thousands of horses which are even treated worse. There is no man that can prove the overcheck a necessity. It does not improve the looks of a horse, and is not beneficial. Why, therefore, is it used?

If every girl would use her influence to prevent this cruel treatment of horses, and refuse to associate with the gentleman who does not use a horse right, and would ask her brothers to stop the use of the tight overcheck and cruel driving, the result would be marvellous. Furthermore, remember that the man who uses no common sense with dumb creatures, has none to use with people. He may appear to be very nice, but the truth will be discovered sooner or later.

I have no doubt aroused some of the readers' agitation, and I must admit there are some who are kind and considerate to horses. The large majority are not, but if they would but view the matter from a right direction, I cannot see why this cruelty should not be abolished. I am not a tenderfoot in the line of horses, and know quite well how to use them to get them to do the most work, and have been in charge of horses for many a year, and I know that there is not one man who has consented to treat horses as he would like to be treated if conditions were reversed, who has not said he is thankful that someone told him. Would you not, therefore, tell others who need to be told, and by doing so, you would be doing a great favor?

Waterloo Co., Ont.

What Young Canada Reads.

A noted philosopher once said, "Sing to me the songs of your country, and I will tell you the greatness of it." Surely this is true in regard to books as well as songs, and of individuals as well as nations. What a tremendous influence books have on the reader's mind. If this be true of adults, how much more will it be so in the case of children, whose plastic minds are ever open to new impressions, and whose ready imaginations are always busy enlarging and decorating every common occurrence.

If parents realized this, surely there would be more care taken in the variety of reading matter which is allowed to find its way into children's hands. It is perfectly amazing that apparently well-educated mothers appear indifferent to the character of the books read by their children. How horrified some of them would be if they could read for themselves the terrible tales of murder and bloodshed that occupy their son's thoughts, or the mandin nonsense of the stories treasured by their daughter, where the duke rushes in and tells the duchess a dreadful secret, and she, covering her beautiful eyes with her lily-white hands, cries, "Villain, you have betrayed me!" and faints.

I remember once being told by a lady how shocked she was when visiting a friend, to be entertained by the little girl of the house with a detailed account of the latest newspaper horror. The child produced a scrapbook in which she had carefully preserved the pictures cut from the printed accounts of murders. "This shows the west end of the room with the blood-stains on the wall." "The cross marks the position of the body when found," and so on. These were the underlining inscriptions. The child could, with infinite minuteness, tell the accompanying story of each picture, taking a peculiar delight in recounting the gruesome and revolting details. Now, that child's mother was, apparently, a clever, well-educated woman, and yet she saw nothing wrong in allowing her child's mind to dwell on such things. Can we wonder at the increase of child crime, when children are allowed to grow up with their minds continually occupied with that sort of thing?

It is an important fact that there is a greater demand for such literature to-day than there was five years ago. We have two reasons for this. In the first place, the children of to-day are greater readers than they have ever been; and, secondly, their taste in reading is untrained, and therefore they readily turn to the thrilling, emotional poison of the dime novel.

To a great extent, home influence is to blame for this. In nine cases out of ten, parents allow their children to read, indiscriminately, any book which falls into their hands, and, unfortunately, the books which to-day fall most easily into a child's hands are not such as would cultivate any taste for more intellectual reading. I have heard girls and boys of to-day sit up with the air of a connoisseur and discuss Robert Chambers' books. Now, while I have nothing to say against Chambers' books, I do not think they are ideal reading from which a child should be allowed to form his opinions of society.

When a child hears a book discussed at home, he is usually filled with a desire to read the same book, and in this way the class of books read in the house are the books to whose level the child grows. This may account for the calm and peaceful existence of Dickens and Thackeray in most of our public libraries.

I happened upon a little incident the other day, which, I think, brings out more clearly than anything I can say, the influence that parents have in this matter. I was walking down the street, when, at a corner, I came in violent contact with a small boy. He was astride a stick, and at his side dangled a miniature sword, "Hello," I called, "Where are you going?" "Why, he answered, carefully replacing the cocked hat that had come to grief in our sudden meeting, "I'm Hector, and I'm on my way to fight Ajax." "What?" I gasped, staring in amazement at this unusual sample of juvenile Canada. "Why, don't you know about Hector and Troy, and how they all fought?" he said in astonishment. "mother tells me all about them, and when I'm six, she's going to read me Oliver Twist and Christmas Carol." I would like to know that boy's mother. Do you think her son would ever wax enthusiastic over "Three-fingered Dick," or "The History of a Bloody Latch-key?" Would her daughter be satisfied with "The Fatal Wedding," or "Deserted at the Altar?" What a foundation that mother is laying by the good, wholesome literature she gives her children.

Then, too, the English course in our public schools may be partly to blame for the lack of intelligent reading on the part of our youthful Canadians. This, of course, does not exert a negative influence, but it does very little to instil in the child a desire for more and better reading. Until the child reaches the Entrance examination, there is no recognized test in literature. This means that very little time will be spent on the subject, as the curriculum is already overcrowded, and the time must necessarily be spent on subjects which count more at the examinations. Then, when the child does reach the High School Entrance examination, he finds himself confronted with a nondescript examination paper called "Written Reading," which ranges in difficulty anywhere from work suitable for a Third-book pupil to that of a University student. Rarely, I think, would this be found guilty of embedding in the child a love for "a book of verse underneath a bough." Thus we have brought the child to the point in his education where at least ninety per cent. of our children leave school to go out into the world, and what have we given him that will create tastes along the line of good reading?

Nearly every newspaper we pick up contains accounts of crime committed by children whose minds are affected by the reading of these Penny Dreadfuls. The bold highwayman is applauded, the petty thief admired, and the boy who runs away from home to become one of these choice characters is all that is courageous and valiant. Then, to make these impressions more vivid, we have the ever-alluring picture show. There is an example of a possible good being turned into a probable evil. There the child sees presented as vividly as possible, the scenes of robbery and murder about which he reads. He sees tricks played on the aged and infirm, and the chief

actor applauded. Fine morals, truly, for our young Canadians to grow up on.

It is surely for no lack of interesting, good literature, that children read such poisonous trash. There are dozens of books which, like Ruskin's "King of the Golden River," will hold the interest of any child. Why not place these books before the child, then, and we will not find him indulging in sensational novels when he grows older. "As the twig is bent, so the tree inclines." Surely the effort to have young Canada inclined in the right direction is worth considering.

The following is a roughly-graded list of books suitable for children's reading: Anderson's Fairy Tales, Birds' Christmas Carol, The King of the Golden River, The Jungle Tales, Robinson Crusoe, Swiss Family Robinson, Lion the Mastiff, Black Beauty, Beautiful Joe, Alice in Wonderland, Moosewa, Seaton Thomson's Books, Roberts' Animal Stories, Peeps in Many Lands, Lamb's Tales from Shakespeare, The Wonder Book, In the Heart of an Ancient Wood, Anne of Green Gables, Anne of Avon Lea, Oliver Twist.

ALICE M. ELLIOT.
Waterloo Co., Ont.

Current Events.

Wireless communications have passed between St. Thomas, Ont., and Detroit.

The revolt in China is spreading, and a score of villages have been devastated.

Count Jacques de Lesseps flew across the Channel from Calais to Dover last week in a monoplane.

It is probable that a special autumn session of the British Parliament may be called to deal with the question of the veto.

The Rutherford Government of Alberta resigned on May 26th, and Chief Justice Sifton was called upon to form a new Government. He is a brother of Hon. Clifford Sifton.

Lend a Hand.

- Lend a hand to the tempted.
- Lend a hand to souls in the shadow.
- Lend a hand to those who are often misjudged.
- Lend a hand to the soul crushed with unspeakable loss.
- Lend a hand to the poor fighting the wolf from the door.
- Lend a hand to those whose lives are narrow and cramped.
- Lend a hand to the boy struggling bravely to culture his mind.
- Lend a hand to the young people whose homes are cold and repelling.
- Lend a hand to those whose surroundings are steadily pulling them down.
- Lend a hand to the prodigal sister. Her life is as precious as that of the prodigal brother.

A woman missionary in China was taking tea with a mandarin's eight wives, says the Detroit Free Press.

"Why," one cried, "you can walk and run as well as a man!"

"Yes, to be sure," said the missionary.

"Can you ride a horse and swim, too?"

"Yes."

"Then you must be as strong as a man!"

"I am."

"And you wouldn't let a man beat you—not even if he was your husband would you?"

"Indeed, I wouldn't!" said the missionary.

The mandarin's eight wives looked at one another, nodding their heads. Then the oldest said, softly: "Now, I understand why the foreign devil never has more than one wife. He is afraid."



Get Acquainted with Diamond Dyes and Save Money.

This article is for all you women who have not used Diamond Dyes. For, we want to tell you one of the many ways in which you can effect a great saving in your dress bills. Time and again, you will find on sale in many of the stores articles such as hosiery, ribbons, gloves, dress goods, etc., that are real bargains. The only reason for the low price being that the shade is out of fashion—or the goods may be a little soiled. Quite a saving can be made by buying such things, and restoring the color with Diamond Dyes, or you can change the color to any one of the new shades if you wish.

Other Uses for Diamond Dyes.

There are a great many other uses for Diamond Dyes, and each one will save you money. For instance, look over some of your "old things." Most of them are not really "old"—they're a little faded or soiled, or the color may be out of fashion. A bath in Diamond Dyes will make them all look like new again. Faded hosiery, silk gloves, veils and feathers, too, can be made like new with their use. Portieres, couch covers, table covers, ribbons, sashes and trimmings of all kinds are given new life and added beauty by a bath in Diamond Dyes. And for dyeing dress goods, faded garments, skirts, waists and suits Diamond Dyes are invaluable, both in economy and usefulness. There are 18 different colors to choose from, and you can get most any shade desired, if you follow the simple directions that come with each ten-cent package.

You Take No Risk with Diamond Dyes.

You may have tried coloring some article before and were not satisfied, but it wasn't Diamond Dyes you used. For you can use Diamond Dyes with safety on the most expensive piece of goods, and there is no danger of the goods becoming spotted, or streaked, or harmed in any way. You will be satisfied with the results every time. Because Diamond Dyes are the only dyes perfect in formula and positive in action.

THE TRUTH ABOUT THE USE OF DYES.

Diamond Dyes are the standard of the world, and always give perfect results. You must be sure that you get the *real* Diamond Dyes, and the *kind* of Diamond Dyes adapted to the article you intend to dye. Beware of imitations of Diamond Dyes. Imitators who make only one kind of dye, claim that their imitations will color Wool, Silk, or Cotton ("all fabrics") equally well. This claim is false, because no dye that will give the finest results on Wool, Silk, or other animal fibres, can be used successfully for dyeing Cotton, Linen, or other vegetable fibres. For this reason we make two kinds of Diamond Dyes, namely: Diamond Dyes for Wool, and Diamond Dyes for Cotton.

Diamond Dyes for Wool should not be used for coloring Cotton, Linen, or other Mixed Goods, but are especially adapted for Wool, Silk, or other animal fibres, which take up the dye quickly. Diamond Dyes for Cotton are especially adapted for Cotton, Linen, or other vegetable fibres, which take up the dye slowly. "Mixed Goods," also known as "Union Goods," are made chiefly of either Cotton, Linen, or other vegetable fibres. For this reason our Diamond Dyes for Cotton are the best dyes made for these goods.

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

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

"The Farmer's Advocate" Fashions.



6630 Blouse Waist, 34 to 42 bust.



6590 Blouse or Shirt Waist, 34 to 44 bust.



6641 Circular Petticoat, 22 to 30 waist.



6520 Breakfast Jacket, 34 to 44 bust.

Kindly order by number, giving measurement. Price, ten cents per pattern. Address: Fashion Dept., "The Farmer's Advocate," London, Ont.

The late Bishop Gallier was once asked to baptize a negro baby boy.

"Name this child," he said, addressing Mrs. Jackson, the mother of the black babe.

"Halbid."

"That's a strange name, Mrs. Jackson," remarked the Bishop, hesitatingly.

"Scripter name," rejoined the happy mother, with a confident grin.

"I never saw it in the Bible."

"Why, Bishop, how kin yuh stan' up dar kiddin' a ole ignorant niggah lak I is?" Yuh says dat name whenever yuh says de Lawd's Prayer: 'Halbid be Thy name!'"

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.]

Ginger Cookies—Linoleum.

My husband has been taking your paper some years, and I have often found the Home Department very helpful. Could you give me a recipe for soft ginger cookies? Also what should one do to a linoleum to brighten it up after being down four years? Could you oil it with boiled oil as you can hard-wood floor?

MRS. A. G. T.

Ginger Cookies.—1 cup New Orleans molasses, 1 cup butter, 1 egg, 3/4 cup sour milk, 1 heaping teaspoon soda, 1/4 teaspoon ginger, flour to make a soft dough. Bake in a moderate oven. These will be crisp at first, but will soften later.

Linoleum should be very frequently rubbed off with a cloth very moist with warm water, as gritty particles of dust, if allowed to adhere to it, quickly ruin its good looks. Occasionally, it may be wiped with skimmed milk and water, and once a year it should be well rubbed with good furniture polish. I should imagine boiled oil would do very well, but the furniture polishes sold in hardware stores have been tested.

Hair Dressing.

Dear Dame Durden,—I would like to know how to do your hair with the coronet braid, and would like to know if you can do it without any false hair. Thanking you in advance, I will say good-night.

VANITY.

Lambton Co., Ont.

Very few people have hair enough to make the coronet dressing without a good deal of false material, or, at least, a long, thick switch. In "fixing" it, a so-called "turban" frame is also, as a rule, used. This is fastened on the back of the head, and the hair, combed softly back, or slightly parted at the front, is drawn over it and pinned in. Next, the braid is pinned on. It should pass quite around the head, quite covering the joining edge of the turban. If one has a great deal of hair, one may easily simulate this method. I have heard a rumor lately that simpler methods of hair dressing, depending solely upon one's own "crown of glory" for accomplishment, are about to return to favor. The news seems too good to be true; indeed, one can scarcely believe it to be true until the fashion actually becomes popular, for styles in hair-dressing seem to change about as rapidly as any others. The fact, however, that very young girls have returned to the custom of wearing their hair in one long braid or curl at the back, with a simple ribbon bow at the back of the neck, would seem to be auspicious of an all-around change.

Poultry House.

Dear Dame Durden,—I thought I would write you again. I am starting a poultry-yard this summer. I have intended to have twelve hens, three turkeys, three geese, three ducks, and I was thinking that a long, low building, facing the south, and to keep the ducks, turkeys, geese and hens in the same building, but have the interior partitioned off, and to have a kind of storage-room at the entrance. Now, Dame, what would you recommend to give to hens, turkeys, ducks and geese, and in what seasons? Is Louse-killer good for to put on turkeys, ducks and geese?

Is it necessary for the children who write to the Beaver Circle to sign their names?

Now for some recipes.

Hot Cake.—Pour boiling water over 1 1/2 cups of corn meal, 1/2 little salt, and 1 tablespoon lard or butter. Cover and let stand two hours, then add the yolks of 3 eggs, beaten up with 1/2 cup milk, 1 teaspoon Magic baking powder, lastly the beaten whites of 3 eggs. Bake for 1/2 hour.

Bachelor's Buttons.—2 eggs, 4 ounces of butter, 8 ounces sugar, 10 ounces of

The Women Send Him Flying

Farmers' wives know that only Sharples Dairy Tubular Cream Separators are free from the disks and other contraptions used in all common machines. The woman who must wash the separator will not approve the purchase of any common machine even though the agent may misleadingly claim it is simple or easy to clean. Such agents care nothing about causing women needless work. Women have good reason to send such agents flying. Why not? Washing 40 to 60 disks is no pleasure and women are wise to avoid it.

Sharples Dairy Tubular Cream Separators

have no disks, yet produce twice the skimming force, skim twice as clean, skim faster and wear longer than common separators. The World's Best. The manufacture of Tubulars is one of Canada's leading industries. Sales easily exceed most, if not all, others combined. Probably replace more common separators than any one maker of such machines sells. Write for Catalogue No. 198



30 Yrs
THE SHARPLES SEPARATOR CO.
TORONTO, ONT. WINNIPEG, MAN.

SPRINGTIME-FRECKLE TIME



Now's the time, if you freckle, to get ahead of those wee pests that disfigure a good complexion. Don't wait until they appear, begin now.

PRINCESS COMPLEXION PURIFIER

An antiseptic remedy, removes tan, freckles, mothpatches and discolorations, and makes the skin clear, smooth and healthy; cures pimples, rashes and blackheads. Price, \$1.50. Express paid.

SUPERFLUOUS HAIR. Moles, etc., eradicated forever by Electrolysis. Satisfaction assured. Booklet "F" mailed free.

HISCOTT DERMATOLOGICAL INSTITUTE
61 College St., Toronto.
Established 1892.

"Doctor," said the patient upon whom the hospital surgeon had just operated for appendicitis, "you're the same surgeon that amputated the first finger of my right hand when I had it crushed in a railroad accident a few months ago, ain't you?" "Yes," answered the surgeon. "Well, you got my index then, and now you've got my appendix." "I hope you are satisfied."

PEASE "ECONOMY" FURNACE

(Warm Air)

No stooping to shake the "Economy" Grate. No dust in the cellar or the house. Write for booklet—"The Question of Heating."

PEASE FOUNDRY COMPANY
LIMITED

Toronto - Winnipeg 2330

flour, 1 teaspoon Magic baking powder, flavor with ratifia. Make into small, round balls, and bake in a rather quick oven.

Pop-overs.—2 eggs, 2 cups milk, 2 cups flour, a little salt. Put all into a bowl and beat. Bake in deep patty tins.

Now, this is all, Dame, so who comes next? Where are Jack's Wife, Wrinkles, Sunbonnet Sue, and has Graybird left us altogether? LOUISA MAY.
Huron Co., Ont.

We sent the poultry question to the Poultry Department of the Macdonald College, Que., and have just received the following reply:

1. You might make the house 20 feet long by 10 or 12 feet wide, have it 4 or 5 feet high at the back, and 6 or 7 feet in front. Divide it into three pens, the middle pen 8 feet wide, and the two end pens 6 feet each. At the end nearest your living house have the store and feed room; the pen at the further end for geese and turkeys. They will run together. The geese and ducks will stay outside most of the time anyway. Have a roost at the low end of the pen for the turkeys, likewise for the hens. The door leading into the store-room will be at the end, but near the front; there will also be a door similarly placed connecting the pens. The inside doors should be swung high enough to clear the litter that may be on the floor. Put three windows in front, one large one in the center, and two smaller for the end pens. Have a runway for the hens to get into their yard, which is in front, the runway for the turkeys, geese and ducks, put at the end, and have their yard separated from the hen yard. A small opening might be made between the hen-house and the end pen to let the hens run into this pen occasionally, but the opening should be high enough that the ducks could not get through. The north wall should be double boarded.

2. Ducks and geese, as a rule, are not troubled with lice, and turkeys only when young. Hens, however, may require attention at any time.

Children writing to Beaver Circle must sign their names, and it is preferred that they use them, in that department, for publication.

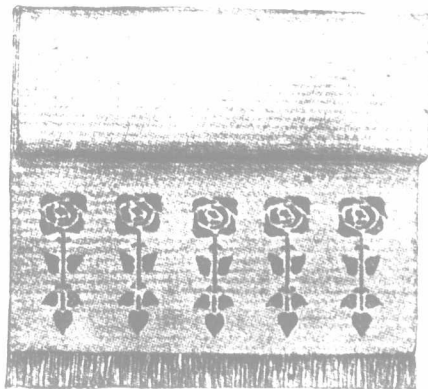
Many thanks for the recipes.

Stenciling, Again.

Dear Dame,—I have noticed several items of interest concerning stencil work, and would like to hear more about how it is done; also how the common dye is used as a paint. Please give instructions for mixing paints. B. L. W.
Northumberland Co., Ont.

Stencil patterns may be bought all ready for using, or may be made at home. Procure some stout brown paper, or, still better, regular stencil paper. On it draw the design with a lead pencil, leaving connecting portions where necessary. Next cut out the necessary parts with small, sharp scissors, or with a sharp knife (first placing the design over glass), and finally, if the ordinary paper

be dripped off rather dry on blotting paper, as if too wet, the coloring matter is likely to run and make blurred outlines. Scrub the color in well, but do not have it too wet. When one piece is done, move the stencil and repeat. Let the material dry and apply coloring



Stencil Pattern for Rug or Curtain

on the other side also. Naphtha or gasoline may be used instead of turpentine, but great care must be taken not to work in a room with fire or flame of any kind, ever so little.

The accompanying stencil patterns may be easily drawn, or may be purchased from the Home Journal Pattern Co., Philadelphia.

Our Scrap Bag.

To make curtain rings run easily, rub the pole well with paraffin.

To help to keep flies out of the pantry, sponge the windows daily with a weak solution of carbolic acid and water.

Try knickerbockers, or full bloomers of the same material of her dress (black satin will do), for your little daughter, instead of petticoat and drawers, and see if you will not like them better.

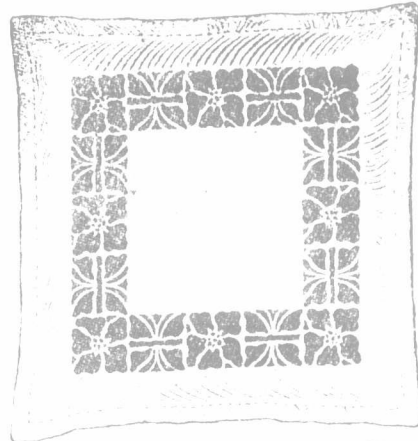
The following hint is from Harper's. I have heard of persistent deep breathing as a brightener of the low-spirited before. Deep breathing is a good habit to acquire, anyway: "The most helpful thing I have ever learned from experience is this: If we breathe deep we cannot worry, and if we worry we cannot breathe deep. I wish others might be helped by the knowledge, as I have been." C. N. M.

If white garments have been rusted by hooks and eyes, twist the discolored portions and hold them for a few minutes in boiling water in which a little cream of tartar has been dissolved.

An easy way of mending a lace or net curtain is to cut a piece of similar material, shape it to just fit over the edges of the hole, wet it in cold starch, and press with a hot iron.

For Falling Hair—Salicylic acid, three drams; carbolic acid, one dram; alcohol, five ounces. Apply once or twice daily.—Medical Talk.

If the wall paper behind a couch is soiled, tack over it a piece of pretty Japanese or fibre matting, and put a



Easy Stencil Patterns.

is used, varnish both sides of the paper, and let dry,—this to prevent soaking. When ready, place the material to be stenciled over a large sheet of blotting paper on a board, place the pattern over, and fasten down firmly with thumb-tacks. Now, with rather stubby brushes, lay on the coloring "through the hole." The coloring matter may be dye, prepared as for dyeing, or tube paint, mixed with turpentine, and the brushes must

narrow picture moulding along the top. The effect is very pleasing. The matting should, of course, be of the leading color tone of the room.

To clean papered walls.—Mix corn-starch, whitening, and tanners' earth, in equal parts. Rub walls and ceiling with it, applied with a cheesecloth mop. Finally, go all over wall with damp flannel, rubbing downward. Stale bread is also sometimes used. To remove

BOVRIL

is the concentrated goodness of beef.

It is always the same. Never varies in quality or price.

Just Six Minutes to Wash a Tubful!

This is the greatest washer the world has ever known. So easy to run that it's almost fun to work it. Makes clothes spot-

less clean in double quick time. Six minutes finishes a tubful.

Any woman can have a **1900 GRAVITY WASHER** On 30 days' free trial.

Don't send money. If you are responsible, you can try it first. Let us pay the freight. See the wonders it performs. Thousands being used. Every user delighted. They write us bushels of letters telling how it saves work and worry. Let the 1900 Washer pay for itself. Just send us 50 cents each week out of the money it saves you. Write to-day for our Free Washer Book. It explains the "easy payment plan." Tell us your nearest freight station. Address me personally for this offer.

F. A. D. BACH, Manager.
The 1900 Washer Co., 357 Yonge Street
TORONTO, CANADA

The above offer is not good in Toronto or Montreal and suburbs. Special arrangements for these districts.

Cowan's Maple Buds

(NAME AND DESIGN REGISTERED)

are different from and better than any other chocolate confection you ever tasted. Maple Buds are not made by any other concern, as the name and design is fully patented. Look for the name on every Bud.

The Cowan Co. Limited,
Toronto. 87

EUREKA Glass Tank Sprayer



Solution tank is a quart Crown glass jar. If broken, it can be easily replaced for a few cents. Solution tubes are brass. None of the liquid used can be drawn back into the pump chamber, thus the chamber and valves are uninjured. This is the easiest operated and the most effective small sprayer on the market. Inquire of your hardware dealer.

Write for our complete catalogue of Sprayers and Garden Tools.
THE EUREKA PLANTER CO. LIMITED
Woodstock - Ont. 6

World's Greatest Separator

GOOD NEWS

For Cream Separator Buyers.

STANDARD CREAM SEPARATORS

ARE NOW ON THE MARKET.

Pronounced by dairymen and cream separator experts to be the best. Free catalogue explains all. Write for one to-day to:

THE RENFREW MACHINERY CO., LIMITED, RENFREW, ONT.

If you are a judge of tone-quality you'll choose the

**Sherlock-Manning
20th
Century
Piano**

and become the proud owner of a high-grade instrument.

Sherlock-Manning



LOUIS XV.

If you are a judge of piano-value you'll choose the

**Sherlock-Manning
20th
Century
Piano**

and save a hundred dollars.

STICKNEY

Gasoline Engine



Just suits the

CANADIAN FARMER.

It is simple in design.

Does not easily get out of "kilter." Your boy can start it.

LOOK HOW COMPACT.

No conglomeration of tank and pipes always in the way.

Booklet No. 57 will post you on the principles of Gasoline Engines.

Ontario Wind Engine & Pump Co.

(LIMITED).

TORONTO, CANADA.

YORKSHIRES March and April pigs from imp. sire, Summer Hill Albert 2nd 21674. All are a choice lot. Will make show stock. One hour fit for service now. Prices right. G. B. MUMFORD, AYR, ONT.

"The Brake that Makes the Wheel Run Easy."

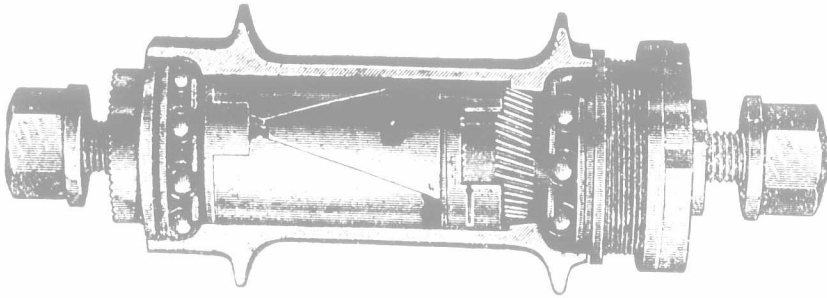
The Hercules Coaster Brake

There were more "Hercules" brakes sold in Canada last year than all others combined.

One reason for the "Hercules" popularity is that it is lighter in weight than any other. The "Hercules" is an armless brake, a great feature in any bicycle. A child can take it apart and reassemble it.

Positive in action and easy running when released. It wears well because it is solidly-simple, and there are no intricate parts to get out of place or become damaged in the wear.

THE HERCULES IS AS SMALL AS THE ORDINARY HUB OF A BICYCLE.



WRITE US FOR PARTICULARS AND CATALOGUES.

Canada Cycle & Motor Co., Ltd., Toronto

grease spots from the paper, apply fullers' earth mixed to a thin paste with ammonia. Let dry, then brush off.

Recipes.

Steamed Bananas.—Cut into halves lengthwise, steam until hot, place on hot buttered toast, brush with butter, and serve at once for breakfast.

Whole-wheat Pop-overs.—Break 2 eggs in a bowl; beat slightly, then add 1 cup milk and beat with an egg-beater, adding gradually one cup whole-wheat flour and one teaspoon salt. Beat rapidly until smooth, lifting the batter high to involve as much air as possible. Drop into hot patty-pans or muffin-rings and bake 30 minutes.

A Meat Dish.—Put through the chopper any cold beef and a little ham if possible, one small onion, and one pickled green pepper. Season, add 2 table-spoons-melted butter, 1/2 cup cold boiled rice, 1 cup stewed or canned tomatoes. Bake until brown.

Steamed Eggs.—Butter cups, drop an egg into each, sprinkle with salt and pepper, and steam until whites are set. Serve on buttered toast.

Old Potatoes.—Cut into very small balls, let soak three or four hours in cold water, then boil in salted water, putting it on cold, and serve with cream or milk sauce.

QUESTIONS AND ANSWERS.

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

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

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

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

Miscellaneous.

DOG TAXES.

Can municipality who compels dog to be tied, collect taxes on same? G. A. C.

Ans.—Yes.

WEEDS FOR IDENTIFICATION.

Kindly inform me, through your valuable paper, "The Farmer's Advocate," the name of the weed which I enclose, and how best to deal with it. J. P.

Ans.—The specimens are very small and shrunken. There is no evident character that excludes them from being perennial sow thistle.

A NEW BERRY.

Would like to know, through your valuable paper, if you have ever heard or know anything about the new berry, "Himalaya Giant," or is it just a fake, as I procured some of the seed and they failed to germinate? Will inclose paper describing this new wonder. MRS. J. H. D.

Ans.—We have not yet fruited the Himalaya Giant berry, nor do we know any Experiment Station or individual who has. Not having seen this fruit, nor having seen it reported upon by other Experiment Stations, we are unable at the present time to give further information about it.

W. T. MACOEN,
Dominion Horticulturist.

PUTTING PIGS IN CLOVER.

I have a number of small pigs six weeks old which I am thinking of turning out on clover. How old should they be before I could turn them out? Would it be best to turn them on all at once or leave them on a little while at a time at first? W. L. S.

Ans.—Presuming that the pigs are weaned at about eight weeks old, they may be turned out on clover a couple of weeks later, provided they have a comfortable covered place to sleep in, and are fed some grain or middlings, with skim milk. It is better to turn them out first in the afternoon for an hour or two when the clover is dry, and if the pigs are white, it is better to let them out towards evening, or on a cloudy day, as they are liable to cracking of the skin from sunburn, causing scurf.

QUESTIONS AND ANSWERS.
Miscellaneous.

COW'S MILK LEAKING.

As I am in perplexity about a cow who is losing her milk, I would be obliged to you if you could send me some advice what to do about it.

A SUBSCRIBER.

Ans.—Not much can be done to prevent milk leaking. Dipping the ends of teats in vinegar, or in a solution of alum after milking, has worked successfully in some cases. It can be easily tried. As season of lactation advances, there will probably be improvement.

FARMING ON SHARES.

A lets farm to B on shares. B, as per agreement (in writing), agreeing to do "all the work on the farm," receiving one-third of profits. A is engaged in building, also putting up new fences, and claims that B is obliged to assist, or he can get other labor and charge B for it. B has often lent a hand in what he considers this extra work, merely as a matter of good-will and, though B has no wish or intention to do so, is under the impression that he himself could claim for these services to A.

Ontario. A SUBSCRIBER.

Ans.—We do not think that B is legally called upon to assist in the work in question, or to pay for other assistance to A in respect of such work. On the other hand, B cannot legally claim any remuneration for the assistance he has already, voluntarily, rendered to A.

AILING CHICKENS.

I have some pure-bred Brown Leghorn chickens. I got the cockerel and pullets from the same person, but they were not supposed to be any relation. When hatched, the chickens seemed to be very healthy, but when a few days old they seemed to get blind, and would run around in circles.

J. S.

Ans.—My first impression would be that the trouble with the chickens is due to vermin. I have seen chicks act similar to those which you mention, where the breeding stock was out of condition, either by too high feeding, or by close confinement, with a lack of green food and exercise. I doubt if any treatment will be of much use. If the chickens are grown out of doors on as free a range as possible (and I prefer cultivated land to sod), then fed liberally with bread and milk, cracked wheat, and pin-head oatmeal, with a good supply of grit and drink, either milk or water, they should come along all right. The sitting hen should be liberally dusted with insect powder during incubation, say the day they are set, about the 10th day, and again on the 18th, taking care to rub the powder well in.

W. R. GRAHAM.

CATTLE BLOATING.

I lost a valuable cow recently from bloating on being turned into a forward clover pasture. What is best treatment in such a case?

J. S.

Ans.—Prevention is better than cure. Cattle, on being turned out of stable, should not be let into fresh clover or other pasture when wet with dew or rain, and better for only an hour or two the first day. When bloating is noticed, if attended to promptly, relief may generally be given by securing a round stick, such as a piece of a fork handle, eight or ten inches long, in the mouth of the animal, by means of ropes from each end tied to the horns, or, if hornless, back of the ears, and keeping the animal gently walking. If a bad case, a dose of spirits turpentine, two ounces, given in water, or, better, in two or three ounces raw linseed oil as a drench, usually gives relief.

In a very severe case, the animal moaning and slaving, there is danger of death from suffocation, and tapping with an instrument called a trocar and canula, should be promptly used. The trocar is a sharp-pointed instrument, and the canula is the sheath. The place to tap is in the middle of the depression between the backbone and the hook bone, the trocar being withdrawn and the canula held in the opening while the gas escapes. If this instrument is not on hand, the next best thing is to prepare a goose quill by cutting off the ends, and, with

a sharp-pointed knife, make an incision through the skin and the lining of the stomach, insert the quill, and hold it firmly till the gas escapes.

GOSSIP.

Eggs for hatching, from the Lakenfelder (belted) breed of poultry, are for sale by A. O'Neil & Son, Birr, Ont., whose specialties are belted Hampshire hogs and the belted breed of chickens above named. See their illustrated advertisement on page 937.

E. F. Osler, Lake View Stock Farm, Bronte, Ont., writes: I am glad to let you know that, through the medium of "The Farmer's Advocate," I have lately sold three Holstein cows to a gentleman who is taking them to South Africa to start the black-and-white breed in that country.

The Gait Horse Show, slated for the dates June 9th to 11th, as advertised in this issue, will be, as usual, an event of much interest, and occurs at a season when comfortable weather may be expected. Prizes to the amount of \$3,500 are offered, and the show is open to the Dominion, if not to the world. Former Gait shows have been very successful and satisfactory to all concerned. Single fares on all railways will be available.

GREAT SHORTHORN SALE.

At Mansfield, Ohio, May 24th, 58 head of Shorthorn cattle, from the herd of Carpenter & Ross, of that place, sold for \$23,260, an average of \$401. H. L. Emmert, East Selkirk, Manitoba, took the show cow, Sweet Duchess of Gloster, at \$1,800. Two bulls, Silver Dale and Glorious Dale, both sired by Avondale, sold for \$1,330 and \$1,325, respectively, to C. J. McMasters, and B. L. Brasfield, of Illinois. At Elmendorf Farm, Lexington, Kentucky, May 25th, fifty head were sold for an average of \$305, the highest price being \$1,000, for the white three-year-old bull, Albin, by Whitehall Marshall, dam Moneyfuffel Maid, bred in Canada, by Jas. Leask. There were a number of Canadian breeders present at these sales, and Miller Bros., of Brougham, bought the young Canadian-bred cow, Rosa Hope 17th, by Nonpareil Archer, for \$595. Captain T. E. Robson, London, captured the red three-year-old cow, Master's Sunshine, by Master Lavender, dam Imp. Scotland's Pride, bred by Wm. Duthie, for \$340, and Geo. Amos & Son secured the five-year-old cow, Starlight Rose 2nd, a Cruickshank Secret, for \$300.

In a southern county of Missouri years ago, says the Kansas City Journal, when the form of questioning was slightly different than now, much trouble was experienced in getting a jury in a murder trial. Finally an old fellow answered every question satisfactorily; he had no prejudices, was not opposed to capital punishment, and was generally a valuable find. Then the prosecutor said solemnly:

"Juror, look upon the prisoner; prisoner, look upon the juror."

The old man adjusted his spectacles and peered at the prisoner for a full half-minute. Then, turning to the Court, he said:

"Judge, darn if I don't believe he's guilty."

Two Kentucky colonels were showing an Englishman what a wonderful country the South is. When the Briton had travelled from Baltimore to New Orleans, and from the Atlantic to the Mississippi, he said: "Yes, the South is a fine country, but you have no industries here."

"No industries," retorted Col. Smith, with indignation. "Why, suh, Col. Robinson in Kentucky has a dairy where he produces a million pounds of butter and a million pounds of cheese a month."

"Impossible!" said the Englishman.

Col. Smith turned to his fellow for corroboration.

"I don't know how much butter and cheese Col. Robinson produces a month," said the second Kentuckian, "but I do know that he has twelve sawmills, and he runs them all with buttermilk."



PAQUET GUARANTEED CLOTHES

MADE TO YOUR MEASURE BUT NOT CUSTOM-MADE

THIS looks paradoxical, but it's none the less true for all that. What's more, we can PROVE it to your entire satisfaction, and stand ready to refund your money if you are not ABSOLUTELY SATISFIED with your Clothes when they arrive. PAQUET Guaranteed CLOTHES, as their names implies, are GUARANTEED to fit YOU perfectly. All Ready-made Clothes are cut and made up to fit AVERAGE types, not REAL men. That's why they don't fit YOU. And they can't be MADE to fit, either, without being all ripped up and recut—a very expensive undertaking, and, therefore, out of the question. PAQUET Guaranteed CLOTHES are cut to fit BEFORE they are made up at all. That's why we can GUARANTEE them to fit PERFECTLY. Our New Style Book tells all about our method of Clothesmaking. PAQUET Guaranteed CLOTHES are GUARANTEED to be the best value in Canada to-day at from \$10.00 to \$14.25—worth \$13.50 to \$20.00.

THE SUIT ILLUSTRATED

is made from absolutely PURE WOOL, navy or black serge, best Indigo Dye, thoroughly shrank and absolutely guaranteed to keep its color. The workmanship is unexcelled in this Country. The pockets are made according to our special process, and will neither sag nor get out of shape. The real value is \$13.50. Our Special Price, PRE-PAID to any part of Canada, is \$10.00. Sizes 36 to 44 only. Larger sizes, 75c. per size extra.

Write for FREE Style Book

illustrating New York's latest models, and containing samples of the very newest materials for the present season. This book also contains our special self-measurement chart, which is so simple and concise that anyone using it is absolutely certain to be fitted PERFECTLY. Write NOW! Don't put it off until another time—a post card will do—you'll get the Style Book by return mail.

THE PAQUET COMPANY LIMITED.
MAIL-ORDER DEPARTMENT
QUEBEC, CANADA.

THE MAGNET DRAWS

All foreign matter out of the milk and cream

It is the one-piece skimmer in the large steel bowl of special shape and length that does it. The shape of the bowl makes the insertion of this special device possible, and it is this Separator skimmer that gives absolutely clean cream and butter.

The MAGNET Cream Separator bowl is supported at both ends, the only one so supported (MAGNET PATENT), preventing wobbling, and, therefore, never gets out of balance. The square gears are cut out of solid blanks and set in the strong frame, which holds the parts rigid, preventing vibration. When speed is gotten up the heavy bowl and gears act as a balance wheel. A child can easily keep up that regular motion in turning, which produces smooth cream and takes out all the butter-fat but a trace, whether operated by child or man.

Let us prove these and the many other MAGNET strong points on your farm at our expense.



FREE TO MAGNET USERS: MAGNET SANITARY STRAINER.

Send us the names of 15 dairy farmers who have cows and no cream separator, or farmers who have separators that are not skimming clean, and we will send you FREE a MAGNET SANITARY STRAINER.

This strainer is the latest addition to the MAGNET, and is patented. Dairy authorities and users say it is the best strainer and the easiest to clean they have ever used. We wish you to have one of these strainers on your MAGNET tank.

Send us 15 names and the number of the MAGNET you own and receive the strainer FREE.

THE PETRIE MFG. CO., LIMITED
Head Office and Factory: HAMILTON, CAN.

Winnipeg. St. John, N. B. Regina. Vancouver.
Calgary. Montreal.



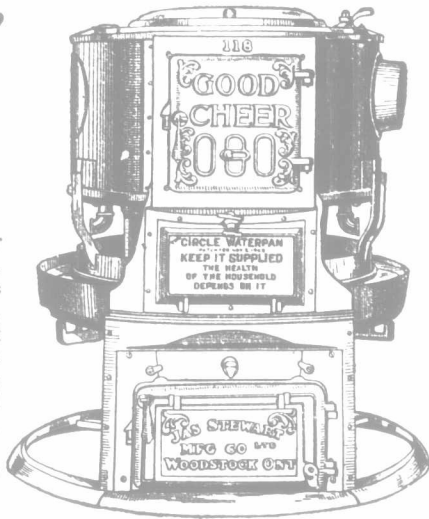
Like
"The Kettle
on the Hob"

of grandmother's time—the large Circle Water Pan of the "Good Cheer" Furnace supplies the moisture so necessary to the air we breathe.

The ordinary Furnace with its apology for a waterpan holding only a few quarts, is utterly unable to keep the air it heats half as humid as outdoor air. This dry air shrinks the wood work, loosens the joints of the furniture, dries and shrivels up the house plants, and worse still, affects your skin, throat and lungs in much the same way. That's why you catch cold so easily in winter.

The
"Good Cheer"
FURNACE
with its new patented
"Circle Waterpan"

supplies air like the breath of summer—air that is not only warm, but humid, like the air outdoors. You can live more comfortably in this humid, healthy "Good Cheer" atmosphere at 68° than you can at 72° or 75° in the dried-out air supplied by the average furnace. There's both health and economy in a "Good Cheer" Furnace. If you're building, arranging to build, or even thinking of building—make up your mind to install a "Good Cheer" Furnace. Write for full description.



THE JAMES STEWART MFG., CO., LIMITED,
WOODSTOCK, Ont. - - - - - WINNIPEG, Man.

Mr. Farmer, You Surely Want the Best! Nothing
Less Should Satisfy the Progressive Farmer.



Probably no cultivating maching is so widely known and used throughout the farming world to-day as the

PLANET JR. NO. 8

We guarantee this machine the best made, and unsurpassed for general efficiency, while it is exceedingly strong, simple, accurate and positive in all positions. Our price, delivered, freight prepaid, to purchaser's station, \$10.50.

KENNETH McDONALD & SONS, OTTAWA, ONT.

TENTH ANNUAL GALT HORSE SHOW

BIGGER, BETTER AND MORE BRILLIANT THAN EVER.

DICKSON PARK, GALT
Thursday, Friday and Saturday June 9, 10 and 11
\$3,500 in Prizes. Single Fare on All Railways.
JAS. CROMARTY, President. JAS. WETHERALL, Vice-President. W. A. HUNTER, Secretary. F. S. JARVIS, Treasurer.

POLES OF STERLING QUALITY

Michigan White Cedar
W. C. STERLING & SON COMPANY
Oldest Cedar Pole Firm in Business

Producers for 30 Years
1380 MONROE, MICHIGAN 1910

The annual meeting of the American Guernsey Cattle Club was held in New York City May 11th. The secretary's report showed that 2,372 bulls, and 4,900 cows, a total of 7,272 head, had been registered during the year ending April 30th, 1910, and that 5,068 sales in the same year has been recorded. The

Advanced Register now contains 92 bulls and 1,019 cows, the average milk yield of all the cows being 7,820.52 lbs., the average butter-fat yield being 107.82 lbs., and the average percentage of butter-fat 5.091. President J. H. Codman and Secretary W. H. Caldwell were unanimously re-elected.

QUESTIONS AND ANSWERS
Miscellaneous.

LICENSE TO COLLECT BIRDS' EGGS.

Would you kindly inform me the address of party I would apply to for license to collect specimens of birds' eggs. R. H.

Ans.—Permits for the collection of birds' eggs and specimens are issued by the Deputy Minister of Fisheries, Public Works Department, Parliament Buildings, Toronto.

LABORER QUITTING.

A hires B for eight months at \$15 a month. B was to get spending money; the rest at the end of the term. B works 23 days and quits without any reason. B gives C an order on A for \$14, to be paid 24th day of May.

1. Can C collect the order?
2. If so, at what time?
3. Or, can B collect wages at the rate of \$15 a month?

Ontario.
Ans.—1. Only part, if any.
2. At end of the eight months.
3. No—only such wages as are reasonable under the circumstances.

LUMP JAW.

I have a cow nine years old with a lump the size of a man's two fists on her jaw. It is rather long shaped, hard, and somewhat painful to the touch. It came on altogether this spring, I think. Is it lump jaw? If so, would it be right to send her milk to the cheese factory? Is there any cure, and what? Is the disease contagious?

A NEW SUBSCRIBER.

Ans.—From the description, we should infer that it is a case of lump jaw (actinomycosis). The iodine-potassium treatment has been successful in effecting a cure in many cases. Give iodide of potassium three times daily, in water, as a drench, commencing with one-dram doses, and gradually increase the dose by ten grains daily, until the appetite and desire for water fails, tears run from the eyes, and saliva from the mouth. When any of these appear, discontinue the drug. Repeat in four weeks, if necessary. Signs of improvement are reduction of size of lump, or its getting smaller. There is very little, if any danger of the milk being affected, except, possibly, in a very advanced case, when the general health is affected. It is not contagious in the early stages, but may be when discharges from the lump fall upon grass or other food which may be taken into the system.

PROBABLY TUBERCULOSIS—
WHERE TO PUNCTURE FOR
BLOAT—SET MILK AFTER
STRAINING.

1. Hens are going lame, some in one leg and some in both. Upon opening them, fine liver covered with white spots. They become very thin, but have no diarrhea. What is disease and remedy?
2. Where is the proper place to puncture a cow for bloat?
3. Should milk be disturbed by moving from one place to another, about twenty minutes or half an hour after straining?

Subcriber.
Ans.—1. Tuberculosis may be suspected as the trouble with the fowls. In addition to lameness, other symptoms of the disease are usually paleness of the combs, wattles, and skin about the head, and a persistent diarrhea. Post-mortem shows the liver almost invariably affected, usually enlarged, and studded more or less abundantly with little white nodules of a somewhat cheesy consistency, and from the size of a pinhead or less, to a quarter of an inch in diameter. If the white spots mentioned as being on liver, correspond with above description, there is little doubt that tuberculosis is present. If so, there is no cure for sick birds. Destruction of affected birds, prompt marketing of apparently sound birds, disinfection of premises, and beginning again with sound stock, are measures recommended.

2. The proper place to puncture for bloat is in the middle of the depression on the left side, between the point of the hook bone and the last rib.

3. Assuming that milk is to be creamed by the gravity system, the sooner it is put away where it will be undisturbed after being strained, the better.

POULTRY AND EGGS

Condensed advertisements will be inserted under this heading at two cents per word each insertion. Each initial counts for one word, and figures for two words. Names and addresses are counted. Cash must always accompany the order for any advertisement under this heading. Parties having good pure-bred poultry and eggs for sale will find plenty of customers by using our advertising columns. No advertisement inserted for less than 30 cents.

B. P. ROCK EGGS—At half price in June, etc.; 237 egg strain. Mrs. J. R. Henry, Watertown, Ontario.

BUFF Orpington eggs that hatch; nine chicks guaranteed. Four special pens, \$3 setting. Splendid utility stock, extra heavy layers, \$1 setting. Illustrated catalogue free. Hugh A. Scott, Caledonia, Ont.

CLEARING SALE OF HIGH-CLASS STOCK
To make room for young stuff, in Barred and Buff Rocks. Cocks, two dollars; hens, one dollar each. Satisfaction guaranteed. Joseph Foster, Brampton, Ontario.

CANADA'S best Anconas. Winter layers. Very profitable. Free circulars. Tells all about Anconas and Leghorns. Edmund Carlyle Apps, Box 224, Vice-President International Ancona Club, Brantford, Ontario.

EGGS at \$1.50 per 15, shipped in special baskets, from the following varieties: Rose and Single Comb White, Single Comb Black Leghorns; also Black Columbia and White Wyandottes. Mention this paper. A. & T. Readwin, 236 Paisley St., Guelph, Ontario.

GREAT REDUCTION—Famous Pride of Ontario strain of Rose-comb Rhode Island Reds and White Wyandottes, are prizewinners. Record-breaking layers, large, healthy, vigorous; illustrated circular free. Eggs, special reduction price, only 75 cents per 15. We guarantee satisfaction. Robert Smith, Colville, Ontario.

SINGLE-COMB BROWN LEGHORNS—Twenty 15 eggs, one dollar; one hundred, four dollars. Single-comb Black Minorcas, thirteen eggs, one dollar. Isaac Reed, Ardrea, Ontario.

SINGLE-COMB BLACK MINORCAS—\$1 for 15 eggs. Satisfaction guaranteed. Alfred B. Warder, Spry, Ontario.

S. C. W. LEGHORNS—Prizewinning and great laying stock. Eggs, \$1.00 per 15. A hatch guaranteed. Geo. D. Fletcher, Binkham P.O., Ontario.

WHITE ROCK EGGS—Good laying strain, \$1.00 per setting. Highworth Poultry-yards, London, Ontario.

WANTED—A few private farmers to ship me Poultry, Eggs, Dairy Butter, Syrup, and all other farm produce. Will pay highest market price. W. J. Falle, Prince Albert Ave., Westmount, Montreal.

Pleasant Valley Farm offers
WHITE WYANDOTTE EGGS

for hatching from 2 pens of grand winter layers. Large white birds. \$1.00 and \$1.50 per 15, \$4.00 and \$5.00 per 100.

G. AMOS & SONS, Moffat, Ont.

SPRING BANK FARM Offers S.-C. Brown Leghorn eggs at \$1 per 15, \$4 per 100. Excellent layers from prizewinning strain. Satisfaction guaranteed. Wm. Barnet & Sons, Fergus P. O., Ont.

TRADE TOPICS.

The Renfrew Machinery Company, of Renfrew, Ontario, advertise their Standard Cream Separators, pronounced by the many dairymen who have used them, the best. Parties interested will do well to look up their advertisement and write for their catalogue giving prices and particulars. The cream separator has come to stay, and no up-to-date dairyman will be content to do without one.

The Vancouver Island Development League, in their advertisement in this paper, and in an interesting booklet which will be mailed free on application, make known the claims of that section of the Dominion for pleasant and healthful homes, desirable farm properties for all kinds of crops, and especially for fruit-growing, poultry-raising and gardening. If interested, look up the advertisement and write for the booklet.

GOSSIP.

G. B. Mumma, Vt., Ont., writes: I have some Yorkshire boars, March and April pigs, by imported sires, Summer Hill Albert 2nd 21074, dam of two of them, Summer Hill Floss 3rd 21436 (imp.); dam of the others is Maud 21874, whose sire was S. H. Chester 18137. These are a choice lot of young pigs; every one will make a show hog. Have also one ready for service, and prices are right.



SHOWERY WEATHER DURING HAYING

Calls for the most improved methods for drying the hay quickly, and getting it to the barn or stack before a shower catches it. No better implements have ever been

devised for the rapid and economical handling of the hay crop than the

Massey-Harris Side-delivery Rake and Massey - Harris Hay Loader

They are generally used together, the side-delivery rake making a windrow from which the loader takes the hay and delivers it well onto the load. A load can be put on in a few minutes with a boy to drive, and a man to distribute the hay on the load.

They Save Many a Crop Which Would Otherwise Be Ruined by Rain or Exposure.

MASSEY-HARRIS CO., LTD.

TORONTO, MONTREAL, MONCTON, WINNIPEG, REGINA, SASKATOON, CALGARY,

Makers of a full line of haying tools:

MOWERS, RAKES, SIDE-DELIVERY RAKES, LOADERS, TEDDERS.



VANCO LEAD ARSENATE

Made in Canada

Destroys All Leaf-Eating Insects

"VANCO" Lead Arsenate will kill 95% of Codling moths where Paris Green at its best will not kill over 75%.

For potato bugs it is far surer than Paris Green, and sticks to the vines much longer, especially in rainy weather.

"VANCO" Lead Arsenate contains 15% to 16% Arsenic Oxide and not over 40% moisture average. It is made by expert chemists and the quality is absolutely reliable. It never fails to kill the insects, and never burns the foliage.

Because we make it right here in Canada, in large and well-equipped laboratories, we are able to offer you "VANCO" Lead Arsenate at very favorable prices. Compare these with what others are asking.

In 500 lb. barrels...10c. per lb. In 100 lb. kegs...11c. per lb.
" 50 " " ...11c. " " 25 " " ...12c. "

In 12 1/2 lb. pails...13c. per lb.

In "VANCO" Brand you get High Quality at Lowest Price. We ask for business not on promises, but on records of Government Analyses and practical tests.

Club your orders and save on freight
Write for free Booklet on Sprays.

Chemical Laboratories Limited 13
126-136 Van Horne Street, - - TORONTO.

Please Mention The Farmer's Advocate

QUESTIONS AND ANSWERS. Miscellaneous.

COWS CHEWING BONES.

Will you kindly let me know the reason of a cow having an inclination to chew bones. As soon as she goes out to pasture, which is in the creek flats, she starts to hunt for bones in going to and from the field. I have fed her salt and sulphur, and have asked the local veterinarian, and he told me that was all I could do for her. She seems to show signs of wanting something. Can you tell me what it is? She also fails in her milk as soon as the craving comes on.

Ans.—This is a habit, believed to be originated by a want of phosphates in the system. As the season advances, the craving for bones usually ceases. To allay it, an ounce of phosphate of lime in a pint of cold water, as a drench, night and morning, is recommended; or the phosphate may be given in bran or chop.

CEMENT CISTERN.

Please let me know how to build a cement cistern.

1. I would like it round, and about 1 1/2 feet across or 4 1/2 feet deep, or would a square cistern be better?
2. How strong with cement should it be made?
3. Please tell me how, and with what to finish up the inside after the forms are taken away?
4. In your issue of April 14th, the imbedding of wire in a cement water tank was advised. Is it necessary to put it into a cistern?
5. How thick should the wall be?

Ans.—1 and 5. A round cistern is decidedly stronger than a square one. Having made the excavation the full size of outside of cistern, prepare a wooden curbing, the proper depth and of such a diameter as to leave a space of three inches for concrete between it and side of excavation. When the concrete is thoroughly rammed in up to top of curbing, then lay on a plank platform with a hole in the center, and boxed up to above ground. Then, on the platform and around the whole, build a cone-shaped mound of wet sand, and over this put on the layer of concrete, so that the bottom edge shall rest on the perpendicular wall of the cistern. In about a week, remove forms and cement the bottom.

2. The concrete should be made fairly strong, about 1 to 6 would be right.
3. Plaster inside with cement and fine sand mixed 1 to 2, or wash with pure cement and water.
4. No reinforcing is necessary in a round cement cistern.

BUILDING A CHIMNEY.

I am building a house and would like a little information about chimneys. Will a chimney with a single flue accommodate both a furnace and cook stove? I have talked to several, and some say it will, and some say it won't. Also, how many bricks in a round in a double-flued chimney?

Ans.—It depends largely on the location and dimensions of the chimney. If it is a "center chimney," that is, one not built in an outside wall, one flue 8 x 8 inches, or 9 x 9 inches, inside measurement, in nearly every case proves capable of serving both furnace and stove. If, however, it is an "outside chimney," and the flue is oblong in shape, say 4 x 12 or 16 inches, trouble almost invariably occurs, because more heat is used in heating the wall. A square flue, 8 x 8 inches, and a flat one, 4 x 16 inches, have just the same area, but there is 25 per cent. more wall surface in the flat one, and hence it is harder to warm, and hence the draft is slow. Besides, if the flat chimney is placed in an outer wall, as is usually the case with this type, it is doubly cold, and is so difficult to heat that it seldom works well, and such a chimney would not be likely to be sufficient for even the furnace, to say nothing of the cook stove. An "outside chimney" to accommodate both satisfactorily, should be about 10 inches square, or, if built with tile, should have a 10-inch tile.

It would be impossible to state the number of bricks in a "round" of a double chimney, unless the size of the flue was specified.

Send your remittances by DOMINION EXPRESS MONEY ORDERS AND FOREIGN DRAFTS

Payable everywhere.

Rates for Money Orders:

\$ 5.00 and under 3c.
Over 5.00 to \$10.00..... 5c.
" 10.00 to 30.00.....10c.
" 30.00 to 50.00.....15c.

Money sent by

TELEGRAPH AND CABLE.

Issued in all stations of the Canadian Pacific Railway Co.



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.

BULBS AND PLANTS—Import Bulbs and Perennials direct from Holland at quarter price. Get import list at once. Morgan's Supply House, London, Ontario.

FOR SALE—New Woven Wire Fencing, all sizes and lengths, at half price. Write quick to Imperial Waste & Metal Co., 7 Queen St., Montreal.

FARM FOR SALE—In Brock Township, about 50 miles from Toronto; near church, school and excellent markets; 165 acres, more or less, suitable for grain or stock farming. Good buildings, well watered, excellent soil, and one of the best farms in this fine township. Apply to Robt. H. Shipman, Cannington.

FARMERS—Potato Bugs destroyed with one dressing; does not injure plants or destroy their progress. One packet sufficient to make 25 gallons of solution. Can be used in the ordinary spray. Sent, postage paid, on receipt of fifty cents. Vickers Maxim, Queen City Chambers, 32 Church Street, Toronto.

SEED CORN—\$1.00 per bushel in three varieties. LEAMING, PRIDE OF NORTH, SOUTHERN SWEET; BAGS, 25c. each. CALEDONIA MILLING CO., CALEDONIA, ONT.

VANCOUVER ISLAND offers sunny, mild climate; good profits for ambitious men with small capital in business, professions, fruit-growing, poultry, farming, manufacturing, lumber, timber, mining, railroads, navigation, fisheries, new towns; no thunder storms; no mosquitoes; no malaria. For authentic information, free booklets, write Vancouver Island Development League, Room A, 102 Broughton St., Victoria, B.C.

WANTED—Competent girl for housework. Apply: 643 Waterloo St., London, Ont.

WE HAVE FARMS

of all sizes and suitable for all kinds of farming in every county in Western Ontario. Send for our catalogue. The Western Real-estate Exchange, Ltd., 78 Dundas St., London, Ont.

FARMS FOR SALE BY PHILP & BEATON, Real-estate Brokers, Whitevale, Ont.

120 acres, Whitby Township, Ontario County; 2 miles from Brooklin, G.T.R., where are post office, churches, market, bank, etc.; 1 1/2 miles from public school; 33 miles from Toronto; good clay loam; good frame house of 7 rooms; bank barn, 32 x 80, with good stabling and all other necessary buildings; good wells, cistern and never-failing spring; good fences; one acre of good orchard. This farm has been the home of the owner, Mr. David Burns, for over 30 years, and the land is clean and in a high state of cultivation. Price, \$8,000; \$1,500 down.

140 acres, Pickering Township, Ontario County; half mile from village, post office, school, churches, etc.; 3 miles from railway station and continuation school; rich clay loam, clean and in high state of cultivation; splendid, two-storied brick house of 10 rooms, bathroom, furnace, etc.; fine bank barn, 42 x 85, 9 ft. stone wall, with good stabling; silo, piggery, driving-house, and all other necessary buildings; house erected in 1907; barn in 1902; goodavenue-sire and rail fences; good orchard of 3 acres, 25 farms planted; \$12,500; \$4,000 down. Philp & Beaton, Whitevale, Ont.

A young artist once persuaded Whistler to come and view his latest effort. The two stood before the canvas for some moments in silence. Finally the young man asked timidly, "Don't you think, sir, that this painting of mine is well—or—tolerable?"

Whistler's eyes twinkled dangerously. "What is your opinion of a tolerable egg?" he asked.

W. H. D.

His Friend Said

**"If They Don't Help or
Cure You I Will Stand
The Price."**

**Liver
Complaint
Cured.**

Mr. J. B. Busk, Orangeville, Ont., writes: "I had been troubled with Dyspepsia and Liver Complaint and tried many different remedies but obtained little or no benefit. A friend advised me to give your Laxa-Liver Pills a trial, but I told him I had tried so many 'cure alls' that I was tired paying out money for things giving me no benefit. He said, 'If they don't help, or cure you, I will stand the price.' So seeing his faith in the Pills, I bought two vials, and I was not deceived, for they were the best I ever used. They gave relief which has had a more lasting effect than any medicine I have ever used, and the beauty about them is, they are small and easy to take. I believe them to be the best medicine for Liver Trouble there is to be found."

Price 25 cents a vial or 5 for \$1.00, at all dealers, or will be sent direct by mail on receipt of price.
The T. Milburn Co., Limited, Toronto, Ont.

The roofing that lasts is made of genuine Trinidad Lake asphalt—

Genasco Ready Roofing

Cross-section, Genasco Smooth-surface Roofing
Trinidad Lake Asphalt
Asphalt-saturated Wool Felt
Trinidad Lake Asphalt

The Kant-leak Kleet makes seams absolutely water-tight without cement. Write for Genasco Book and samples.

THE BARBER ASPHALT
PAVING COMPANY

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

PHILADELPHIA

New York San Francisco Chicago

Roofers Supply Co., Ltd., Bay and Lake Sts.,
Toronto.

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

J. L. Lachance, Ltd., Quebec.

The ever-burning question, "What shall we do with our boys?" seems to be satisfactorily answered in the following advertisement, which appears in the window of a Farringdon road butcher's shop: "Wanted—A respectable boy for beef sausages."

THROW AWAY ALL YOUR FEARS

**Backache, Gravel and Rheumatism
Vanish Before Dodd's
Kidney Pills.**

**Proved Once Again in the Case of Mrs.
Fred Krieger, Who Suffered From
the Worst Forms of Kidney Disease.**

Palmer Rapids, Ont., May 30.—(Special.)—The thousands of Canadians who live in daily terror of those terrible forms of Kidney disease known as Backache, Gravel and Rheumatism, will be deeply interested in the story of Mrs. Fred Krieger, of this place.

"I was for years a great sufferer from Kidney Disease, Gravel, Rheumatism and Backache," Mrs. Krieger states. "It all started through a cold, but I got so my head ached, I was nervous, my limbs were heavy, I had a dragging sensation across my loins, and I was totally unfit to do anything."

"Reading about wonderful cures by Dodd's Kidney Pills, led me to buy some. After using a few I found they were doing me good, and this encouraged me to continue their use. Eight boxes made me well."

"I have been able to do my own work ever since, and to-day I am completely cured. Dodd's Kidney Pills gave me health, and I feel like a new woman."

"If you keep your Kidneys strong and healthy you can never have Backache, Rheumatism or Gravel. Dodd's Kidney Pills never fail to make the Kidneys strong and well."

GOSSIP.

SALE DATES CLAIMED.

June 7th.—At Guelph, Harry Smith and others; Shorthorns.

June 8th.—E. Jeffs & Son, Bond Head, Ont.; Shorthorns.

June 15th.—R. H. Reid & Sons, Pine River, Ont.; Shorthorns.

Official records of 168 Holstein-Friesian cows were accepted by the American Holstein Association, from April 30th to May 11th, 1910. This herd of 168 animals, of which over one-half were heifers with first or second calves, produced in seven consecutive days, 68,718 lbs. of milk, containing 2,414.216 lbs. of butter-fat; thus showing an average of 3.51 per cent. fat. The average production for each animal was 409 lbs. of milk, containing 14.37 lbs. of butter-fat; equivalent to 53.4 lbs. or 28 quarts of milk per day, and over 16½ lbs. of the best commercial butter per week.

A. F. McNiven, of St. Thomas, Ont., reports the following sales from his Clyde Park stud: To Wm. Hyland, Essex, Ont., the imported Shire mare, in foal, Burg Starlight [327], an extra-quality mare, of great size and the best of action; also the imported Clydesdale mare, Jennie Gibb [21281], and her ten-days-old foal, by Jas. Kilpatrick's Hiawatha horse, Manaton. These are a big span of mares of the right type. To Wm. Travis & Son, Talbotville, the two-year-old filly, Rosie Kerr, second prize at Stirling, Scotland, and third at Winter Fair, Guelph. A few good mares, fillies and young stallions are on hand, and another consignment expected end of July.

JERSEYS SELL HIGH.

In the dispersal sale of W. Getty's herd at Athens, Tennessee, May 19th, the entire offering of 76 head brought an average of \$254.53, the highest price, \$710 being realized for the seven-year-old bull, King Fox, a son of Flying Fox, and Hope's Finance, by Financial King. The ten-year-old cow, Belle Baronetti, was sold at \$625, the highest price for a female, though she was 56 miles away at the time, under a year's test at the Tennessee Experiment Station.

At the dispersal of the herd of the Willowdale Importing Company at Vandalia, Ill., May 17th, the average for 97 head was \$333.86. The highest price of the day, \$1,000, was realized for the seven-year-old bull, Royal Mastey, purchased by E. S. George, Detroit, Mich. The two-year-old bull, Financial Raleigh, sold for \$1,575, and ten females brought from \$500 to \$950 each.

CANADIAN JERSEY BREEDERS' MEETING.

The Canadian Jersey Breeders are holding a special summer meeting at the farm of B. H. Bull & Son, proprietors of the Brampton Jersey herd, on Wednesday, June 8th.

At this meeting, officers of the club, and the proprietors of the Brampton herd, will be glad to welcome, not only Jersey fanciers and breeders, but all interested in dairy farming.

The Brampton farms include over six hundred acres of land, and the Brampton herd is not only the largest herd of pure-bred cattle in Canada, but is one of the large and prominent Jersey herds of this continent.

Messrs. Bull & Son have kept their stock fully abreast of the times by careful selection, breeding and importing.

We understand that their recent importation will reach Brampton before the date of the meeting, and that their stock for the Edmonton and Calgary exhibitions will not be shipped until after the meeting, so that a splendid opportunity will thus be given of inspecting this famous herd at its best. Any person who is interested in a Jersey cow or a dairy farm, need have no hesitation in presenting himself at Brampton on the 8th of June, for the geniality of the Messrs. Bull and the hospitality of "Hawthorne Lodge" have both been tried for many years, and are well known to the stockmen of our country. The Brampton herd of Jerseys has made an unparalleled prize-winning record at the principal fairs in Canada from ocean to ocean.

Proper Lubrication

On your plows, harrows and drills use

Granite Harvester Oil



Insures better work from the new machine and lengthens the life of the old. Wherever bearings are loose or boxes worn it takes up the play and acts like a cushion.

Changes of weather do not affect it.

Gasolene
and
Kerosene
Engines

Standard Gas Engine Oil

is the only oil you need. It provides perfect lubrication under high temperatures without appreciable carbon deposits on rings or cylinders, and is equally good for the external bearings.

Steam Traction
Engines
and
Steam Plants

Capitol Cylinder Oil

delivers more power, and makes the engine run better and longer with less wear and tear, because its friction-reducing properties are exactly fitted to the requirements of steam traction engines and steam plants.

Traction Engines,
Wagons, Etc.

Mica Axle Grease

makes the wheel as nearly frictionless as possible and reduces the wear on axle and box. It ends axle troubles, saves energy in the horse, and when used on axles of traction engines economizes fuel and power.

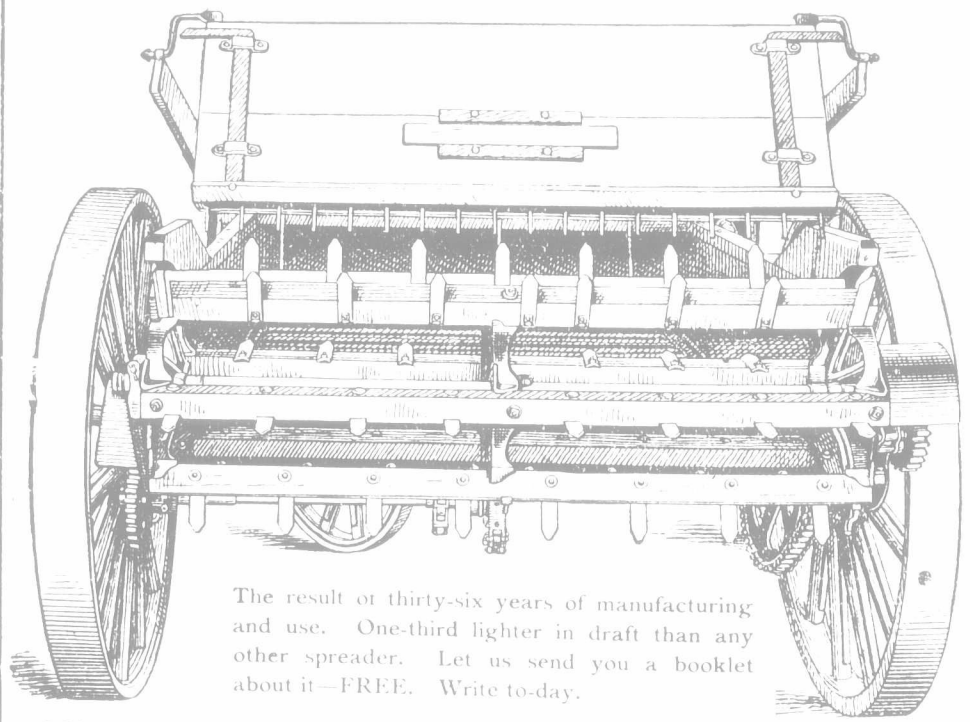
Every dealer everywhere. If not at yours, write for descriptive circulars to

The Imperial Oil Company, Limited
Ontario Agents: **The Queen City Oil Co., Ltd.**

The Kemp Manure Spreader

EQUIPPED WITH

**The Reversible, Self-Sharpening, Graded,
Flat-Tooth Cylinder.**



The result of thirty-six years of manufacturing and use. One-third lighter in draft than any other spreader. Let us send you a booklet about it—FREE. Write to-day.

W. I. Kemp Company, Ltd., Stratford, Ont.

YOUR HOUSE!

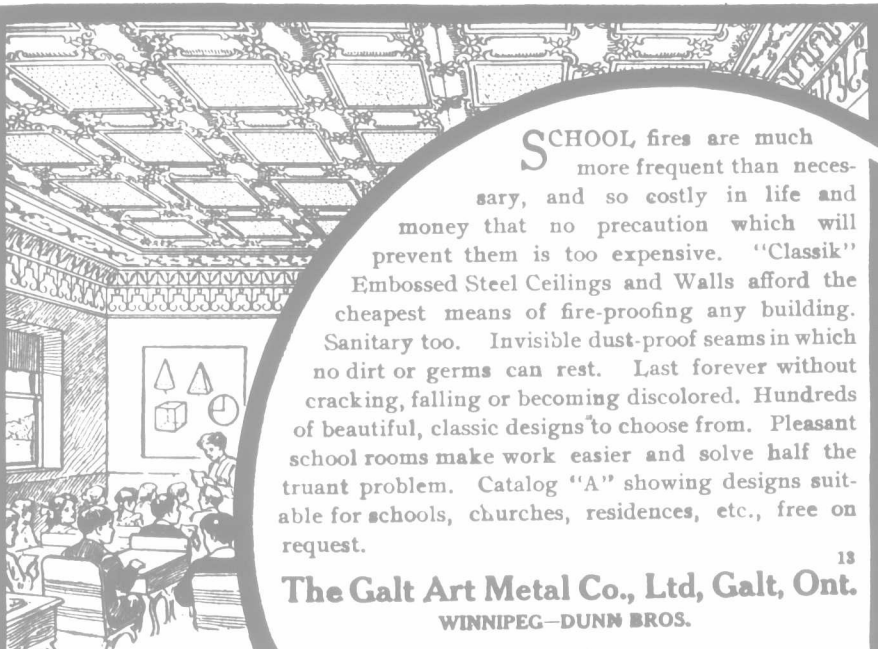


We want to help you to make it bright and prettier. Let us tell you how. The greatest beautifier and preserver for house and home is paint. We mean

RAMSAYS PAINTS

You should learn all about these great paints, how they brighten, how safe they are, how good, how easy, how cheap, comparing quality with the others. We shall send you the prettiest and most useful Booklet ever issued, telling you all about painting your home, if you will write us for Booklet AB. You should have a copy. It is free.

A. RAMSAY & SON CO.,
THE PAINT MAKERS - Montreal
Est'd. 1842.



SCHOOL fires are much more frequent than necessary, and so costly in life and money that no precaution which will prevent them is too expensive. "Classik" Embossed Steel Ceilings and Walls afford the cheapest means of fire-proofing any building. Sanitary too. Invisible dust-proof seams in which no dirt or germs can rest. Last forever without cracking, falling or becoming discolored. Hundreds of beautiful, classic designs to choose from. Pleasant school rooms make work easier and solve half the truant problem. Catalog "A" showing designs suitable for schools, churches, residences, etc., free on request.

The Galt Art Metal Co., Ltd, Galt, Ont.
WINNIPEG—DUNN BROS.

Galt "Classik" Ceilings

The Greatest Time and Labor Saving Invention and the Wonder of the Age is

The Genuine Tolton Pea Harvester



WITH NEW PATENT BUNCHER AT WORK

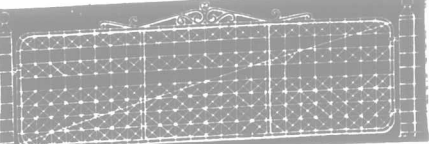
1. Harvesting in the most complete manner from eight to ten acres per day.
2. Harvesters to suit all kinds of mowers. Many thousands sold.
Every Machine Warranted. Our Motto: "Not how Cheap, but how Good."
No drilling holes in Mower Bar or Inside Shoe. A wrench is all that is required to attach it to any mower. Give your orders to any of our local agents, or send direct to

TOLTON BROS., LIMITED, GUELPH, ONTARIO

The electrically-welded, solid-piece frame gives strength and stiffness to

Peerless Farm and Ornamental Gates

We build Peerless Gates to last a lifetime—handy, convenient and attractive. They remain staunch and rigid through all kinds of rough usage. The frame is



made of heavy steel tubing electrically welded into one solid piece. The Peerless Gate, like the Peerless Fence, saves expense because it never needs repairs. We also make poultry, lawn and farm fences of exceptional strength. Write for free book.

THE BANWELL HOXIE WIRE FENCE CO., Ltd., Dept. B Hamilton, Ont., Winnipeg, Man.

GOSSIP.

CRUICKSTON PARK STOCK FARM.

Few people in Ontario are aware of the extent to which horse-breeding operations are carried on at Cruickston Stock Farm, near Galt, the property of Miss K. L. Wilks. The farm proper contains 1,700 acres, through which runs the Grand River. The appointments are fully commensurate with what would be expected on a farm with the reputation and of the character of Cruickston Park, certainly the greatest horse-breeding farm in Canada, and perhaps second to none in America, the whole under the able and efficient management of James Wetherill. The principal line of breeding is Standard-breds, although, to a more or less extent, there are bred: In horses, Clydesdales and Hackneys; in cattle, Shorthorns, and in sheep, Shropshires. In purchasing breeding stock, Miss Wilks has one stand-and-fast rule that is strictly adhered to, which is, that "the best is none too good," let the original cost be what it may. At the head of the Clydesdale stud is the great horse, Baron Howes (imp.), sired by the renowned breeding horse and sire of champions, Baron Hood, dam by Crown and Feather, by Prince of Wales (673). Baron Howes is one of the grandest specimens of Clydesdale perfection yet imported to this country, combining to a remarkable degree, that beautiful, compact conformation, outstanding flashy quality, big size, and true, straight action, so desirable, and so seldom seen. As would be expected from a horse of his kind, he has to his credit championships won on both sides of the water. Chief service horse in the Hackney stud is Crayke Mikado (imp.), by the noted Garton Duke of Connaught, dam by Lord Derby. Crayke Mikado is a horse of outstanding merit, typical of the modern Hackney, with a most sensational all-round action. He has to his credit championship honors won at both Toronto and Chicago.

Chief among the stallions in service in the Standard-bred stud is the unbeaten champion of two flags, Mograzia, by the renowned sire of Futurity winners, Moko, dam Congrazia, 2.19½, by Antevolo, 2.19½. Mograzia was never put to training, but has shown some wonderful bursts of speed. He is generally considered to be the most perfect specimen of the breed on this continent. Another of the great sires in service is Bingen Pilot, by Bingen, 2.06½, a noted sire of extreme speed, dam Kabla Belle, 2.29½, by the great Pilot Medium, the sire of Peter the Great, 2.07½, who in turn sired Sadie Mac, 2.06½, owned and trained at this farm. There are few horses bred on richer-producing lines than Bingen Pilot. Another of the high-class sires in service is Jim Todd, by Todd, 2.14½, dam Sultana, by Sultan. He is a horse of superb form and finish, with remarkable action; a show horse of a high order, getting second only to his illustrious stable-mate, Mograzia. There are few farms in America with so grand an array of brood mares, among them being such celebrities as Katherine, 2.12½; Emma Hoyt, 2.19½; Susie T., 2.09½, etc. The breeding animals that go to make up the splendid herd of Scotch Shorthorns are all imported, as are also the breeding Shropshires.

TRADE TOPIC.

Steel stalls and stanchions for dairy cows and other cattle are fast becoming popular with farmers, because they economize labor and litter, keep the cows and the stables clean, admit light, and free circulation of air, and tend to healthfulness of the animals. To make sanitary, up-to-date stables possible, Beatty Bros., of Fergus, Ont., manufacture satisfactory steel stalls and stanchions, and will mail, free of cost, their illustrated booklet descriptive of these devices. The Ontario Milk Commission, in their report, strongly recommend stanchions and steel fittings, which do not harbor dirt and unwholesome germs. Beatty Bros. report the demand for this class of cattle ties increasing so rapidly that they have started a branch in Brandon, Manitoba, for supplying the Western demand, which is steadily increasing. Parties contemplating building or making changes in their stables, will do well to look up the advertisement of this firm and write for their catalogue.

METALLIC CEILINGS

are everything that plaster, wood and wall paper are not.

Metallic Ceilings are fire-proof, absolutely.

Metallic Ceilings don't crack or crumble—don't get damp or mouldy—don't need repairs.

Metallic Ceilings are far and away the most economical building material you can put in a house.

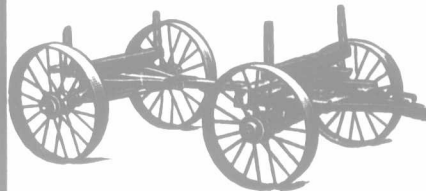
You don't believe it? We can prove it. Write us for the facts.

The Metallic Roofing Co.

Limited
MANUFACTURERS,

TORONTO AND WINNIPEG.
2401 (50)

BUY THIS WAGON



Dominion Wagons are strong, low, loaded easier than high wagons. Changed to platform pattern instantly, easily. Halves labor. Saves time. Easy on horses. Easy on your pocketbook. Built to last. Can't break. Can't rot. Cuts repair bills.



Dominion Wide-tire Low Steel Wheels—best for stony or muddy roads. Cheaper, lighter than wood. No setting tires. Cold proof. Last a lifetime. Fit all axles. Write for free catalogue now.

Dominion Wrought Iron Wheel Co., Limited,
Orillia, Ontario.

GRAND TRUNK RAILWAY SYSTEM

HOMESEEKERS' EXCURSIONS

TO WESTERN CANADA

Through the metropolis of Chicago, thence via Duluth and Fort Frances, or through Chicago and the twin cities of Minneapolis and St. Paul.

May 31, June 14 and 28

Via Sarnia and Northern Navigation Company. Steamer leaves Sarnia 3.30 p.m.,

May 30, June 15 and 29

WINNIPEG AND RETURN - \$32.00
EDMONTON AND RETURN - \$42.50

Proportionate rates to other Western points. Tickets good for 60 days. Secure tickets and full information from Grand Trunk Agents.


POTATO DIGGER



Does perfect work. Fully guaranteed. Write for illustrated catalogue of Diggers, Pickers and Sorters. **THE HOOVER MFG. CO., Box No. 32 Avery, Ohio.** Transfer points—Buffalo, N. Y.; Detroit, Mich.; St. Paul, Minn.; Marshalltown, Ia.; Idaho Falls, Id.; Portland, Ore.; Spokane, Wash.; Winnipeg, Man.; Hamilton, Ont.; Fond du Lac, Wis.

Please Remember to Mention "The Farmer's Advocate" When Writing

Fistula and Poll Evil



Any person, however inexperienced, can readily cure either disease with Fleming's

Fleming's Fistula and Poll Evil Cure

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

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

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

Dr. Page's English Spavin Cure


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



This preparation (unlike others) acts by absorbing rather than blister. This is the only preparation in the world guaranteed to kill a Ringbone or any Spavin or money refunded, and will not kill the hair. Manufactured by Dr. Frederick A. Page & Son, 7 and 9 Yorkshire Road, London, E. C. Mailed to any address upon receipt of price, \$1.00. Canadian agents:

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

Bickmore's GALL CURE



Be sure and work the horse

The soothing, healing ointment works a speedy cure of Galls, Cuts, Sores and Wounds. Standard horse remedy of the world. Cures while you work the horse. Buy it and be ready for emergencies. Sold by dealers generally. Trial sample sent for 2c. postage. Get it and test it. Address

Wingate Chemical Company, Ltd.,
888 Notre Dame St. W., Montreal, Can.

KENDALL'S SPAVIN CURE



Took Off Bog Spavin

Edison, Alberta

"I have been using Kendall's Spavin Cure on a colt that had a bad Bog Spavin and it took it clean off. Kendall's is the best liniment I ever used." Yours truly, F. H. Smith.

Kendall's is the best for Spavin, Curb, Ringbone, Splint, Swellings, Strains and all Lameness. 40 years use prove it.

\$1. a bottle—6 for \$5. Be sure it is Kendall's you get and ask for free book "A Treatise On The Horse"—or write us.

Dr. B. J. Kendall Co., Enosburg Falls, Vt.

High - class Driving Ponies AND OUTFITS.


Twelve ponies, ranging in height from 10 hands to 13 hands, and of bay, brown, sorrel, black and piebald colors, and from 2 to 5 years of age. For prices and particulars write:

E. Dymont, Copetown, Wentworth Co., Ont.

Elm Park Clydes, Aberdeen-Angus and Suffolks. We have at present six Clyde mares recorded in both Canadian and American Studbooks. Three of them sired by Lord Charming [2264] and two of them in foal to Monticello Marquis [6735]. Our cattle number fifty-five head of both sexes. Our Suffolk sheep are doing well, and flock numbers sixty-seven. **James Bowman, Elm Park, Guelph, Ont.**

AGENTS 200% PROFIT

Handy, Automatic **HAME FASTENER**



Do away with old hame straps. Horse owners and teamsters will about them & Fasten instantly with gloves on. Outwear the harness. Money back if not satisfactory. Write today for confidential terms to agents.

F. Thomas Mfg. Co., 744 Wayne St., Dayton, Ohio

When Writing Mention This Paper.

QUESTIONS AND ANSWERS. Veterinary.

UNDESIRABLE CONFORMATION

The bones on the outside of the hocks of a Standard-bred colt project a little beyond the tendons. I have been advised to rub with iodine to reduce the bones.

S. H.

Ans.—This is hyperdevelopment of the cuboid bones, and does not constitute unsoundness, although, from a certain point of view, on either side, there may appear to be a curb. Nothing can be done. The conformation is congenital, and the size of the bones cannot be reduced. Any person conversant with the different conformations of hocks, will at once see that this colt is not unsound; at the same time, no doubt, many would-be horsemen will say he has curbs.

V.

DEVELOPING ACTION.

1. Have a road horse 15½ hands and weighing 1,100 pounds. He has good action, and I want to improve it. What weight of shoe should he wear?

2. He paddles a little. How can I make him go straight? Would shoeing heavy at the toe have this effect?

3. Would it be wise to use a curb bit?

J. A. T.

Ans.—1. The weight of shoe with which a horse will perform best differs with different animals. For a horse of 1,100 pounds, a shoe weighing about 1½ pounds usually gives the best results. There should be no calks, and the toe and well back to the quarters should be rounded on outside, to enable the horse to lift quickly.

2. This is due to the conformation of the pastern and foot. You will notice that this horse stands with his toes turned inwards, and he cannot be made to go straight.

3. This depends upon the horse, but, of course, a heavy harness horse should be driven with a curb bit, but the amount of curb used will depend upon the horse. In fact, as regards weight of shoe, amount of curb, etc., the driver must find out by experiment just what suits his horse best. The conversion of a light harness horse into a heavy harness horse requires some skill.

V.

Miscellaneous.

WARBLES IN HEIFER.

I have a heifer three years old. I found lumps on her back, from which, when I squeezed, a worm came out. She is healthy, and in good condition; is milking well. Please tell me what is the cause, are they harmful, and how best to get rid of them.

YOUNG READER.

Ans.—The grubs are the larvae of the warble fly. They cause discomfort, and probably interfere somewhat with the thrift of the animal affected, but, except for that, are not serious. It is well to squeeze grubs out and kill them. Smearing the backs of cattle with a mixture of sulphur 4 ounces, spirits of turpentine 1 quart, or with the horshy mixture of fish oil and carbolic acid, a few times during the summer is said to act as a repellent to the fly, and prevent the laying of eggs on the cattle.

HEAVES NOT INFECTIOUS.

1. Will one horse take heaves from another affected with them by feeding from the same manger or by drinking from the same pail?

2. Have about ten acres of light loam on which I failed to get a catch of clover last year. I was thinking of sowing buckwheat, to plow down, and seeding with fall wheat this fall, or would it be better to top dress with manure and soy with rape, then seed with spring crop next year? I have quite a few young cattle and lambs, so that the rape would come in very handy.

D. B. S.

Ans.—1. Heaves are not infectious.

2. As a green crop to plow under in preparation for fall wheat, peas are much superior to buckwheat. Though the seed costs more, yet the extra profits will more than make up the difference. If seeding with spring grain is as successful as with fall wheat, the other suggestion to give a dressing of manure and soy rape, to be pastured off in the fall, followed by seeding with spring crop, is commendable.

FREE SAMPLE To FARMERS

Say you are interested, and we will gladly send you Free and postpaid a sample of the only Practical culvert and a handsomely illustrated book telling all about it. For drainage, road-repair, and a score of farm-uses there is no culvert so economical as this. Made of heavy Billet Iron; curved cold into half-sections. Then deeply corrugated—makes it five times stronger than smooth-surfaced pipe. Heavily galvanized to make it proof against rust, dampness, decay, corrosion. Will outlast any other material.

LEARN ALL ABOUT THE MOST PRACTICAL and DURABLE CULVERT

PEDLAR NESTABLE GALVANIZED CULVERT



These pictures show how easily and quickly you can lay Pedlar Culvert. Comes nested, half-section within half-section—saving freight and cartage. Triple-thick Flat Flange locking ribs on each side are clamped together by a simple tool—no bolts nor rivets needed. Joints are broken—only culvert you can do that with. Ends interlap. Will stand tremendous strains. Won't leak, nor buckle, nor crack from frost. Cheaper than wooden culverts.

An Investment—Not An Expense

Investigate first. Send for the free sample and book. Then recommend this culvert to your township officials—push the Good Roads Movement—this culvert keeps roads in better shape. Use it, too, for any drainage about your farm—there's a size for every purpose. Railways use and approve it—and you know what careful buyers railways are! Investigate.

Rust-Proof Won't Decay Easily Laid

Send NOW for FREE Sample, Booklet No. 19, and Low Prices. Address our place nearest to you.

Made in Every Size from 8 to 72 ins. diameter

The PEDLAR PEOPLE of Oshawa

HALIFAX 16 Prince St.	LONDON 86 King St.	WINNIPEG 76 Lombard St.	MONTREAL 321-3 Craig St.	PORT ARTHUR 45 Cumberland St.
OTTAWA 423 Sussex St.	TORONTO 111-113 Bay St.	CHATHAM 200 King St. W.	QUEBEC 127 Rue du Pont.	REGINA 1901 Railway St. S.
CALGARY 1112 First St. W.	VICTORIA 434 Kingston St.	ST. JOHN, N.B. 42-46 Prince William St.	VANCOUVER 821 Powell St.	

409

"BT" STANDS FOR BEST

"BT" Hay Carriers are giving satisfaction in every Province in Canada. No load is too heavy for them to handle.

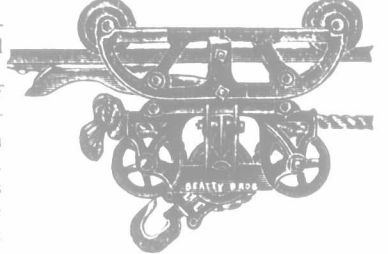


Fig. 100—Maple Leaf Car.

Fig. 100 shows the "BT" Maple Leaf Car. It is a strongly-built Malleable Carrier weighing thirty-five pounds (about ten pounds more than other makes). It has a tread of 14 inches on the track (four inches more than others). The wheels that the rope runs over are 3½ inches (larger than in any other). It has a large open mouth that allows the bail pulley to enter from any angle, and no matter how the rope may twist. It has many other features of merit that we would like to tell you about. We also have Special Sling Carriers.

The "BT" Line of Hay Tools includes The Provan Line of Oshawa, The Whitman & Barnes Line of St. Catharines, and the Tolton Line of Guelph. No other line is as broad. It will pay you to get our Catalogue.

BEATTY BROTHERS, FERGUS, ONTARIO.
We also build Stanchions and Steel Stalls and the "BT" Litter Carrier.

CRUICKSTON STOCK FARM, GALT, ONTARIO

The services of any one of the following high-class stallions can be secured for approved mares by applying to the manager: **Mograzia**, Champion Standard bred stallion; **Bingen Pilot**, by Bingen, 2-06¼; **Jim Tod**, by Tod, 2-14¼, also sire of Kentucky Tod; **Crayke Mikado**, Hackney stallion, Champion at Chicago International, and the Canadian National, Toronto; **Baron Howes**, Champion Clydesdale International, considered by expert judges to be the best Clydesdale stallion in America. For all particulars, apply to

JAS. WETHERILL, Manager, Galt, Ont.

CLYDESDALES and HACKNEYS

We have for sale a few choice Clydesdale mares, imported and Canadian-bred; also some Canadian-bred Clydesdale stallions. Hackney stallions and mares for sale always. Long-distance phone. **Hodgkinson & Tisdale, Beaverton, Ont.** G. T. R. and C. N. R.

IMPORTED CLYDESDALE FILLIES

I have still on hand six Clydesdale fillies. They are big, smooth fillies, exceptionally well bred, and their underpinning is the kind Canadians like. I have only one stallion left, a right good one. My prices are as low as any man's in the business. Phone connection.

GEO. G. STEWART, HOWICK, QUEBEC.

IMPORTED CLYDESDALES and HACKNEYS

In my stables at Ingersoll, Ont., I have always on hand Clydesdale stallions and fillies, and Hackney stallions, personally selected in Scotland for their high-class type, quality and breeding. Let me know your wants.

W. E. BUTLER, INGERSOLL, ONT.

WHEN WRITING ADVERTISERS, PLEASE MENTION "ADVOCATE."

Brantford Roofing

passed the experimental stage many years ago

FULLY fifty per cent. of the concerns manufacturing ready roofing have come into existence during the last few years. Their products are therefore in the experimental stage. Their brands have not been in use long enough to determine their actual value.


Now, Brantford Roofing passed the experimental stage many years ago. It is made by a company which was one of the "pioneers" in the roofing industry. It has a record of many years of satisfactory service behind it. It is worthy of your FIRST consideration when selecting a LASTING roofing material for your home or barn.

On request we will send you a list of those who have roofed their buildings with Brantford Roofing in your locality. Then you can see and learn for yourself how satisfactory Brantford Roofing has proved with your neighbors.

You have your choice of three styles of Brantford Roofing—ASPHALT (silicia finish), RUBBER (smooth finish), CRYSTAL (mineral surface). All three styles have a 99 per cent. pure Asphalt saturation.

Get our Free Roofing Book and Samples. Then choose the style you decide is best adapted to your particular job.

BRANTFORD ROOFING COMPANY LIMITED
BRANTFORD, CANADA



UNION STOCK - YARDS Horse Exchange
WEST TORONTO, CANADA.
The Greatest Wholesale and Retail Horse Commission Market.
Auction sales of Horses, Carriages, Harness, etc., every Monday and Wednesday. Horses and harness on hand for private sale every day.
The largest, best equipped and most sanitary stables in Canada. Half-mile of railway loading chutes at stable door. Quarter-mile open track for showing horses. Northwest trade a specialty. **HERBERT SMITH, Manager.** (Late Grand's Repository.)

T. H. HASSARD'S NEW IMPORTATION!
MY NEW IMPORTATION OF
Clydesdale Stallions and Fillies
are now in my stables at Markham, Ont., and, as usual, I have a big range for selection, of a type, breeding and quality seldom equalled, never excelled, by any previous importation. Call and see them. Phone connection. **T. H. HASSARD, Markham, Ont.**

CLYDESDALES AND FRENCH COACHERS
We have still on hand a few choice Clydesdale stallions—all young—that for size, style and quality will stand inspection. We have also a few Clyde fillies—imported and Canadian-bred, and two French Coach stallions. Correspondence and inspection invited. Our prices are easy and terms to suit. Phone connection.

R. NESS & SON, HOWICK, QUEBEC.

WAVERLY CLYDESDALES AND HACKNEYS
My 1910 importation of Clydesdale stallions and fillies, and Hackney stallions and fillies, are now in my barns. One and two-year-old Clyde fillies of a character and quality never before excelled. My Hackney stud was never so strong in high-class animals. All are for sale and prices right. **ROBT. BEITH, BOWMANVILLE, ONT.**

Ormsby Grange Stock Farm, Ormstown, P. Quebec.
Importation and breeding of high-class Clydesdales a specialty. Special importations will be made for breeders at minimum cost. My next importation will arrive about June 1st.
Duncan McEachran.

Imported Clydesdales My new importation of Clydesdale stallions for 1910 have arrived. They were selected to comply with the Canadian standard, combining size, style, quality and faultless underpinning with Scotland's richest blood. They will be priced right, and on terms to suit. **C. W. BARBER, GATINEAU PT., QUEBEC.**

CLYDESDALES, Imported and Canadian-bred. I have on hand 2 Imported Clydesdale Stallions, one 4, the other 3 yrs. old; one other 5 yrs. old; 2 Canadian-bred Clydesdale Stallions, one 2, the other 3 yrs. old; one French Coach Stallion, 4 yrs. old; one Shire Stallion, and the noted Hackney Stallion, Chocolate Jr. I will sell these horses cheap for quick sale. **I. D. ELLIOTT, Bolton Ont.**

CLYDESDALES AND HACKNEYS
We have still for sale several good Clydesdale Stallions; also our prizewinning Hackney Stallion, Blanch Surprise, and a few good Clydesdale and Hackney Mares. All of which will be sold on reasonable terms. Phone connection.
JOHN A. BOAG & SON, Bayview Farm, Queensville, Ont.

SMITH & RICHARDSON'S CLYDESDALES.
Black Ivory, Commodore, Royal Gretna, Pride of Newmills, Dunure Acknowledgment, Dunure Souter, Captain Vasey, Look Again, Baron Acme, and some younger ones, all sold, but a few good ones left yet, and at moderate prices. **SMITH & RICHARDSON, COLUMBUS, ONT.** Myrtle, C. P. R.; Brooklyn, G. T. R. Phone.

QUESTIONS AND ANSWERS.
Veterinary.

ENLARGEMENTS ON KNEE.
Mare 19 years old has a swelling on the bones of knee. The knee has become quite large and hard, and is becoming stiff.
G. B.
Ans.—This is a disease of the bones of the knee, and the bones are becoming united. It is called ankylosis. All that can be done is to get your veterinarian to fire and blister the joint. This should allay the inflammation and pain, but the joint will remain more or less stiff, according to the number of bones involved.
V.

PARALYSIS.
Old cow in good flesh will be due to calve in July, became uneasy, seemed to lose power in fore and then in hind feet, lay down and got up several times, and then was unable to get up. She has been down three days. Would it be wise to sling her? She has been purged and given condition powders. She eats well.
B. C.
Ans.—This is paralysis, probably due to disease of the spine, but may be from digestive trouble. If from the former cause, she may not recover. Do not use slings. Feed on soft, easily-digested food, and give two drams nux vomica, three times daily. Keep comfortable as possible by packing with straw, and turn from side to side every six or eight hours.
V.

LAME MARE.
I bought a 14-year-old mare, lame in hind leg, but the seller said she would get all right after she was exercised, that she had been that way for four years. She is now worse than when I bought her. She has difficulty in backing. She can walk all right, but is very lame when trotted.
L. G. C.
Ans.—It is hard to diagnose these cases of chronic lameness without a personal examination. I am of the opinion there is disease of the hip joint, and that nothing can be done to help her. On the other hand, it may be hock lameness, from an occult spavin, for which there is little hopes of cure, but in some cases benefit results from firing. The fact that the seller admitted that she had been lame for four years, indicates that the prospects of cure are remote. I would advise you to show her to your veterinarian, and if he decides the trouble is in the hock, have her fired and blistered.
V.

SORE IN FRONT—LUMPS ON SHOULDER.
1. Seven-year-old mare that always worked on the hard streets is now on a farm. She seems tender in front feet. The blacksmith took a corn out of her heel, under shoe.
2. She has two hard lumps the size of marbles in the skin of her shoulder, under the skin.
D. M. M.
Ans.—1. It is not probable she will ever be serviceable for work on hard roads again, but will probably go practically sound on the farm. Have her shod once every four weeks, and have the corn well pared down each time until it disappears. Use bar shoes, and keep feet soft by poulticing with linseed-meal poultices at night. The proper way to poultice is to get your harnessmaker to make regular poulticing boots, but it can be done with little bags made out of canvas or other material. When not working for a few weeks, it would be well to blister the coronet.
2. These are little fibrous tumors, and should be carefully dissected out and the wounds dressed three times daily until healed, with a five-per-cent. solution of carbolic acid.
V.

Miscellaneous.

RAM WITH FLOCK.
When lambs come from April 15th to May 1st, how late into the summer can one allow the ram with the flock without risk?
BEGINNER.
Ans.—When ewes have had lambs after April 15th, it would be quite safe to allow the ram to run with them until September 1st, at least.

Warranted to Give Satisfaction.

Gombault's Caustic Balsam



Has Imitators But No Competitors.
A Safe, Speedy and Positive Cure for
Curb, Splint, Sweeney, Capped Hook, Strained Tendons, Founder, Wind Puffs, and all lameness from Spavin, Ringbone and other bony tumors. Cures all skin diseases or Parasites, Thrush, Diphtheria. Removes all Bunches from Horses or Cattle.
As a Human Remedy for Rheumatism, Sprains, Sore Throat, etc., it is invaluable. Every bottle of Caustic Balsam sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. If you send for descriptive circulars, testimonials, etc., Address
The Lawrence-Williams Co., Toronto, Ont.

Horse Breeders

Artificial MARE IMPREGNATORS
We GUARANTEE you can get from 2 to 6 mares in foal from one service of stallion or jack. Increase the profits from your breeding stables by using these impregnators. No experience necessary to use them successfully. Prices \$3.00 to \$5.00 each prepaid.
Popular SAFETY IMPREGNATING OUTFIT, especially recommended for impregnating so-called barren and irregular breeding mares. \$7.50 prepaid.
Write for CATALOGUE which illustrates and describes our Impregnating Devices, Breeding Hobbles, Stallion Bridles, Shields, Surports, Service Books, Etc.
CRITTENDEN & CO., Dept. 36, Cleveland, Ohio, U.S.A.

Increase Your Profits

Don't Have a Blind One

"VISIO"
An Absolute Cure for Moon Blindness
(Ophthalmia), Cataract and Conjunctivitis
Shying horses all suffer from diseased eyes.
A trial will convince any horse owner that this remedy absolutely cures defects of the eye, irrespective of the length of time the animal has been afflicted. No matter how many doctors have tried and failed, use "VISIO" under our GUARANTEE.
Money refunded if under directions it does not cure. \$2.00 per bottle, postpaid on receipt of price.
VISIO Remedy Ass'n., Dept. 8, 1933 Wabash Av., Chicago, Ill.

Shoe Bolts, Capped Hook, Bursitis ARE HARD TO CURE, yet

ABSORBINE
will remove them and leave no blemishes. Does not blister or remove U's hair. Cures any puff or swelling. Horse can be worked. \$2.00 per bottle. Book 6c free. **ABSORBINE, JR.** (man-kind, \$1 and \$2 per bottle). For Bolls, Bruises, Old Sores, Swellings, Goures, Varicose Veins, Variocosts, Ailays Pain, Your druggist can supply and give references. Will tell you more if you write. Manufactured only by **W. F. YOUNG, P. O. 258 Temple St., Springfield, Mass. Canadian Agents: Lyman's Ltd., Montreal.**

MESSRS. HICKMAN & SCRUBY
Court Lodge, Egerton, Kent, England.
Export pedigree live stock of every description. Owing to rapid increase in business, Mr. L. C. Scruby has been taken into partnership. During the spring months the export of horses will be a specialty. We are at this business all the year round, and can do better for you than you can do for yourself, even if you do come over to do your own business. Send us your orders, and we will do the best we can for you. Nobody can do more.

HIGHLY-BRED CLYDESDALES FOR SALE
Always on hand, stallions, colts, mares and fillies. The champion stallion, "Baron Howes" (13847), was purchased from this stud. Apply:
JOHN R. BEATTIE, Annan, Scotland.
Baurch Farm.

For Sale: REGISTERED HACKNEY STALLION, COCK ROBIN.
Three years old; 15½ hands; chestnut; hind feet white. Sire Commodore 3rd, imp., (6695), by Chocolate Jr. (4185). Dam Ada Adair (181), by Robin Adair 2nd, imp., (3907). For description, terms, etc., address: **G. W. CLEMONS, ST. GEORGE, ONT.**

60 Specially Selected Shorthorns 60

57 Females and 3 Bulls

All young and in the best possible condition; all possessed of special outstanding merit; all bred on the most fashionable and popular lines, and nearly all eligible for American registration.



Will be sold at GUELPH to the highest bidder on TUESDAY, June 7, 1910

1 p. m. sharp. Terms cash. For catalogues write:

HARRY SMITH,
HAY P. O., ONTARIO.

Geo. Bellows, Marysville, Mo.,
Carey Jones, Chicago,
Capt. T. E. Robson, London, } Auctioneers.

Bog Spavin

Cure the lameness and remove the bony growth without scarring the horse—have the part looking just as it did before the blemish came.

Fleming's Spavin Cure (Liquid) is a special remedy for soft and semi-solid blemishes—Bog Spavin, Thoroughpin, Splint, Curb, Clapped Hock, etc. It is neither a liniment nor a simple blister, but a remedy unlike any other—doesn't irritate and can't be imitated. Easy to use, only a little required, and your money back if it ever fails.

Fleming's Vest-Pocket Veterinary Adviser describes and illustrates all kinds of blemishes and gives you the information you ought to have before ordering or buying any kind of a remedy. Mailed free if you write.

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

CIDER PRESSES

THE ORIGINAL M.T. GLEAD HYDRAULIC PRESS produces more cider from less apples than any other and is a **BIG MONEY MAKER**.

Sizes 10 to 400 barrels daily, hand or power. Presses for all purposes, also cider evaporators, apple-butter cookers, vinegar generators, etc. Catalog free. We are manufacturers, not jobbers.

HYDRAULIC PRESS MFG. CO.
(Oldest and largest manufacturers of cider presses in the world.)
110 Lincoln Avenue, Mount Gilead, Ohio

Homestead Aberdeen - Angus

Bulls all sold, but must sell a number of cows, as I am short of grass. Will be priced low for quick sale. Come and see them before buying.

Wm. Ische, Sebringville, Ont.
Long-distance phone.

FOR SALE: SOME NICE YOUNG **Aberdeen-Angus Bulls** and some females of all ages. Also a first-class Clydesdale stallion. **J. W. Burt, Coningsby, Ont.**

ABERDEEN - ANGUS

Will sell both sexes; fair prices. Come and see them before buying. Drumbo station.

WALTER HALL, Washington, Ont.

Aberdeen-Angus Cattle

5 choice bulls for sale, just rising the year; fit for service. **GEO. DAVIS & SONS, ALTON, ONT.**

SHORTHORN FEMALES

OF ALL AGES FOR SALE.

Prices to suit all kinds of customers. Have one red eleven-months-old bull left; a Clipper; price \$100.

J. T. GIBSON, DENFIELD, ONTARIO.

Glenburn Stock Farm

Shorthorns, Shropshires, Berkshires, and Barred Plymouth Rocks.

JOHN RACEY,
Lennoxville, Quebec.

SHORTHORNS BERKSHIRES

One choice young Lady Fanny bull for sale—good herd header; also several young heifers. A few prize-winning Berkshires, both sexes. Write or come and see them. Prices moderate. **ISRAEL GROFF, ELMIRA, ONTARIO.**

GOSSIP.

R. H. REID & SONS' SHORTHORN SALE.

The advance sheets of the catalogue of the thirty-odd Shorthorns, 23 females and 10 bulls, in the dispersion sale of the herd of R. H. Reid & Sons, Pine River, Bruce County, Ont., near Kincardine, G. T. R., to take place on June 15th, as advertised in this issue, indicates that the cattle offered are excellently bred, and from what is known of the herd, it is safe to say they are up to a high standard in individual merit. The herd represents such popular families as the Duke of Richmond's Marchioness; the Kinellar Claret; the Cruickshank Cecelias; and several of the good old milking tribes, as Roan Duchess, Beauty, by Snowball; Lavinia and Princess, which should find ready buyers, now that so much interest is being taken in the dual-purpose or dairy Shorthorn. A number of these are of show-yard material, and most of the cows will be sold with calves at foot, or in calf to the imported stock bull, Best Boy, a choice roan two-year-old of the favorite Bessie family. This sale will doubtless afford an opportunity to secure some good bargains. Parties interested will do well to look up the advertisement, send for the catalogue, and attend the sale.

LAST CALL FOR THE GUELPH SHORTHORN SALE.

Everyone interested in Shorthorn cattle or beef-raising should make it a point to attend the great sale at Guelph on Tuesday, June 7th. A man is certainly blind to his own interests that cannot see the signs of the times, which all indicate an active demand for this great dual-purpose breed of cattle in the very near future. A better opportunity was never offered in Canada than this sale will present to lay a herd foundation on strictly high-class material of the best possible breeding. They are all young and all old enough will either have a calf at foot, or be in calf to a bull of outstanding merit. The catalogue shows that the offering comprises representatives of such very desirable Scotch families as Bruce, Mayflower and Augusta, Mare Missie, Roan Lady, and Princess Royal, Cruickshank Butterfly, Victoria, Village, Brawith Bud, Duchess of Gloster, Jessica, Cecelia, Lady Fanny, and Lovely; Manson, Kelle n Beauty, and Campbell Mina, Jilts, Ury, Crimson Flower, Miss Ramsden, Claret, and others. Rarely, if ever, have so many superior Shorthorns been offered at one sale in Canada. The stable feeding and sowing is over, grass is growing fast, and the prospects for good prices for Shorthorns for years to come are bright. This sale should bring together a very large attendance of breeders and general farmers, as Guelph is convenient of access by G. T. R. and C. P. R., and a look over the College farm, to which street cars run, may be had by those arriving the day before or morning of sale.

Shorthorns, Leicesters, Berkshires

BY AUCTION, AT STONELEIGH STOCK FARM, ON

WEDNESDAY, JUNE 8TH, 1910,

MESSRS. E. JEFFS & SON will sell by auction their entire herd of Shorthorn cattle, Leicester sheep and Berkshire swine. The Shorthorns are Scotch-topped—22 head, 19 females and 3 bulls, including the stock bull, imp. Famous Pride—a most desirable lot of the useful kind. A number of high-class Leicester sheep and Berkshires of both sexes of breeding age. Conveyances will meet morning trains from north and south at Beeton and Bradford. Terms: 6 months' on bankable paper, or 6% per annum off for cash. Catalogues on application to:



E. JEFFS & SON,
BOND HEAD, ONT.
J. K. McEwen, Weston, and R. Faris,
Bradford, Auctioneers.

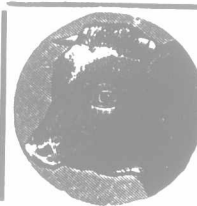
GREAT DISPERSION SALE OF SHORTHORN CATTLE

Having decided to retire from the breeding of Shorthorn cattle, we will place our entire herd, consisting of 1 choice imported bull, 10 Canadian-bred bulls, imported cows with calves at foot (bred again to imported bull), Canadian-bred cows in calf to imported bull, a number of fine heifers mostly in calf. In all, **23 FEMALES.** These will be sold, positively without reserve, by public auction on

WEDNESDAY, JUNE 15, 1910

At CLOVER LEA STOCK FARM. Sale to commence at 2 o'clock p. m., sharp. These cattle are the best that can be produced, among them many animals of show quality and breeding. An opportunity for farmers or young breeders to secure the nucleus of a herd. Terms: Six months' credit on approved joint notes. Six per cent. per annum off for cash. Visitors will be met at Ripley, G. T. R., morning and noon on day of sale. Lunch provided.

John Purvis, Holyrood | **R. H. REID & SONS, Props,**
Thos. Gundy, Goderich | Auctioneers. **PINE RIVER, ONTARIO.**



PLAN to come to GUELPH, Ont., on JUNE 7

next, and secure a heifer of Royal breeding and quality. Bred to a first-class bull. Harry Smith, Hay, Ont., will be pleased to send you a catalogue. Cordially yours,

H. Cargill & Son, Cargill, Ontario



IRVINE SIDE SHORTHORNS

One good red bull, 16 months old, by Imp. Pride of Scotland, and out of a Miss Ramsden dam (from imp. sire and dam). Will be priced away down, as he is the last of last year's calves. Will price a few young heifers safe in calf.

J. WATT & SON, Salem P. O.

Maple Hall Shorthorns

Are bred on most fashionable Scotch lines, and are of high-class individuality. For sale are 6 young bulls from 6 to 10 months of age. A low, thick, sappy lot. Also 10 yearlings and 10 two-year-old heifers. Show material in this lot. Telephone connection.

DAVID BIRRELL & SON, GREENWOOD P. O., ONT., CLAREMONT STATION.



VALLEY HOME SHORTHORNS AND BERKSHIRES

If you want a first class Shorthorn bull or heifer come and see what we have, or if you want a show animal with a choice pedigree we have them. For description of herd see Xmas Number of The Farmer's Advocate, on last page. **S. J. PEARSON, SON & CO., MEADOWVALE, ONT., P. O. AND STATION, C. P. R.**

Subscribe for The Farmer's Advocate

GOSSIP.

Attention is called to the advertisement of the auction sale of 500 head of Romney Marsh rams, to take place at Ashford, Kent, England, on September 29th and 30th.

The prize lists for the Canadian National Exhibition, Toronto, August 27th to September 12th, are out, and call for a distribution of \$50,000, practically all going to live stock, \$12,000 being for horses. Copies are obtainable from the manager, J. O. Orr, City Hall, Toronto.

Admirers of the Hampshire breed of hogs will be interested in the advertisement in this paper of A. O'Neil & Son, of Birr, Middlesex County, Ont., who were the first and are largest importers and breeders of Hampshires in Canada, and who are making a new and large importation of this attractive breed, to arrive in a few days, to meet the steadily increasing demand for them in this country. See their advertisement on another page in this issue.

E. JEFFS & SON'S DISPERSION SALE.

The Shorthorns to be sold by E. Jeffs & Son, of Bond Head, Ont., at their farm, "Stoneleigh," on Wednesday, June 8th, number 22 head, all told, comprising five bulls, three fit for service; two bull calves, the balance females. Among the former is the stock bull, Famous Pride (imp.) = 50031, by Golden Fame, dam Fanny 2nd, by Financier. He is a massive r-d, eight years old, with a remarkably mellow skin, and won second prize at Toronto as a yearling; he is active, sure, and a proven sire of worth. Another is a roan yearling of the Gwynne family, sired by Royal Lucerne = 60945, a Fashion-bred son of Lucerne (imp.). Another is a white yearling of the Zora tribe, by the same sire. The females are of the Gwynne family, descended from Camilla (imp.), by Fusilier; Mazurkas, descended from Red Rose (imp.), by a son of Young Albion; Countess, descended from Imp. Margaret, and the well-known Zora tribe, and sired by such splendid bulls as Imp. Gladiator, Prince Arthur, Ingram Yet, Heir-at-Law, and Wynock Chief. Among the lot are several one- and two-year-old heifers. All old enough will either be safely in calf or have calves at foot. Among the Berkshires are four boars old enough for service, and nine young sows old enough to breed; also two brood sows, with litters at foot, of both sexes. Very seldom indeed have the farmers of Ontario had the privilege of attending a sale where registered Shorthorn cattle, Leicester sheep and Berkshire hogs could be bought at their own prices, and more particularly of a quality as high as that of this offering. Prices of pure-bred stock in Canada are certain to advance. The 20th century belongs to this country, and the natural development, with the inevitable rapid increase in population, will surely keep the prices of live stock soaring. And this sale, coming as it does at a time when grass is at its best, should ensure a big crowd and a bumper sale. The terms are most reasonable: Six months on bankable paper, or six per cent. per annum off for cash. Write the Messrs. Jeffs to Bond Head P. O. for a catalogue.

QUESTIONS AND ANSWERS.
Miscellaneous.

WEEDS FOR IDENTIFICATION.

Will you kindly tell me the name of the enclosed weeds. I have been told that the large one is the sow thistle; is it? What is the small one? H. A. B.

Ans.—The perennial sow thistle, like the Canada thistle, has running rootstocks; its leaves are softly spiny-toothed, the flowers are yellow, resembling those of dandelion, and its juice is milky.

The larger specimen you send is a robust rosette of the radical leaves of the English plantain. Another name—English rib-grass—is very appropriate. It is capable of choking out grass in pastures, and should be regarded as a bad weed.

The smaller specimen seems to be a young shoot of some composite, but there is not enough of it to determine the species. J. P.



The CAPITAL is the Cream Separator that will "Buy Itself" For You.

As soon as you have read this advertisement, sit down and write a post card for The Capital book—the book that not only tells the story of the easy-running, cream-saving separator, but that tells how you can put The Capital in your own dairy practically without costing you a cent.

The book also tells all about the wonderful Capital gears, about their perfect meshing and non-wearing qualities—how they run in oil—how an automatic clutch stops them running the minute you let go of the handle—and about how they give the light, three-and-a-half-pound bowl 7,000 revolutions a minute.

It tells how and why The Capital skims closer—why The Capital wastes less than one-fifth the cream that other separators waste—and then explains how the machine can be made sweet and clean in two minutes after you are through using it.

This book is full of hard-and-fast facts—separator facts—which every dairyman owes it to himself to know; facts which will prove a revelation to the dairyman who is not familiar with The Capital.

Write for the book to-day—NOW.

THE NATIONAL MFG. CO., LIMITED,
Head Office: Ottawa. Factories: Ottawa and Brockville.
Branch Offices:—Regina, Sask.; Edmonton, Alta.; Moncton, N.B.

4% Invest Your Money Safely at 4%

Think twice before you risk your hard-earned savings in mining or speculative stocks. Better be safe than sorry. Our 4% Debentures are an absolutely safe investment. Interest half-yearly. \$2,000,000 assets as security.

AGRICULTURAL SAVINGS & LOAN CO., 109 DUNDAS STREET, LONDON, ONT.

275 BURLINGTON SHORTHORNS 275

3 Choice Imported Scotch Shorthorn Bulls—yearlings.
1 Imported 2-year-old Bull, red—an extra sire.
10 Bulls, 9 to 16 months old—all by imported sire.
30 Choice Young Cows and Heifers—mostly bred or have Calves at foot. Long-distance telephone. Farm ¼ mile from Burlington Jct. Sta., G. T. R.

J. F. Mitchell, Burlington, Ont.

SCOTCH SHORTHORNS—Eight extra good young bulls, from 10 to 15 months old; 20 choice cows and heifers, forward in calf or with calves at foot. Prices reasonable. Inspection invited.

W. G. PETTIT & SONS, Freeman, Ont.

Farms close to Burlington Jct., G. T. R.

INVERNESS SHORTHORNS—I can supply Shorthorns of all ages, with richest Scotch breeding and high-class individuality.

W. H. BASTERBROOK, Freeman, Ont.

Imp. Scotch Shorthorns—When looking for Shorthorns, be sure to look me up. Young bulls fit for service, and females all ages; bred in the purple, and right good ones. A. C. Pettit, Freeman, Ont.

Maple Leaf Shires, Shorthorns, Hampshire Hogs
1- and 2-yr.-old Shire stallions, females from yearling fillies up; Shorthorns, both bulls and heifers; a choice lot of young Hampshire pigs, both sexes, beautifully belted.

PORTER BROS., APPLEBY P.O., BURLINGTON STA. Phone.



"ELECTRO BALM"
CURES ECZEMA,
Also Piles, Burns, Scalds, Chapped Hands and Face.

Gentlemen use it after shaving. This Balm is handled by the best firms, and is highly recommended by those who have used it.

Write for Free Sample
80c. a Box at all Dealers or upon receipt of price, from
THE ELECTRIC BEAN CHEMICAL CO., Ltd., OTTAWA.

Scotch Shorthorns **A. Edward Meyer**
P. O. Box 378, Guelph, Ont.,

Breeds **SCOTCH SHORTHORNS** Exclusively. Twelve of the most noted Scotch tribes have representatives in my herd. Herd bulls; Scottish Hero (imp.) = 55042 = (90065) 295765 A. H. B.; Gloster King = 68703 = 283804 A. H. B. Young stock for sale. Long-distance phone in house.

John Miller, Brougham P. O., Ontario.
Claremont Stn., C. P. R., 3 miles.

CHOICE SCOTCH BULLS
FOR SALE. HERD-HEADING QUALITY.

H. SMITH, R. R. 3, Hay, Huron Co., Ont. Farm adjoins Exeter, on G. T. R.

HIGH-CLASS SHORTHORNS **Spring Valley Shorthorns**

I have on hand young bulls and heifers of high-class show type, pure Scotch and Scotch-topped, sired by that sire of champions, Mildred's Royal. If you want a show bull or heifer, write me.

GEO. GIER, Grand Valley P. O. and station, also Waldemar station.

Herd headed by Clipper Chief (imp.) = 64220 = (94673). If you want to get an imported bull, or a good Canadian-bred one to head your herd, be sure and write, or come and see them. Long-distance telephone.

KYLE BROS., AYR P.O., ONT.

SALEM SHORTHORNS

I have generally what you want in choice Shorthorns.

Elora Station, G. T. R. and C. P. R. J. A. WATT, SALEM.

Three Shorthorn Bulls for Sale. **Shorthorns and Leicesters.** For sale: Choice-bred young bulls, and a number of 1 and 2 year-old heifers. All got by Imp. sires, and out of grand milking dams. And Leicester rams and ewes of all ages. **W. A. Douglas, Tuscarora, Ont., Caledonia Station.**

Show animals, choice breeding. Prices reasonable. Stock bull, Benachie (imp.).
Geo. D. Fletcher, Binkham P. O., Erin Sta., C.P.R.

Silver Creek Holsteins—Official records range from 13 lbs. for 2-year-olds to 22 lbs. for mature cows. Stock bull, King Payne Segis Clothilde, his 7 nearest dams' records average 27 lbs. For sale are young stock of both sexes, sired by bull with high official backing and out of Record cows.

A. H. TEEPLE, Currie's P.O., Ont., Woodstock, Sta. Phone connection.

SHORTHORN BULLS

I have some choice young bulls, from imp. sire and dams. Good ones at reasonable rate. Come and see them. Prices right. Also some choice heifers.

J. Brydane, MILVERTON, ONTARIO.
G. T. R. and C. P. R. Station.

Willow Bank Stock Farm SHORTHORNS AND LEICESTERS.

Herd established 1855; flock, 1848. The great Duthie-bred bull, Imp. Joy of Morning = 32070 =, and the Missie bull, Royal Star = 72502 =, heads my herd. Choice selections to offer at all times in both bulls and females.

JAMES DOUGLAS, CALEDONIA, ONTARIO.

HAWTHORN HERD OF DUAL-PURPOSE Shorthorns

For sale: Young cows and heifers; bred right; priced right; and the right kind. Come and see them.

Wm. Grainger & Son, Londesboro, Ont.

Bud's Emblem = 63860 = (284905) A. H. B.

First-prize aged bull C. N. E., 1909, by that famous champion and sire of champions, Old Lancaster, imp. = 50062 =, heads the Old Meldrum herd of **SHORT-HORNS**, near Guelph. **A. F. & G. Auld, Eden Mills P. O., Ont.**

Heart Trouble Cured.

Through one cause or another a large majority of the people are troubled with some form of heart trouble.

The system becomes run down, the heart palpitates. You have weak and dissipated spells, a smothering feeling, cold clammy hands and feet, shortness of breath, sensation of pins and needles, rush of blood to the head, etc.

Wherever there are sickly people with weak hearts Milburn's Heart and Nerve Pills will be found an effectual medicine.

Mrs. Wm. Elliott, Angus, Ont., writes:—"It is with the greatest of pleasure I write you stating the benefit I have received by using Milburn's Heart and Nerve Pills. I suffered greatly from heart trouble, weakness and smothering spells. I used a great deal of doctor's medicines but received no benefit. A friend advised me to buy a box of your pills, which I did, and soon found great relief. I highly recommend these pills to anyone suffering from heart trouble."

Price 50 cents per box, or 3 boxes for \$1.25, at all dealers, or mailed direct on receipt of price by The T. Milburn Co., Limited, Toronto, Ont.

ARE YOU IN WANT OF A CHOICE BULL TO HEAD YOUR HERD?

We are offering choice bull calves sired by Fountain's Boyle, who won first prize at Toronto, London and Ottawa, who also headed first-prize herd at Toronto and Ottawa. Also offering some choice heifers.

D. DUNCAN, DON, ONT.
DUNCAN STATION, C. N. O.

BRAMPTON Jerseys

CANADA'S GREATEST JERSEY HERD
We are offering for sale one 2-year-old bull and four yearlings, fit for service; also six bull calves; females of all ages. Come and see them, or write.

B. H. BULL & SON, BRAMPTON, ONT.

High Grove Jerseys and Yorkshires. No better blood in Canada. Present offering: Two young bulls, 12 and 20 months old, respectively; females all ages. Prices and all information on application.

ARTHUR H. TUFTS, P.O. Box 111, Tweed, Ont.

Centre and Hillview HOLSTEINS

140 head, 45 females in R. O. M. Herd headed by Brookbank Butter Baron, Bonheur Stateman and Sir Sadie Cornucopia Clothilde. The average of dam, sire's dam and granddam is: milk in 7 days, 662.85 lbs.; butter in 7 days, 30.58 lbs. We have bulls born March, '09, to two weeks old for sale, from Record-of-Merit dams. Long-distance telephone.

P. D. Ede, Oxford Centre, Ont., Woodstock Sta.

HOLSTEINS AND YORKSHIRES

R. HONEY, Brickley, Ont.
Northumberland Co.
Offers a choice lot of heifers and sows ready to mate; also orders taken for the coming crop of calves from Prince Posh Calamity Bleske and R.O.P. cows.

Evergreen Stock Farm

For sale: A fine bull calf 2 months old, from Pauline Pet, record 16,000 lbs. of milk per year for 8 years; sired by Sir Mercena Favorite. Also other bull calves at moderate prices.

F. E. PETTIT, BURGESSVILLE, ONT.

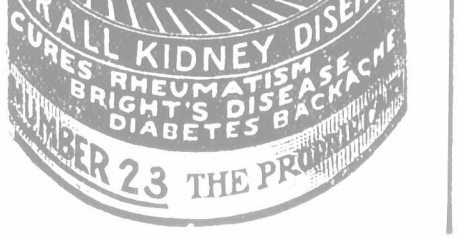
Elmwood Holsteins

Chicely-bred calves for April and May delivery. Sired by imported Ykema Sir Posch and Pontiac Sarcastic, a grandson of Sarcastic Lad. Registered. Delivered. Express paid. Safe delivery guaranteed.

E. D. GEORGE & SONS, PUTNAM, ONT.

Professor—Jones, will you differentiate between the words "discover" and "invent"?

Jones—Well—er—Peary discovered the Pole, and Cook invented it.



QUESTIONS AND ANSWERS. Miscellaneous.

SELECTING BREED OF SHEEP —STRAWBERRY CULTURE.

1. Whether are Shropshire or Leicester sheep the best to keep? I have had no experience with sheep.
2. What is the best way to care for strawberries the first year?

A NEW BEGINNER.

Ans.—1. There is no best breed of sheep. Both those mentioned are good. It is well to keep the same breed as is commonly kept in the district, as buyers of stock sheep are attracted where there are numbers to be procured.

2. Cultivation should begin soon after strawberries are planted, and continued throughout the summer. Some hand hoeing will be needed also. Blossoms ought to be pinched off the first season, so that strength may go into runners. Allow matted rows to a width of two feet to form, keeping space between rows cultivated. It pays to place runners where they are wanted as they form, as the earlier the plants root, the better will be the next season's crop.

CORN FODDER FOR HORSES.

My farm is a rented one and small. The meadows are very badly overrun with wiregrass, and I am very scarce of hay for the coming winter.

1. Are cornstalks injurious to horses? Some say they are, and others claim to be able to keep horses fat on them.
2. What feeding value has fodder corn, sown thickly, chiefly for a bulk of feed, compared with timothy hay, for horses?
3. What feeding value has hill corn, sown thinly, say an average crop, with grain on, for horses?

E. A. F.

Ans.—1. Cornstalks are wholesome food for horses, if well cured and free from smut.

2. Prof. Henry, in "Feeds and Feeding," says that for brood mares, idle horses, and colts, fodder corn of good quality will be found an economical substitute for timothy hay. It should not, we think, be fed alone. This also should be considered, that horses will eat the leaves and softer parts only. But Prof. Henry thinks that, admitting this, the much greater tonnage of fodder corn over that of timothy hay produced from a given area, makes it a more economical food.

3. Few horsemen feed corn in this way, though some ears of corn with a ration of oats do very well, and the stalks may be fed to advantage in moderation.

APPLE PACKING: WHO IS RESPONSIBLE?

A, a local apple-buyer, sells B, a distant apple-operator, 1,000 barrels of apples yet unpicked and unbought. The contract stipulates that the price agreed upon, \$1.75 per barrel, may be increased 15c. per barrel, if the price to be paid by A to the farmers is higher than he anticipated at the time of making the bargain. The contract stipulates, also, that the apples shall be f. o. b. at this price at stations named; and that B's name shall appear on the barrels, and that B shall supply a man to oversee the packing and attend to the shipping.

In case of fraudulent packing, who is responsible under the Inspection and Sale Act (Fruit Marks Act)?

SUBSCRIBER.

Ans.—The Dominion Fruit Inspectors do not interpret the law nor examine contracts, but in case of fraudulent packing, they recommend a prosecution against the person whose name appears upon the barrels.

In this particular case, B would be held liable under Section 321.

A would be liable under Section 320, for not placing his name and address upon the barrels, as required by Section 320(a).

A would be liable also for an additional charge under Section 321, if B produced evidence showing that he bought the apples packed, and that A was the owner of them at the time of packing.

It has cost several apple-operators a large sum of money this year to defend suits from the fact that they placed their names upon barrels, representing themselves as the packers, although they were not the packers (the owners at the time of packing).

A. McNEILL.

MAKE DAIRYING PAY BETTER

Strain your milk as it leaves the cow, not afterwards, and see that you strain milk only, not milk, dirt and bacteria. You can make pure milk an absolute certainty by using the

STERILAC SANITARY PAIL

Note its clever construction. The funnel is detachable. As the milk falls on the slant towards the milk, it passes direct to the strainer into the pail. All dirt falling into the opening is caught on a deep metal shelf inside the funnel—not on the strainer—thus milk and dirt never come in contact. You can use ordinary cheese-cloth for straining. Capacity 14 quarts, no joints on the inside; it is easily cleaned. Price, \$2.50. Used by all up-to-date farmers and dairymen.

PURITY MILK COOLER-AERATOR

Cools milk rapidly, within 2 degrees of running ice water, well or spring water, whichever you use. Rapid cooling and thorough aeration ensures milk keeping sweet for 46 hours and destroys odors. The milk flows through the perforated pail on top on to the corrugated body which ensures the milk running down slowly so that it is perfectly cool when it reaches the retainer pan. There are outlets at each side of this pan. This cooler is well made, has soldered seams, is easy to clean and simple to operate. Will last for years. Price, \$6.50. Guaranteed as represented. Write for large catalogue of dairy supplies, FREE.

W. A. DRUMMOND & Co., 175 King St. E., Toronto

Anti-Trust Prices Freight Prepaid To You—No Duty on FARM and TOWN

Telephones and Switchboards

Poles, Wire, Brackets, Insulators, Tools, Lightning Arresters, Ground Rods, Batteries, Insulated Wire, and everything necessary.

NO CHARGE

for our experts' letters of advice, drawings, explanations, instructions, telling you in any language, non-technical, just how to build, own and operate your rural, town or long distance lines in a good but economical way and at a profit, thereby getting your own telephone free.

We are the largest, exclusive and the only bona-fide Independent Telephone and Switchboard makers in Canada or Great Britain.

Our Telephones are extensively used in Canada, England, France and by the U. S. Government.

Our great illustrated book on the Telephone sent Free to anyone writing us about any new telephone lines or systems being talked of or organized.

We have a splendid money-making proposition for good agents.

The Dominion Telephone Mfg Co., Ltd. Dept. C, Waterford, Ont., Canada.

HOMWOOD HOLSTEINS

headed by Grace Payne 2nd's Sir Colantha, one of the richest bred bulls of the day. (The home of Lady Aaggie De Kol, sweepstake cow at Guelph Winter Fair, '08-'09.) Official record 27 1/2 lbs. of butter in 7 days. Also Queen's Butter Barones, champion 3-year-old of Canada; official record 23.66 lbs. of butter in 7 days; and several others with records of over 20 lbs of butter in 7 days. Only a few choice bull calves for sale. M. L. & M. H. Hale, Springford, Ont.

Holstein - Friesians

FAIRVIEW FARM offers young bulls, sired by Pontiac Korndyke and Rag Apple Korndyke, without question the two greatest Korndyke bulls in the world, and out of cows with large A. R. O. records and testing 4% fat. Come and see them, or write.

E. H. DOLLAR, Heuvelton, N. Y.
Near Prescott.

LAKEVIEW HOLSTEINS!

Herd headed by Count Hengerveld Payne De Kol, whose sire, Pieterje Hengerveld Count De Kol, is the sire of De Kol Cremelle, the world's champion milk cow, with 119 lbs. milk in 1 day, 780 lbs. in 7 days, 10,017 lbs. in 100 days. He has five daughters that average 30 lbs. in 7 days, and 120 lbs. in 30 days. His dam, Grace Payne 2nd, 26 30 lbs. in 7 days, is dam of Grace Payne 2nd's Homestead with the following records:

7 days, 4 years old,	29.16 lbs.	% fat 4.12	Bull
30 "	"	" 4.09	calves
7 "	"	" 4.37	for
7 "	"	" 5.42	sale.

E. F. OSLER
BRONTE, ONTARIO.

The Maples Holstein Herd

of Record-of-Merit cows, headed by King Posch De Kol. Nothing for sale at present except choice bull calves from Record-of-Merit cows. Also one or two good cows.

WALBURN RIVERS, FOLDEN'S, ONTARIO

High-class Holsteins

—Head of herd, Pieterje Korndyke Lad. Two nearest dams average 26.09 lbs. butter in 7 days. His sire's dam, Pieterje 22nd, has a record of 31.62 lbs. butter in 7 days. Present offering: now booking orders for bull calves sired by above sire and out of A. R. O. dams.

WM. C. STEVENS, PHILLIPPSVILLE, ONT.

Springhill Ayrshires

Headed by two bulls whose dams have the highest official records in Scotland. Order a bull calf out of our best cows.

We can please you in all ages and sexes

Robt. Hunter & Sons, Maxville, Ont.

STOCKWOOD AYRSHIRES

Are producers of milk testing high in butter-fat. In my herd I have a range of selection, either imp. or Canadian-bred, of either young bulls or females, unexcelled in Canada. Price and terms to suit purchaser. D. M. WATT, ST. LOUIS STA., QUE.

Trout Run Ayrshires

—My present offering is several heifers and cows in milk, a number of heifer calves, 3 young bulls fit for service, one of them from imp. sire and dam; dam's record 45 lbs. a day. My herd are heavy producers and critically selected. Am also offering 20 Toulouse geese at \$4 and \$5 a pair.

WM. THORN, Lynedoch, Ont.

Cherry Bank Ayrshires!

Present offering: One yearling and three last fall bulls. All good ones, with good breeding; also females any age, and calves of either sex. Write for prices.

P. D. McArthur, 3 1/2-mile from Howick station. North Georgetown, Que.

Springbank Ayrshires!

Canada's leading herd of Record-of-Performance Ayrshires. Big records, big cattle, big udders and big teats. Over 50 head to select from; 13 yearling heifers, 7 yearling calves. All in good condition. A. S. TURNER, RYCKMAN'S CORNERS, ONT. 3 Miles South of Hamilton.

Ayrshires and Yorkshires!

We still have a few choice individuals of almost any age on hand in Ayrshires, and are always ready to price any. Other breeders in this section. Bull calves from Record of Performance cows. A few young Yorkshires on hand.

Long-distance phone.

ALEX. HUME & CO., MENIE, ONT.

HILLCREST AYRSHIRES

—Bred for production and large teats. Record of Performance work a specialty. Fifty head to select from. Prices right.

FRANK HARRIS, Mount Elgin, Ont.

Stonehouse Ayrshires

36 head to select from. All imported or out of imported sire and dam. For sale: females of all ages. Am now booking orders for bull calves.

Hector Gordon, Howick, Quebec.

JUNE 2, 1911

QUEST

DITCHES LAWS

1. Where garding t watercours
2. Is th in connecti the owner cost of bo
- Ans.—1. Queries ad Agricultur Day, O. answered cou
2. There tion with
1. How silo 14 fe
2. How take to fil on our far
3. How build a st
4. About
- Ans.—1. with set approxima depth of 2 or over.
2. From corn woul
3. If m 2,000 feet
4. The about \$60 for hoops.
- MILLET SC
- I am th cut for ha
1. Woul an amount and oats,
2. Is n cattle and same?
3. What what the quantity o
4. Woul soda on i increase th fertile?
5. How per acre,
- Ans.—1. will give probably oats. It of these, which can suit Princ ditions as where the in warm
2. Millet cut short left unti unpalatab for cattle trouble h horses as ened peric as part o
3. Eithe grass wou ditions as yielding v late in done bro has been tion. Co rolling. The amou
4. An t meadow l tainly inc plete for phosphori to nitro effective and phos been appl spring.
5. Frou of nitrate two appl has start later.

QUESTIONS AND ANSWERS.
Miscellaneous.

DITCHES AND WATERCOURSES LAWS—RURAL DELIVERY.

1. Where can I obtain literature regarding the laws of the ditches and watercourses of the Province of Ontario?
2. Is there any annual fee or expense in connection with rural-mail delivery, to the owner of mailbox, except the first cost of box?

D. M. D.

Ans.—1. Consult the Ontario Statutes. Queries addressed to the Department of Agriculture, Toronto, or to Prof. W. H. Day, O. A. C., Guelph, would be answered courteously.

2. There is no annual fee in connection with rural-mail delivery in Canada.

SILLO QUERIES.

1. How many tons of silage would a silo 14 feet by 30 feet hold?
2. How many acres of corn would it take to fill it, corn growing very heavy on our farm?
3. How much plank would it take to build a stave silo of this size?
4. About how much would it cost?

J. A. T.

Ans.—1. If silo were filled to the top with settled silage, it would contain, approximately, 120 tons. Filled to a depth of 25 feet, there would be 100 tons or over.

2. From five to eight acres of good corn would fill it.

3. If made of 1½-inch plank, about 2,000 feet would be needed.

4. The cost for material would be about \$60 for lumber, and \$15 to \$20 for hoops.

MILLET FOR HAY—NITRATE OF SODA ON MEADOW.

I am thinking of sowing millet, to be cut for hay.

1. Would this plant likely give as large an amount of fodder as peas, or vetches and oats, would?
2. Is millet hay relished by horses, cattle and sheep, and is it a safe feed for same?
3. What are the best varieties, and what the best methods of sowing, and quantity of seed per acre?
4. Would an application of nitrate of soda on meadow land and forage crops increase the yield where the land is fairly fertile?
5. How much would you advise using per acre, and when should it be applied?

C. P.

Ans.—1. In favorable seasons, millet will give large yields of fodder, as large probably as would peas, or vetches and oats. It is not usually sown in place of these, however, but as a catch crop which can be sown late. Millet may not suit Prince Edward Island weather conditions as well as those in the Provinces where the summer is warmer. It delights in warm weather.

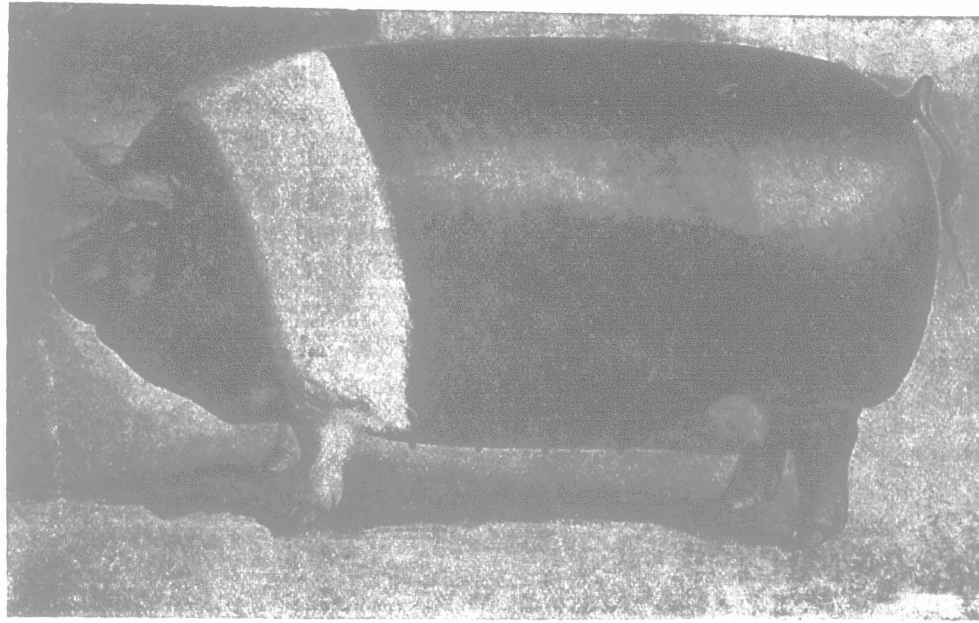
2. Millet hay is relished by stock if cut shortly after it is headed out, but if left until partially ripe it is woody and unpalatable. It is a perfectly safe feed for cattle and sheep, but instances of trouble have been noted when fed to horses as their sole roughage for lengthened periods. Fed in moderation, and as part of the ration, there is no danger.

3. Either common millet or Hungarian grass would probably suit P. E. I. conditions as well as any. A very heavy yielding variety, the Japanese Panicle is late in maturing. Sowing is usually done broadcast, by hand, on land that has been worked into fine, smooth condition. Cover the seed by harrowing and rolling. About three pecks per acre is the amount usually sown.

4. An application of nitrate of soda to meadow land or forage crops would certainly increase the yield; though a complete fertilizer, that is, one containing phosphoric acid and potash, in addition to nitrogen, would probably be more effective and economical. The potash and phosphates, however, should have been applied last fall, or early in the spring.

5. From 100 to 200 pounds per acre of nitrate of soda is recommended. Make two applications, the first after growth has started, and the second two weeks later.

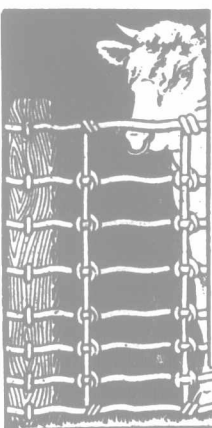
Canada's Greatest Herd of Hampshire Swine



First and largest established herd of pure-bred Hampshires in Canada. Herd now consists of over 100 head, all ages, including our 1910 importation. We have for sale now imported stock, either sex, from 6 weeks to 3 months old. These are bred from the most noted ancestry, with no objectionable crosses, and can furnish either pairs or trios not akin. Have a few male pigs from 6 to 10 months old. All stock safely crated and properly equipped for transportation, so there is no danger in shipping even to the most distant points. Write for prices, or visit the farm.

Stations { Lucan, G. I. R.
Denfield, L. H. & B.

A. O'NEIL & SON, BIRR, ONT., CAN., MIDDLESEX CO.



The fence that's strong all through

Every wire in our heavy farm fence is No. 9 hard steel, with uniform strength and lasting qualities in each strand. A fence with any small or soft wire in it is short lived. A chain is no stronger than the weakest link. Then PEERLESS Fence made from English wire is rust-proof—that withstands more than double the endurance of other makes.

Peerless the fence that saves expense

The PEERLESS does not cost anything to keep—there are no repair bills—it is not affected by changes of temperature. The horizontal wires being crimped makes ample provision for all contraction and expansion. PEERLESS Fence, once well stretched, is always tight—no shock affects it. We are manufacturers of high grade farm, poultry, ornamental fencing and gates. Write for Free Book, a sample of PEERLESS Fence and a simple method of testing any make of fence.

THE DANWELL HOXIE WIRE FENCE CO., LTD., DEPT. B, HAMILTON, ONT., WINNIPEG, MAN.



LABELS

Metal Ear Labels for Cattle, Sheep and Hogs.

The old standby for all who have stock liable to stray, or to dispute as to identification or ownership; for herd or flock records, or for general convenience. Send for free circular and sample. It may save you much trouble. Write to-day.

F. G. JAMES, BOWMANVILLE, ONTARIO.

STEWART M. GRAHAM

PORT PERRY, ONTARIO.
Pedigree-live-stock and real-estate AUCTIONEER.
Graduate of Jones' National School.

I WILL IMPORT the Ribby SHEEP of the different English breeds for those wanting them. Selections will be made with the greatest care, and the charges will be moderate. Will also bring a few CLYDESDALES and SHORTHORNS on order. Let me know what you want, and ask for particulars. Have two Shorthorn bulls just landed that will be sold worth the money, and they are high-class in every way. Have as usual home-bred Shorthorns. **ROBERT MILLER, Stouffville, Ont.**

LINCOLN LONG-WOOL SHEEP

And Shorthorn Cattle.
The Ribby Grove Flock and Herd, owned by **MR. HENRY DUDDING,**

Is the source to which practically all the leading export buyers have resorted from time to time to obtain stud sires and dams, and rams and ewes of unrivalled merit and quality. The record of its show-yard success is unequalled, and so are its sale averages. Selections of Sheep and Cattle always for sale.

Apply: **THE OWNER, RIBBY GROVE, STALLINGBOROUGH, GRIMSBY, ENGLAND.**
Cables: Keelby. ANNUAL HOME SALE, 1910, takes place on Thursday, July 7th next.

Fairview's Shropshire Offerings:

Their breeding is of the very best, and for 26 years they have proved their superior quality in the leading show-rings, including three World's Fairs, where the Fairview exhibits won more section, flock, champion and special prizes than all competitors combined. That's the kind we now offer. For a flock header or a few ewes, write for circular and prices to: **J. & D. J. Campbell, Fairview Farm, Woodville, Ont.**

Willowdale Berkshires!

Nothing to offer but suckers and three extra choice young sows, bred to farrow May and June. Be quick if you want one. **J. J. WILSON, Importer and Breeder, Milton P. O., and Station. C. P. R. and G. T. R.**

Monkland Yorkshires

With very nearly 100 sows in breeding, of modern type and high-class quality, our herd will stand comparison with any in Canada. We are always in a position to fill large or small orders with despatch. Long-distance phone. **JAMES WILSON & SONS, FERGUS, ONT.**

DUROC - JERSEY SWINE

Imported and home-bred. Sows ready to breed. Boars fit for service, and younger ones either sex. Also Embden geese. **MAC CAMPBELL & SONS, HARWICH, ONT.**

Annual Ram Show and Sale, 1910

The annual show and sale of registered Kent or Romney Marsh **RAMS** will take place at Ashford, Kent, England, on **Thursday, September 29th, and Friday, September 30th, 1910.**

The entry includes the first selection from the principal flocks of the breed, and will number 500 head of thoroughly typical and choicely bred rams.

Challenge cups and prizes to the value of £260 will be offered for competition.

Full particulars and catalogues (when ready) from **W. W. Chapman, 4 Mowbray House, Norfolk St., Strand, London, W. C., England.** who will supply any information required.

Cables and telegrams: Sheepcote, London.

WOOL

WE WANT TO BUY YOURS. WRITE NOW FOR OUR PRICES.

E. T. CARTER & CO.,
84 FRONT ST. E., TORONTO, CANADA.



ELECTRIC BEANS

Stand supreme as a Blood and Nerve Tonic.

They are unequalled for Bilioueness, Sick Headache, Constipation, Heart Palpitation, Indigestion and Anemia. Those who are in a position to know what is best use "ELECTRIC BEANS."

Write for Free Sample
50c. a Box at all Dealers or upon receipt of price, from **THE ELECTRIC BEAN CHEMICAL CO. LTD., OTTAWA.**



LARGE WHITE YORKSHIRES.

Have for sale at the present time a fine lot of young sows bred to imp. boar, due to farrow end of May; also boars ready for service. A good lot of spring pigs. Pairs supplied not akin from large stock from the best British herds. Long-distance Bell phone. **C.P.R. & G.T.R.**

H. J. Davis, Woodstock, Ont.

MAPLE GROVE YORKSHIRES.

To make room for the natural increase in our herd, we now offer for immediate disposal: 25 choice young and very typical sows, an exceedingly choice, easy-feeding bunch. Many of them sired by M. G. Champion—20102—, champion and silver-medal boar at Toronto in 1907, and first as a three-year-old in the aged class in 1908, a grand stock-getter. Many of our sows are prize-winners, and are of the best Yorkshire blood in England and Canada. 100 Feb., Mar. and April pigs—pairs not related. We are putting prices low, because we must sell. Satisfaction guaranteed.

H. S. McDIARMID, Fingal, Ont.
Shedden Station. Long-distance phone in house.

HILLVIEW YORKSHIRES

Are ideal in type and quality. We have young things of both sexes for sale. Also one Clyde mare. Shorthorns of both sexes. And Barred Rock and Houdan eggs. **W. F. DISNEY, Greenwood P. O., Ont.** Phoneconnection.

SUNNYSIDE CHESTER WHITE HOOS.

I am now offering some very choice young things of both sexes, of breeding age. A few Shropshire sheep of both sexes. A number of Bronze turkeys and toms, and Red Cap cockerels and pullets. **W. E. WRIGHT, Glenworth P. O., Ont.**

MAPLE LEAF BERKSHIRES

For sale: Young sows bred and ready to breed; boars fit for service; also young pigs farrowed in March and April. Imp. sires and dams. Pairs not akin. **C.P.R. and G.T.R. Joshua Lawrence, Oxford Centre P. O., Ontario.**

Hillcrest Tamworths

are a second to none in America for type and quality. For sale are both sexes and all ages, from sows bred and boars fit for service down to youngsters. **Herbert German, St. George, Ont.**

Newcastle Tamworths and Shorthorns

FOR SALE: Young sows due April and May, by imp. boar, dams by Colwill's Choice, Canada's Champion boar in 1901-2-3-5; also choice pigs, both sexes. Two yearling Shorthorn bulls, Synne and Lavender families, and six choice heifers and heifer calves. Prices right. Bell phone. **A. A. Colwill, Box 9, Newcastle, Ont.**

Tamworths

A grand lot of young boars from 2 to 4 mos., also young sows (dandies). Some just bred. Some in farrow to first-class boars from best herd in England. Prices reasonable. **Chas. Currie, Morriston, Ont.**

Put Your Feet in a Pair at Our Risk!

STEEL SHOES

Will Surprise and Delight You With Their Lightness, Neatness and Comfort—Their Almost Unbelievable Durability

We want you to slip your feet into a pair of Steel Shoes—to feel and see and know how much lighter, neater, stronger, more comfortable they are than any other work shoes in existence. Hence we are making this special Free Examination Offer, merely asking a deposit of the price, while you are "sizing up" the shoes. If they fail to convince you immediately you can notify us to send for them at our expense and we will refund your money.

Must Sell Themselves

We ask no favors for Steel Shoes. Compare them with the best all-leather work shoes you can find. Give them the most rigid inspection inside and out. Let them tell their own story. It's no sale unless, of your own accord, you decide that you must have them.

Better Than the Best All-Leather Work Shoes

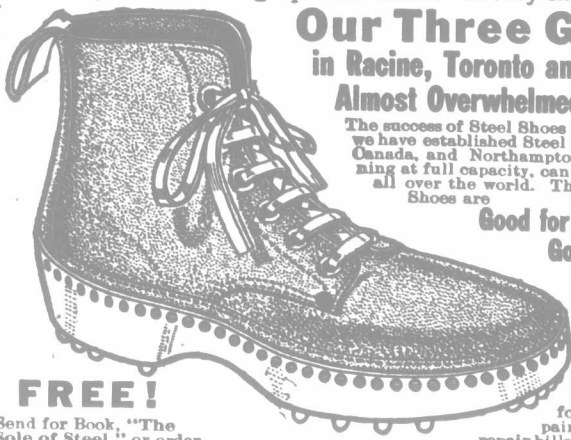
Steel Shoes are the strongest and easiest working shoes made. There's more good wear in one pair of Steel Shoes than in three to six pairs of the best all-leather work shoes. The leather is waterproof. The Steel Soles are wear-proof and rust-resisting. They are lighter than all-leather work shoes. Need no breaking in. Comfortable from the first moment you put them on. Impossible to get out of shape. They keep the feet dry. They retain their flexibility in spite of mud, slush or water. They cure corns and bunions, prevent colds and rheumatism—save doctors' bills and medicines.

Thousands of Farmers Shout Their Praises

The enthusiasm of users knows no bounds. People can't say enough for their comfort, economy, lightness and astonishing durability. The introduction of Steel Shoes in a neighborhood always arouses such interest that an avalanche of orders follows.

Here is the way Steel Shoes are made. The uppers are made of a superior quality of leather, as waterproof as leather can be tanned. Wonderfully soft and pliable—never gets stiff. The soles and sides are made out of one piece of special light, thin, springy, rust-resisting Steel. Soles and heels are studded with adjustable Steel Rivets, which prevent the bottoms from wearing out. Rivets easily replaced when partly worn. 50 extra rivets cost only 30 cents and should keep the shoes in good repair for at least two years! No other repairs ever needed! The uppers are tightly joined to the steel by small rivets of rust-resisting metal, so that no water can get between.

The soles are lined with soft, springy, comfortable Hair Cushions, which absorb perspiration and odors and add to ease of walking.



FREE!

Send for Book "The Sole of Steel," or Order Steel Shoes on blank below.

Sizes 5 to 12. Black or Tan Color. 6, 9, 12 and 16 Inches High

Steel Shoes, 6 inches high, \$2.50 per pair.
Steel Shoes, 6 inches high, better grade of leather, \$3.00 per pair.
Steel Shoes, 6 inches high, extra grade of leather, black or tan color, \$3.50 per pair.
Steel Shoes, 9 inches high, \$4.00 per pair.
Steel Shoes, 9 inches high, extra grade of leather, black or tan color, \$5.00 per pair.
Steel Shoes, 12 inches high, \$5.00 per pair.
Steel Shoes, 12 inches high, extra grade of leather, black or tan color, \$6.00 per pair.
Steel Shoes, 16 inches high, \$6.00 per pair.
Steel Shoes, 16 inches high, extra grade of leather, black or tan color, \$7.00 per pair.

M. M. Ruthstein
Sec. and Treas. **STEEL SHOE CO., Dept. 439, Toronto, Can.**
Main Factory, Racine, Wis., U. S. A. Great Britain Factory, Northampton, England

Our Three Great Factories in Racine, Toronto and Northampton, England, Almost Overwhelmed by the World-Wide Demand

The success of Steel Shoes is almost startling. Within three years we have established Steel Shoe factories in Racine, Wis.; Toronto, Canada, and Northampton, England. These great factories, running at full capacity, can scarcely keep up with the demand from all over the world. The public is rapidly learning that Steel Shoes are

Good for the Feet! Good for the Health! Good for the Bank Account!

These shoes are better for the feet, better for the health, better for the pocket-book than heavy work shoes or rubber boots.

You Actually Save \$5 to \$10 a Year

by wearing Steel Shoes. Figure it out for yourself. One pair will outlast 3 to 6 pairs of ordinary work shoes. They save all repair bills and keep your feet in perfect condition.

Free Examination

And Your Money Back Promptly if It Looks Better Than the Shoes!

You owe it to yourself to investigate. Get a pair of Steel Shoes for Free Examination by sending the price, which will be returned if you and your own feet are not convinced of their merits.

Why Wait? Send Now!

No risk! No bother! No obligation! Don't hesitate! Act while this offer is open! Simply state size of shoe you wear, enclose the price and get the shoes for Free Examination.

For general field work we strongly recommend our 6-inch high Steel Shoes at \$3.50 per pair or the 9-inch at \$5.00 per pair. For all classes of use requiring high cut shoes our 12 or 16-inch high Steel Shoes are absolutely indispensable. Shoes can be returned at once if not O. K. and the money will be refunded.

BOOK REVIEW.

LATEST BOOK ON APPLE CULTURE.

That there is lots of money to be made in apple-growing is becoming more and more apparent to even the casual observer. The splendid returns that have been made the last few years from many an old orchard where the trees were formerly thought to be little more than cucumbers of the ground, has aroused not only the owners of the orchards all over the country to consider the profits which may be made from them, but has turned to orchard planting thousands of town and city people who want a safe investment in the country. At such a time when all concerned are eager to learn just how the most money can be made out of orchards, both old and new, nothing could be more timely than the publication of "The Canadian Apple-growers' Guide," by Linus Woolverton, M. A., of Grimsby, and we predict for the new book a hearty reception by the apple-growing public. The author's long and varied experience as a practical fruit-grower, as editor of the Canadian Horticulturist, as secretary of the Ontario Fruit-growers' Association, and as secretary of the Board of Control of the Ontario Fruit Experiment Stations, enables him to speak with authority on such a subject. In this work, the whole field of apple-growing has been covered in a comprehensive, yet concise and practical way, and much information is given of inestimable value alike to the novice and the experienced grower. The book is made up of three parts. The first contains twenty chapters, and is intended as a complete guide to all matters pertaining to orchard management, from the buying of the land to the marketing of the crop. Part two gives carefully-prepared, detailed descriptions of several hundred varieties of apples, new and old, grown in Canada. This part of the volume has entailed upon the author many years of patient and careful work, and is enriched with a large number of excellent photographs, which help in the identification of the varieties described. In part three has been condensed in a few pages the information which all planters are most desirous of obtaining, viz., reliable lists of the varieties best adapted for planting in the various apple districts of the Dominion. To obtain such information, it has taken many years of experimenting, and the expenditure of thousands of dollars by the Government and private individuals. With such information now available to the planter, and a reliable guide of this kind in the hands of the grower, we may safely predict greater progress in profitable orcharding in the next decade than has taken place in the past half century. The Canadian Apple-growers' Guide is an attractive volume of about 300 pages, published by Wm. Briggs, Toronto. Price, \$2, or \$2.25, postage paid.

H. L. HUTT.

TRADE TOPICS.

FOR A THICK TENDON.

J. E. Jamieson, of Brockville, Ont., under date of July 17, 1909, reported as follows: "I have a little imported Hackney mare that had a thick tendon. I used one bottle of your Absorbine. I also used the Resublimated Iodine with the Absorbine, as you state in your instruction book was to be used in old cases. I am pleased to say she is cured. I intend to always have Absorbine in my stable." Absorbine, at drugists, \$2 per bottle; or sent direct, charges prepaid, upon receipt of price. Canadian agents, Lyman's, Ltd., St. Paul street, Montreal, Que. W. F. Young, P. D. F., 258 Temple street, Springfield, Mass.

Various kinds of roofing material are in use in the different countries of the world, some of which last but a short time. Among civilized people who have permanent homes, the kind of roofing that is wanted is one that will withstand the changes of temperature and weather, and the fury of the elements. The Genasco Ready Roofing, made from natural asphalt, taken from Trinidad Lake, on Trinidad Island, is the result of years of careful study and experiment, and its manufacturers, the Barler Asphalt Paving Company, Philadelphia, claim that it makes a sound, good, and permanent roof. Its success has been remarkable, and it is now found in almost every quarter of the globe.



Why Insurance?

Have you ever considered "Painting" from the standpoint of an insurance policy?

The premium represented by the cost of painting is in proportion to the importance of the security afforded, no higher than other insurance; in fact it is considerably smaller, and soon becomes a minus quantity.

Why Fire Insurance—Tornado Insurance—Lightning-rods?

They only protect when that which you wish to avert, happens.

Martin-Senour Paint 100% Pure

affords the utmost protection, insures your property, beginning with its application. It wards off the sun dogs of Old Sol, the nips of Old Jack Frost—the ravages of Old Father Time.

Prevents dry rot—checks deterioration. No safer, surer or more reliable insurance could be offered.

If your dealer cannot supply you, notify us and we will gladly direct you to where our paints are to be had.

Decline All Substitutes

Write for illustrated booklet, "Home Beautiful," and interesting color card. Free for the asking.

The Martin-Senour Co., (Limited) Montreal
Pioneers Pure Paint



PLEASE MENTION THE FARMER'S ADVOCATE.



Frictionless Empire

Our New 25c. Book

is a most interesting and instructive book for dairymen. It tells the truth about the two standard methods of cream separation. It is the most unbiased book on separators ever published. It gives many pointers worth dollars to you. You can procure one copy of this book if you will fill in, cut out and mail the coupon to us promptly. Extra copies are 25c. Don't miss this new book. Send the coupon immediately. Send it by next mail.

Important Facts You Should Know about Cream Separators

There are six important things a cream separator should do in order to be a paying investment.

- First: It should get all the cream.
- Second: It should get the cream in perfect condition.
- Third: It should save you money.
- Fourth: It should save you work.
- Fifth: It should be durable.
- Sixth: It should make money for you.

Unless a cream separator does every one of these six things it is not a really good cream separator. It is a losing, instead of a paying, investment. It is not the machine for you.

There are a host of machines that are claimed to do these six things. But Empire separators are the only ones that are actually doing the whole six. That's certainly a bold statement. It's the truth, nevertheless.

For example, we will show you how the Frictionless Empire meets these six requirements.

- First: The Frictionless Empire skims to .02 of one per cent. and often less. That means the loss of only one pound of butter fat in every five thousand pounds of milk, which is equal to the loss of one pound of butter in all the milk a cow gives in one year. The Frictionless Empire gets all the cream.
- Second: The few smooth skimming parts of the Frictionless Empire are as easily and thoroughly washed as a glass tumbler. This cannot truthfully

be said of skimming devices with corners, slots and crevices that soon get clogged up and cannot be thoroughly cleaned. Cream in perfect condition—cream without a taint—can only be obtained from a separator that can be thoroughly cleaned.

Third: The Frictionless Empire gets thirty per cent. more cream than old style methods. The more cream saved the more money saved.

Fourth: The Frictionless Empire does the skimming in a small fraction of the time required with old style methods. It saves many hours of work. It almost runs itself. So nearly frictionless that it will run for half an hour after you've completed the skimming unless you use our brake to stop it.

Fifth: The very best materials that money can buy are used in the Frictionless Empire. The working parts are perfectly turned—true as a die. They fit together accurately, thus reducing friction and wear close to the vanishing point. You can judge the durability of Empire Separators when we tell you that the average cost per machine has been but thirty cents per year for repairs during ten to fifteen years of service—years of service prove their worth.

Sixth: The Frictionless Empire gets thirty per cent. more cream than old methods. The cream is first quality—commands a higher price than gravity cream. More cream and higher price

cream necessarily mean more money.

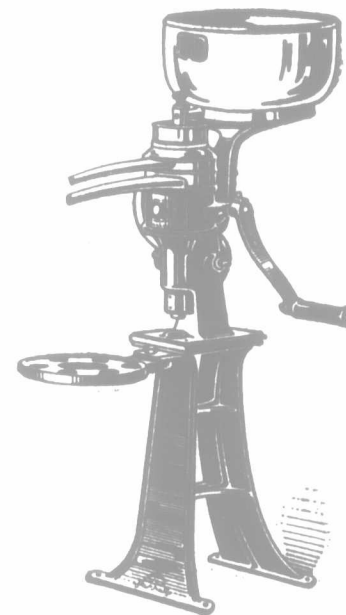
No other separators will fulfill all these six requirements. They cannot do so, because they cannot use the Empire patented devices and mechanism.

These patented features are found only in the Frictionless Empire (cone method) and Empire Disc. They are both high-grade machines. And in these machines you have your choice of the only actually standard methods of cream separation.

Whichever machine you choose you are bound to be satisfied, for every Empire Separator is sold under a binding guarantee—a guarantee as good as a gold bond.

Some day you'll Own an Empire

No matter what machine you buy now sooner or later you'll buy an Empire Separator. An Empire is the only separator really good enough for you. An Empire will make more dollars for you, cost less to run, save you more time, than any other make you can purchase. There is nothing in cream separators equal to an Empire, remember that.



The Empire Disc

The EMPIRE Line of Cream Separators

All Sizes of Both Cone and Disc Machines

We give you your choice of either the cone or the disc method. Both are good methods. The most important thing is the choice of the make. So be sure your new separator is Empire-make.

The Empire Cream Separator Company of Canada, Limited

Winnipeg, Man. - - TORONTO, ONT. - - SUSSEX, N. B.
Chicago, Ill.; Portland, Ore.; Port Huron, Mich.; Bloomfield, N. J.; Columbus, O.; Essex Junction, Vt.; Minneapolis, Minn.; Wichita, Kans.; Kansas City, Mo.; Des Moines, Iowa; Detroit, Mich.; Mason City, Iowa.

Please send me your new book No. 12 I am interested in dairying and promise to read your book carefully. I have at present (state number) cows.

Name.....
P. O. Address.....
County..... Province.....

BOOK REVIEW.

AMERICAN AGRICULTURE.
The Sixteenth Yearbook of the United States Department of Agriculture, because of the vastness of the field of endeavor which it covers and its inherent merit, is a truly noteworthy publication. Compared with those of former years, the Departmental editor, Joseph A. Arnold, has effected improvement by increasing the size of the volume, and disseminating more closely in the quality of the matter included. It opens with the annual report of the Secretary, Hon. J. C. Wilson, outlined in the 1909 Christmas Number of "The Farmer's Advocate," followed by 23 practical papers of great value, several of them illustrated with beautiful colored engravings. The subjects and treatment are characteristic of advanced agriculture, such as the production of better yielding crops of corn, applying water to crops, protection of fruit injuries to fruit trees, soil seed-growing, fruit trees, and soil, bacteria, future work, and method of using the soil for the benefit of the farmer. The issues in form of a book, but is sent with a correct and complete list of services rendered by the Department.



Result after using Stumping Powder on stump shown in our issue of April 7th.

Now is the Time to Clear Your Land of the Stumps and Boulders Thereon

STUMPING POWDER

Is just the thing to do the work quickly, very little labor and at small cost. Write:

HAMILTON POWDER CO'Y,

Toronto, Ont. Montreal, P. Q. Victoria, B. C.

Write for descriptive catalogue and prices.

in separate form the special papers which it contains in order that the information contained may be more generally available.

GOSSIP.

"INTERNATIONAL" NEWS ITEMS.
The International Live-stock Exposition Association directors held their spring or classification meeting May 19, 1910, in the rooms of the Saddle and Sirolo Club, Union Stock-yards, Chicago. It was decided to hold the International Horse Show from November 22 to 26, while the International Live-stock Exposition is to cover the usual period, November 26 to December 3, 1910. It was found that practically all the live-stock associations had increased their appropriations for special prizes, to be offered in connection with this year's show. To recognize breeders as well as fanners, two additional beautiful silver trophies will be offered by the Exposition, one to the breeder of a champion carload of fat cattle, and another to the breeder of the grand champion carload of feeder cattle of the show. It was decided to show the custom house medals by the 25th Fair. As a result of the meeting the Directors of the Exposition will be in a position to...



Every Farmer's Wife in Canada Ought to Read this Advertisement



IF you, Madam, are a farmer's wife, you should use your influence to get your husband to roof the house and barn with Oshawa Galvanized Steel Shingles. For these practical reasons:—

Safe Against Lightning

Every thunderstorm that passes over your place endangers his life and your own, and threatens damage or destruction to the property. But there would be no such danger if the farm buildings were roofed with Oshawa shingles. They protect any building against lightning—far better than any lightning-rod system possibly can.

Safe Against Fire

And, at certain times in the year, the house you live in and the barn nearby is in danger from fire—flying sparks from the threshing machine; sparks from the kitchen chimney; sparks from passing locomotives; sparks from forest fires, perhaps. Farmer's roofs catch fire in many ways—and you are different from most farmer's wives if you do not dread this ever-present danger. You need not dread it at all when the buildings are covered with a seamless steel fireproof Oshawa shingled roof.

Improves Cistern Supply

Probably you depend a good deal on cistern water. An Oshawa-shingled roof keeps your cistern fuller, and the water is cleaner, tasteless, without odor. It never can be from a wood-shingled roof. It always is from an Oshawa-shingled roof.

Costs Very Little

When you speak to your husband about this, ask him to send for the instructive and handsomely-illustrated free book called Roofing Right. He will see, when he reads that, that the actual cost of an Oshawa-shingled roof is less than five cents per year for a hundred square feet of roof surface. He will see that this roofing is **guaranteed to satisfy in every sense for twenty-five years, or he gets a new roof for nothing.** He will see that it will pay him well to cover his house and barn with a roof that is **guaranteed wet-proof, wind-proof, fireproof and lightning-proof for a quarter century,** and that will be a good roof in every sense for fully 100 years.

Use Your Influence

Interest yourself in this vital matter. It directly concerns you. Get your husband to inquire into it. Get him to send for the free book—now—to-day. Or send for it in your own name. Do that, anyway. You will be interested in what the book tells you; and it is important that you, as well as himself, should know all about roofing, and about Roofing Right in particular. Send now for the book, please.

OSHAWA STEEL SHINGLES are made of 28 gauge steel, specially toughened and heavily galvanized to make them rust-proof. Thus they weigh about **SEVENTY-EIGHT**



pounds to the square. With the box about 88 pounds to the square.

When considering metal shingles always learn **THE WEIGHT OF METAL** per square offered and be sure that the weight is of the **METAL ONLY.**

Make the weight test yourself. First be sure the scales are accurate. Then unbox a square of Oshawa Shingles and weigh them. Note that the weight averages 78 pounds **WITHOUT THE BOX.**

Don't go by the box weight. Some boxes weigh fourteen pounds or more.

G. A. Pedlar

DONT stop when you have Oshawa-shingled your roofs. That is only the first step towards making a house modern, or a barn what a barn should be. Go on and plate your house inside and out with steel. Cover the surface of your barn with steel. In a word, "Pedlarize" every building on your farm. This way:

Make Your House Fireproof

Finish the interior of every room in your house with Pedlar Art Steel Ceilings and Side-Walls. These are made in more than two thousand beautiful designs, the patterns stamped accurately and deeply into the heavy and imperishable metal. They cost less than plaster in the first place; and they will be like new when a plaster ceiling or wall is cracked to the danger point—which doesn't take long as a rule. They are easily put in place. They can easily be painted and decorated.

Make Your House Sanitary

Then, if you surface the exterior of the house with Pedlar Steel Siding—it is made to simulate brick, rough stone, cut stone—these Ceilings and Side-Walls and an Oshawa-shingled roof gives you a residence that is more nearly fireproof than the "skyscrapers" of the great cities. Also, such a house will be much warmer in winter than if it were built of solid brick—and so it will save its cost in fuel-savings. It will be cooler in summer. It will be sanitary inside—you can wash the ceilings and walls clean with soap-and-water. It will be a handsome, substantial, and enduring proof of your judgment in choosing the modern building material—steel—Pedlar-made Steel.

Make Your Barns Safe

With Pedlar Steel Siding you can finish the outside of your barn most economically, and your cattle will thrive better in bitter weather than if they were housed in a solid concrete barn. This heavy-gauge seamless steel finish, keeps out the wind and keeps in the animal heat. It saves in lessened feed-bills enough to pay its cost over and over. It costs but little; it is simple to put on; and it will outlast the building's very timbers. Most important of all, it—with Oshawa Steel Shingles for the roof—makes barns practically proof against fire, entirely free from every kind of dampness, and proof against lightning.

Learn About Pedlarizing

At the same time you send for your free copy of Roofing Right Booklet No. 10, ask us for particulars about these other Pedlar specialties. We will send you samples of any of them; prices; illustrations; and samples of the Oshawa Steel Shingle as well—all just for the asking.

**GET SEVENTY-EIGHT POUNDS OF STEEL TO THE SQUARE
GET A TWENTY-FIVE YEAR GUARANTEE**



THE PEDLAR PEOPLE OF OSHAWA

HALIFAX 16 Prince St.	ST. JOHN, N.B. 42-46 Prince-William St.	QUEBEC 127 Rue...	MON-REAL 111-113...	OTTAWA 423 Sussex St.	TORONTO 11-113 Bay St.	LONDON 86 King St.	CHATHAM 200 King St. W.
PORT ARTHUR 45 Cumberland St.	WINNIPEG 76 Lombard St.	REGINA 111-113...	CALGARY 1112 First St. West	VANCOUVER 821 Powell St.	VICTORIA 434 Kingston St.		

