

PUBLISHED EVERY WEEK. \$1.50 PER YEAR.

THE FARMER'S ADVOCATE

AND HOME MAGAZINE

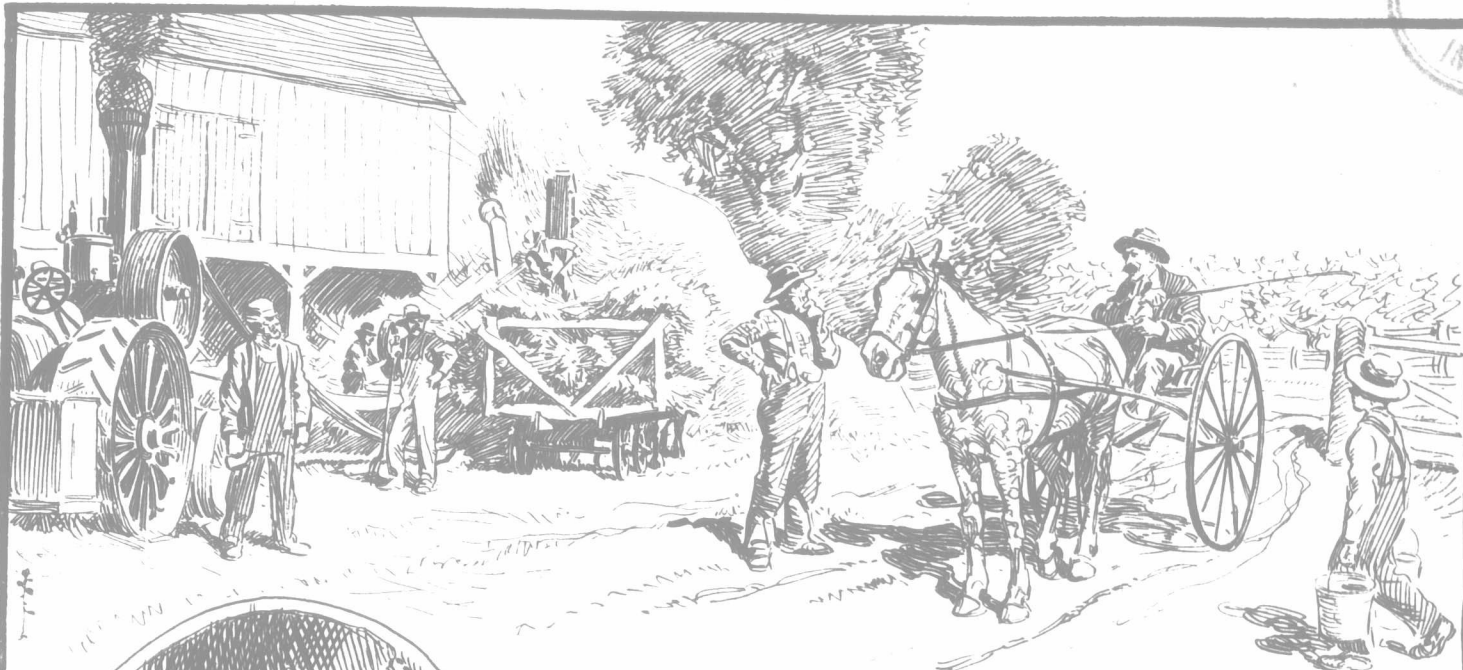
PERSEVERE
AND
SUCCEED
FOUNDED 1880

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

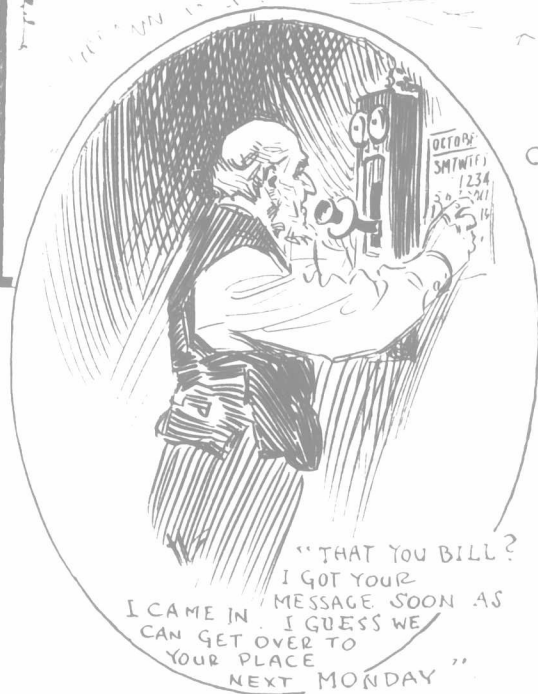
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VOL. XLVII.

LONDON, ONTARIO, OCTOBER 17, 1912.



A
Telephone
Saves
Time and
Makes
Money for
the
Farmer



GET YOUR THRESHING GANG BY PHONE INSTEAD OF WASTING YOUR TIME DRIVING ALL OVER THE COUNTY

"WELL, BILL, I'M SORRY, BUT WE CAN'T GET OVER TO YOUR PLACE TILL WEEK AFTER NEXT. WE'VE GOT THREE DAYS' WORK HERE YET, AND THEN WE'VE PROMISED TO THRESH FOR A COUPLE OF FELLOWS UP THE ROAD"

High-Grade Telephones and Prompt Shipments

are the two main reasons for our success. Our telephones are the most efficient telephones constructed for rural telephone systems. You can easily prove the truth of that statement by testing them on your own line in comparison with others. It will cost you nothing to make the test. Just accept our **Free Trial Offer.**

Our facilities for handling the telephone business for local and municipal systems are unexcelled. We carry complete stocks of construction materials, and can ship within 24 hours after order is received. Everything guaranteed.

WRITE FOR PRICES

Canadian Independent Telephone Co.

20 Duncan Street

LIMITED

TORONTO, CANADA

Why should I use Canada Cement?

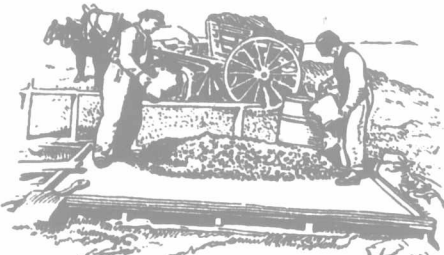


NO FARMER who has used Canada Cement asks that question, because his first trial answered it to his complete satisfaction. Yet it is only natural that a farmer who has never used concrete—perhaps yourself—should require convincing reasons before deciding to use it himself.

If we knew where you lived, and knew your name and the names of your neighbors, we could tell you of many men in your own locality who would be glad to tell why they are using Canada Cement. Since that is impossible, this advertisement will try to give you an answer to your question.

“What is Concrete?”

CONCRETE is an artificial stone. It is a mixture of cement, sand and stone, or of cement and gravel, with water. The proportions of the various materials vary according to the purpose for which the



THE mixing and placing of concrete is simple, and is easily learned. No elaborate tools are needed.

concrete is to be used. This mixture hardens into an artificial stone. This hardening process is rapid at first, and in a few days the mixture is as hard as rock. After that, time and weather, instead of making it crumble, actually make it stronger.

Since stone, sand and gravel may be found on nearly every farm, the only cash outlay is that required for cement. Cement forms only a small part of finished concrete, and this expense is relatively small.

Concrete may be mixed and placed at any season of the year (in extremely cold weather certain precautions must be observed) by your-



CONCRETE is the ideal material for barns and silos. Being fire, wind and weather proof, it protects the contents perfectly.

self and your regular help. This allows you to take advantage of dull seasons, when you would otherwise be idle. The mixing and placing is simple, and full directions are contained in the book which we will send you free.

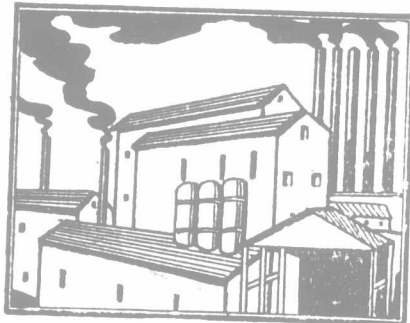
“What Can I Use Concrete For?”

CONCRETE can be used for all kinds of improvements. By having a small supply of cement on hand you will be able to turn many an otherwise idle afternoon to good account by putting a new step on the porch, or making a few fence posts,

or repairing an old foundation wall. It is a mistake to suppose that you have to be ready for a new barn or silo to be interested in concrete. Besides, it is just as well to become familiar with the use of concrete on small jobs, for then you will be better able to handle big jobs later on.

First cost is last cost when you build of concrete. Concrete improvements never need to be repaired. They are there to stay, and every dollar put into them adds several dollars to the cash value of your farm, and in many cases improvements of this everlasting material are actually cheaper in first cost than if they were built of wood. The cost of lumber is constantly increasing, and it will not be many years before its cost will be prohibitive.

YOU should use concrete, because by so doing you can make your farm more attractive, more convenient, more profitable and more valuable.



OUR mills are located all over Canada, so that no matter where you live you can get Canada Cement without paying high prices caused by long freight hauls.

“Why Should I Use Canada Cement?”

WE were the first cement company to investigate the farmer's needs, and to point out to the farmers of Canada how they could save money by using concrete. We conducted an exhaustive investigation into the subject, learned the difficulties they were likely to encounter, and how to overcome them, and published a book, “What the Farmer Can Do With Concrete,” containing all the information that the farmer could need.

We have made a special effort to give the farmers of Canada not only the best cement that can be

made, but also every possible assistance in the use of concrete. Our free Farmers' Information Bureau is at the service of every farmer in Canada. All questions concerning the use of concrete are answered at once, and the Bureau is always glad to receive suggestions from farmers who have discovered new uses for cement.

Last year we conducted a \$3,600 Cash Prize Contest, in which farmers in every Province participated. A second contest, in which three times as many prizes are offered, has been announced for this year.

You can easily see why a company that is devoting this much attention to the farmers' needs is in better position to give you—a farmer—satisfactory service. Canada Cement will always give you satisfactory results. Every bag and barrel must undergo the most rigid inspection before leaving the factory.



THIS sign hangs in front of nearly all our dealers' stores. Let it guide you to the place where the best cement is sold.

YOU should use “CANADA” Cement because its makers offer you not only the best cement made, but also careful, conscientious, personal assistance in making use of it.



THIS book of 160 pages, handsomely bound and illustrated with photographs, was the first, and is the best work describing the farmers' uses for concrete ever published. See free offer on this page.

IF you haven't received a copy of “What the Farmer Can Do With Concrete,” write for it at once. It will be sent absolutely free, without obligating you in any way. Use a post card or clip out the coupon. We will also send particulars of the 1912 Cash Prize Contest. Address:

CANADA CEMENT COMPANY, LTD.
550 Herald Building, Montreal

Please send me, free, your book: “What the Farmer Can Do With Concrete,” and full particulars of the 1912 Cash Prize Contest.

My name is.....

Address.....

Canada Cement Company LIMITED

Farmers' Information Bureau
550 Herald Bldg. MONTREAL, QUE.



WINDSOR DAIRY SALT

Is The Cheapest You Can Use

not alone, because it is the purest and best salt for salting butter. But because it will salt more butter, pound for pound, than any other salt you can use.

The big creameries will tell you this—and show you tests to prove it.

The Agricultural Colleges demonstrate this every day.

Every farmer and dairyman—who is getting good prices for butter—is using Windsor Dairy Salt.

It is pure—it makes beautiful butter—it works in quickly—and it is the cheapest in the end. Just try it yourself.

70D



SYNOPSIS OF DOMINION LAND REGULATIONS.

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

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

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

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

A homesteader who has exhausted his homestead right and cannot obtain a pre-emption may enter for a purchased homestead in certain districts. Price, \$3.00 per acre. Duties.—Must reside six months in each of three years, cultivate fifty acres and erect a house worth \$300.00.

W. W. CORY,

Deputy of the Minister of the Interior.

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

DE LAVAL CREAM SEPARATORS

USED EXCLUSIVELY BY

98% OF THE WORLD'S CREAMERIES

The only separator that is good enough for the creameryman is equally the best cream separator for the farmer to buy.

DE LAVAL DAIRY SUPPLY CO., Limited
Montreal Winnipeg

RAW FURS

Are you a trapper? Are you a dealer? Are you seeking a reliable firm to ship to? Many thousands of shippers say we give best returns, good reasons—we pay as we quote, give a square grade and send your money as quick as the return mail can bring it to you. We post you reliably.

No Commissions. No Express Charges.
Write at once for price list, tags, envelopes, invoices, etc.

BENJAMIN DORMAN, Inc.
RAW FURS, GINSENG, GOLDEN SEAL
147 West 24th Street, New York. (Mention this paper.)

References: Greenwich Bank, N. Y. East River National Bank, N. Y.

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

AGENTS A Big Seller

WIRE HEN'S NEST. 14 inches in diameter. Strong and durable. Made of No. 9 coppered wire. Burn the old straw, thus killing lice and vermin! Sanitary nests make hens lay better. Attach to any board or post. Sells like wild-fire. Big profits. Write for terms, samples to workers.
Thomas Wire Co. 2344 Home St., Dayton, O.



BUILD CONCRETE SILOS

Any size with the London Adjustable Silo Curbs. Send for Catalogue. We manufacture a complete line of Concrete Machinery. Tell us your requirements. **LONDON Concrete Machinery Co., Limited,** Dept. B, London, Ont. Largest manufacturers of Concrete Machinery in Canada. 1

This man uses a BT Manure Carrier instead of a wheelbarrow. He saves half the work and time of cleaning his barn, saves all the manure, prevents disease among his stock and increases his profits in a score of other ways.

There is no reason why you should not own a BT Manure Carrier. We have the figures to prove that it will save its cost with a twelve months' use. Other men are making that saving. Why not you? Read the facts.

Don't be a Slave to the Wheelbarrow
Clean Your Barn the Easy BT Way

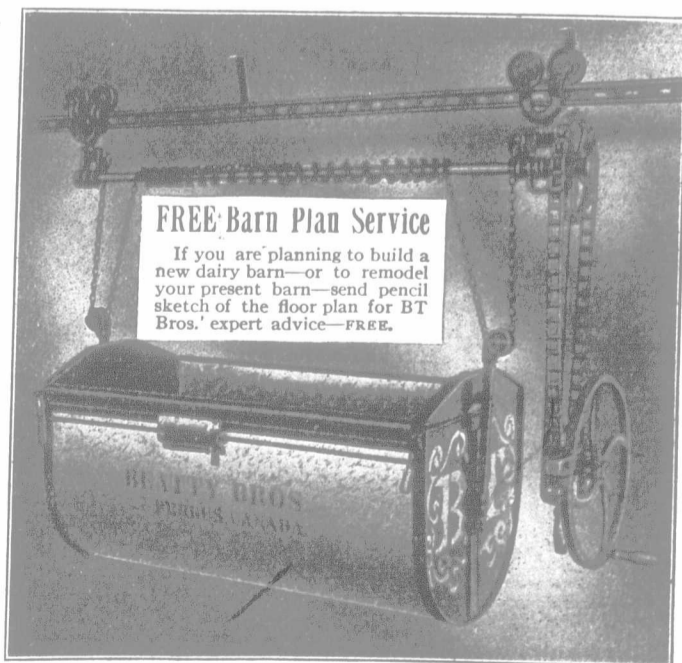
THE slow, hard, dirty, disagreeable work of cleaning the barn should now be a thing of the past. It is no more necessary to wheel the manure out than it is to waste the manure entirely. The BT Manure Carrier makes the work play—even for a boy. The big, 14-bushel tub lowers close to the floor. It is easily and quickly filled, with liquid as well as solid manure. It is easily raised—and an easy push runs the carrier out and away from the barn. Then it dumps its load directly into the spreader, wagon, shed, or on a pile—all without any heavy work on your part.

THE BT MANURE CARRIERS

You need one—if you want to have a MODERN dairy barn. You need one if you want to SAVE WORK AND TIME. You need one if you want to HELP PREVENT TUBERCULOSIS and OTHER diseases among your cows. And we can PROVE that YOU NEED ONE—IF YOU WANT TO INCREASE YOUR PROFITS.

Send for our new fine free book and read the facts.

Get the two BT Books Free. Cuts Barn Work in Two.



Read of the VALUE and SUPERIORITY of the BT MANURE CARRIER. Know why it is the choice of men who investigate thoroughly. Read about the famous BT Track, the Hangers, the Friction Brake, the Hoist, the Latch and Latch Trip and ALL the other BT advantages. It will pay you well to

MAIL COUPON NOW!

Get your BT Carrier now and put it up while the work is slack. Be ready for the early cold snap. Let the BT save your time so you can do other rush work. Our guarantee protects you. Write us to-day. Our book also tells about BT Feed Carriers, Milk Can Carriers and Feed Trucks. Please ask for Carrier Book.

If interested in Stalls, Stanchions, Bull Pens, Calf Pens, Cow Pens, etc., ask for our Stall Book, too. Either or both are free. Mail coupon now. Address:

Beatty Bros. Limited **BT Bros. Limited**
301 Hill Street 301 Hill Street
FERGUS, ONT. FERGUS, ONT.

Please send me the books I have checked.
(.....) Manure and Feed Carriers (including Feed Trucks).
(.....) Stalls and Stanchions (including Bull Pens and Calf Pens).

I have dairy cows. (How many)
Province..... R.F.D.
Town.....
Name.....

BARN PLAN SERVICE FREE
Send sketch of floor plan of proposed barn or old barn for our expert advice free.

ANOTHER 60 SPEED INVENTION



A five rim friction clutch for 4, 5, 6 and 8 H. P. 60 Speed Engines.

An improvement that means more actual working service from the engine than has heretofore been possible. The five pulley rims, each of a different diameter, are removable. You can change from one to another in less than five minutes. Thus, you always have the proper speed for each job. This is a new and exclusive Gilson feature.

GILSON 60 SPEED ENGINES

The *Gilson 60 SPEED Engine* with the five rim clutch, is a power house on wheels, ready for feed cutting, silo filling, feed grinding, wood sawing, etc.—doing every job at just the proper speed for efficiency and economy. It would take a big investment in extras to make any other engine do the work that the *Gilson 60 SPEED* will do.

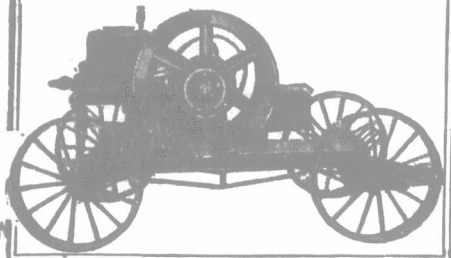
Friction Clutch—enables you to start the engine and then start or stop your machinery at will. No belt to shift.

GET GILSON FACTS and find out how a *Gilson 60 SPEED Engine* does the greatest variety of work, how it saves money in equipment, and gives 100% service at lowest cost.

The *Gilson* is one of the most substantially constructed and simplest-to-run engines built, made in 4, 5, 6 and 8 H. P., also 1 1/2 H. P. and 3 H. P. with 60 SPEED shaft and pump jack.

Write for catalog and prices.

GILSON MFG. CO., Ltd.
68 York St., Guelph, Ontario



Buy a Wagon You Can Depend On!

For convenience, strength and durability—get a T-A Handy Farm Wagon. Designed especially for farm work, will give everlasting service under the roughest usage to which a wagon can be put. And besides—it is easy on horses.

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

Carefully and strongly built, of the highest grade material, these T-A Wide-Tire Steel Wheels will carry 25 to 50 per cent. heavier loads without the least danger of breaking down or getting stuck.

We will be pleased to send you descriptive catalogue. Write for it.

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

HACKNEY AUTO - PLOW

"The Great One-Man Outfit."

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

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

PLEASE MENTION THIS PAPER.

You'll appreciate your **HEWSON'S Sweater** during the cold weather. It's just the thing for tobogganing or for any other out-door sport. Hewson's Sweaters are made from choicest wools. The styles are smart and snappy. And they are beautifully finished. You will be proud to wear one. Most good dealers carry a complete range. Ask to see them.

Hewson Pure Wool Textiles, Limited
Amherst, N.S.

Hewson's Sweaters

PURE WOOL HEWSON AMHERST SWEATERS

The Farmers' Power Plant

BOLINDERS SEMI - DIESEL CRUDE OIL ENGINE

This handy little tool will save you hundreds of dollars. Not alone in replacing labour but in upkeep and running cost as compared with Gasoline engines. A 12 H.-P. Gasoline Engine costs you 30 cents to operate per hour. Our Crude Oil Engine only costs 6 cents per hour. Our engines are designed and built to stand hard work. They will outlive three or four gasoline engines. There is absolutely no risk from fire or explosion as it uses non-inflammable crude oil.

THE CANADIAN BOVING CO., LIMITED
164 Bay Street TORONTO, ONTARIO

Write Quickly "MONARCHS" Make Light Work

Cut out the hard work with a "Monarch," best-made of all farm engines. Own one this winter. You can move it around easily. It will saw wood, grind chop, pulp roots, pump water—do scores of back-breaking chores. Write quickly for easy terms and full particulars. Made in 1 1/2 to 35 horse-power. By acting now you save winter work wonderfully.

Send a postal for our two-color circular and price list, giving interesting details.

CANADIAN ENGINES, LIMITED, DUNNVILLE, ONT.
Frost & Wood Co., Limited, Smith's Falls, Ont., selling agents from Peterboro East to Maritime Provinces.

BROWN'S

WRITE FOR CATALOGUE

WRITE FOR AGENCY

BROWNS NURSERIES
WELLAND COUNTY, ONT.

A Contented Cow is A Profitable Cow

ARE your cows contented? Are they profitable? If not, make them so by doing away with your old-time wooden stalls. They gather dirt, harbour disease germs, and prevent the free circulation of life-giving air and sunlight.

LOUDEN'S

Tubular Steel Stable Equipment is easily and quickly installed, and insures cleanliness and ventilation. Its use means comfort for your cows and profits for you.

GET INTERESTED. WRITE TO-DAY.
Our book, "Perfect Barn Equipment," and the service of our architectural department, are free.

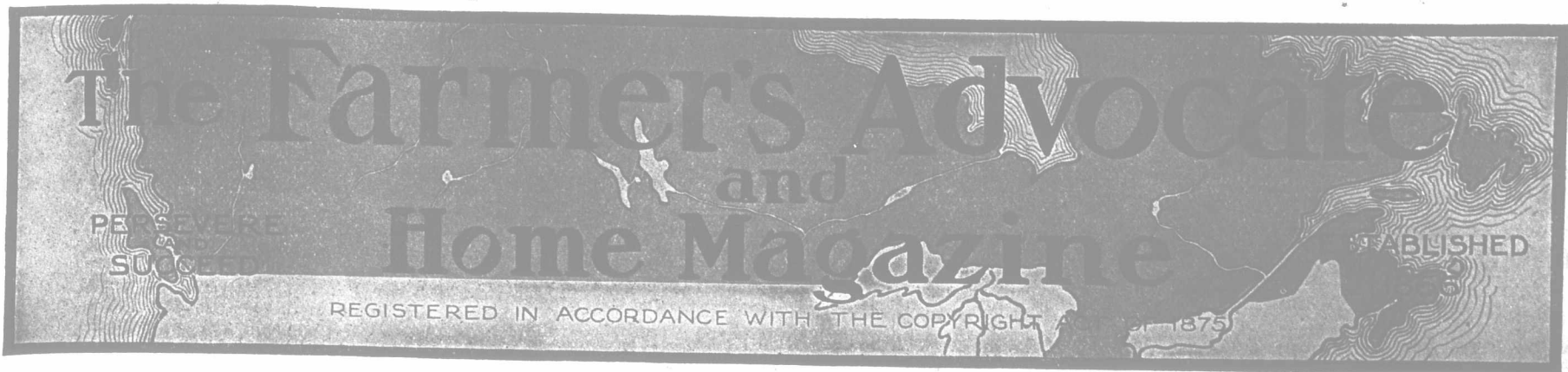
THE LOUDEN MACHINERY CO.
Dep 51 - GUELPH, Ont.

Burning embers can't set fire to the home covered with Certain-teed Roofing

Quality Certified—Durability Guaranteed

In large cities, where there is great danger of conflagrations, "fire zones" are being established in which wooden shingle roofs are not allowed. Your barn or home may be saved by using **Certain-teed Roofing**—it's practically fire-proof and smothers the flames from underneath. Investigate **Certain-teed Rubber Roofing**. It lasts longer, costs less and is easy to lay. It is made both in rolls and shingles—guaranteed for 15 years. Save money by getting prices from your local dealer—see that the **Certain-teed** label is on each roll or bundle—also write today for book, "How to Build for LESS Money"—Free.

GENERAL ROOFING MFG. COMPANY
4F 7 WINNIPEG, MANITOBA.



Vol. XLVII.

LONDON, ONTARIO, OCTOBER 17, 1912.

No. 1047

EDITORIAL.

Who wouldn't be a farm boy nutting in the October woods?

October sunshine has been doubly welcome after three months of rain.

Glutted markets and unprofitable returns to producers give fresh and wholesome stimulus to co-operation.

It is predicted, says an Ohio bulletin, that eggs will retail at five cents apiece in the United States before spring. If so there are liable to be many eggless breakfasts this winter.

Peaches may rot in the orchards of the fruit belts, but consumers a hundred miles away pay fifty cents to a dollar a basket all the same. Middlemen and transportation companies take their uniform toll and the grower receives what's left.

Tons of good apples are now rotting on the ground. Yet next winter there will be poor people in the cities hesitating whether to buy enough for a pie. The gulf between the farm producer in September and the city consumer in mid-winter seems a costly one to bridge.

Winter approaches and perhaps the new barn is not built. That is no reason why the old stable may not be made comfortable. A little tar paper and lumber applied to the walls of the present shell will make it as warm as and considerably drier than the ordinary stone or cement-balled basement.

Stock-judging classes for young men, conducted by the District representatives of the Provincial Department of Agriculture, are proving an excellent feature of many Ontario fall fairs. Besides providing an edifying and interesting form of entertainment for fair visitors, these contests are an excellent education for the young men who take part.

Notwithstanding all that has been said and written, many new silo owners are still afraid of having their corn frozen before filling time. While none of us like to see the leaves shrivelled and lost, experience indicates that a light frost on immature sappy corn is rather an advantage, getting rid of some of the surplus juice, and tending to make a sweeter quality of silage. Compare notes next winter and see.

Irish cattlemen have been fretting under the foot and mouth embargo, which requires their cattle to be landed at the foreign-animals wharf, and slaughtered within forty-eight hours after landing. At a representative meeting of protest held in Dublin last month, one speaker declared every practical man knew that the killing of cattle within forty-eight hours after arrival was tantamount to compelling men to sell their beasts for from £5 to £6 less than they ought to receive.

If a number of cattle are being put in the stables for winter feeding, the buyer should seriously consider having them dehorned. Cattle fed loose in box stalls do slightly better than tied cattle, and it is necessary to remove the horns to prevent trouble.

Where is the winter's manure to be stored? Manure has vastly more value than farmers give it, and should be cared for as its real worth merits. A covered shed is preferable, but where this is not available and the manure is not applied in the green state, at least heap it in a neat pile away from the eaves' drainage.

Six hundred and twenty-six dollars as the four-years average annual return from a flock of 60 or 70 ewes, constituting one quarter of the revenue from a hundred-and-fifty-acre Michigan farm, is the feature of the leading article in a recent number of the Breeder's Gazette. What pays better, even in Canada, with wool prices lower as they are?

To city sportsmen the "no shooting" signs displayed by an increasing number of farm woodlots are naturally a not very welcome sight, but for our part we like to see them. In many instances they denote laudable regard for the interesting wild life of the woods, and a desire to preserve it. If the game is to be shot at all let the farmer have it himself. City men have no more right to it than to the farmer's fruit and crops. It is bad enough for the cities to levy toll upon our industry without poaching our game.

Provincial authorities have been working their wits overtime to expend judiciously the half million dollars voted to agriculture by the Dominion Government at its last session. Overlapping of new and old services has not been wholly avoided. Example: the organization of livestock associations in New Ontario to serve a purpose which belongs to the purview of the already-existing system of agricultural societies. Of the outlay generally, it is to be feared that the superfluity of new-found funds will encourage prodigality and inconsiderate waste. We believe the best results in promoting agriculture will be obtained by considering specific needs as they arise, and then going after the money needed to supply them.

For all the talk about hydro-electric service for farm use, it is exceedingly difficult to draw from the officials of the Ontario Hydro-Electric Commission any definite, comprehensive, reliable figures indicating the relative economy of hydro-electric energy as compared with the gasoline engine. So far as "The Farmer's Advocate" can learn, it resolves itself into a question of how many hours per day a farmer can contrive to utilize the amount of current he contracts for, whether it will pay to utilize electricity for heavy work at the varying rates hitherto quoted. There is, however, one great advantage i. e., adaptability. Electricity can be used for many household and other purposes, each making but a slight draft on the current but saving much perspiration, elbow grease, inconvenience and discomfort. Here, we expect, is where electricity will win out. Durability of motors and reduction of fire risk are other noteworthy points.

Field Crop Competition in Canada.

Right living and good farming ensure their own reward. Theoretically, men ought not to need the stimuli of competition and special prizes, but in practice they do, or at all events such incentives are a spur to material achievement. In the old days of the Provincial Agricultural and Arts Association of Ontario the plan of awarding medals for the best-equipped and conducted farms had for several years a beneficial vogue which still lingers in tradition and to some extent in that worthy pride of homestead and well-ordered farming to be found more or less in most sections. Last year we had the old idea inaugurated afresh in a most public-spirited and admirable way in a Peel Co., Ont., home-flower-garden competition.

In relation to the cultural side of farm practice, field-crop competitions have clearly established themselves in public favor throughout Canada, largely by means of the liberal aid of the Federal and Provincial Departments of Agriculture and the energetic co-operation of their officers, supplemented by the efforts of local organizations and the enterprising generosity of individual citizens. These competitions have been a growth—an evolution. One might trace their genesis back to the Macdonald seed-grain competition for boys and girls during the three years, 1900, 1901 and 1902, initiated at the suggestion of Dr. Jas. W. Robertson, now chairman of the Royal Commission on Industrial Training and Technical Education. In that contest each competitor, of whom 1,500 started and 450 completed the work, grew quarter-acre plots of wheat or oats, selecting the seed by hand for the next sowing. With a view to increasing interest in the production and use of better seed, annual seed fairs began to be organized by the Dominion Seed Branch, in co-operation with Provincial and local agricultural societies, the Eastern Provinces having the honor to lead the way at Charlottetown, P. E. I.; Truro, N. S.; Woodstock, N. B.; Sussex, N. B., and Sherbrooke, P. Q. By 1904 twelve of these fairs were held. Out of these developed Provincial seed exhibitions, and as a natural corollary field-crop competitions made their appearance in Western Canada, where grain-growing is supreme. These appear to have been the outcome of arrangements made by Geo. H. Clark, Seed Commissioner at Ottawa, with Hon. W. R. Motherwell, Minister of Agriculture for Saskatchewan, and the officers of the Alberta Provincial Department of Agriculture during a seed-selection-special railway-train campaign inaugurated in the winter of 1905-6 to mitigate in some degree the evils arising from a disastrous outbreak of smut in the Prairie Provinces. Competitions in standing fields of grain of not less than ten acres were conducted in 1906 by a few agricultural societies in Manitoba, 31 in Saskatchewan and 7 in Alberta, 298 fields in all being inspected by the judges, supplied under the direction and at the expense of the Seed Branch, the Provincial Departments assisting in providing the prize-money. These competitions have extended to all the Provinces, and embrace other crops, such as vegetables. Forty agricultural societies conducted such competitions in 1906 and 110 in 1910. Indicative of the growth of these competitions: Alberta had in 1906 a total of 55 fields scored and in 1911 no fewer than 289.

THE FARMER'S ADVOCATE AND HOME MAGAZINE

THE LEADING AGRICULTURAL JOURNAL
IN THE DOMINION.

PUBLISHED WEEKLY BY
THE WILLIAM WELD COMPANY (LIMITED).

JOHN WELD, MANAGER.

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

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

In no Province of Canada has the work been promoted and expanded with greater vigor and progress than in Ontario, where it falls under the direction of the Superintendent of Agricultural and Horticultural Societies, J. Lockie Wilson, who early discerned the possibilities for good that lay in the system and started competitions in 1907. As an encouragement judges were sent out by the Provincial Department of Agriculture and the five prize-winners in the local competitions are eligible to compete at the Canadian National and Central Canada Exhibitions and at the Provincial Winter Fairs of Guelph and Ottawa. The grain and sheaves winning prizes at these exhibitions are retained by the Department and sent out to the county agricultural representatives, who distribute the grain among farmers in their localities on condition that they supervise its growing and have an equal quantity returned to them in the autumn for further distribution. The Department supplies stencilled sacks for the exhibition grain and what does not win a prize is sold and the money received returned to the exhibitors. As readers of The Farmer's Advocate will recall from our report of the late National Exhibition in Toronto, prize collections from these competitions made a striking display in pyramidal form under the great dome of the new Government Building. This year in Ontario 3,000 farmers entered the competitions, 30,000 acres of land being in use for that purpose. The average size of the fields judged was smaller than in the earlier years, when perhaps the whole of a fifteen-acre or twenty-acre field would be entered. The number of agricultural societies engaging in the competition of 1912 was 154. Vast quantities of high-class seed grain and potatoes thus become available for use, and a great deal has gone to Great Britain and the United States, particularly the latter. The liberality with which the Ontario Government deems it wise to promote this plan of agricultural advancement is shown by the

fact that this year \$18,000 was placed in the estimates for standing field-crop competitions, \$10,000 of which, however, was a supplemental allowance from the Dominion Government.

* * *

Under the old arrangement, when the Provinces assumed control of the competitions, the assistance through the Dominion Department of Agriculture was withdrawn. Last season the Minister of Agriculture (Hon. Martin Burrell) authorized a change of policy under which the grant through the Seed Branch to each Provincial Department is made an amount equal to two-thirds of the money paid out in prizes for field-crop competitions, seed fairs and Provincial seed exhibitions within certain limits. For competitions up to \$50 will be paid for each kind of crop in which a competition is held by any agricultural society, the total amount not to exceed \$150. Approximately \$30,000 is available to the Provinces from the Federal Seed Branch for these purposes.

* * *

Of all considerations, the prize won by the competitor, though liberal, is the least important. The objects sought in holding these competitions have been to encourage the production of high-class seed grain, to promote its distribution and to obtain and impart knowledge of the best cultural methods. The most competent men available, systematically trained-in-advance, are sent out as judges, and the awards are made by a score card, in which freedom from weeds and other good points are enumerated. Men learn that to grow a prize-winning crop it is desirable to begin preparations at least a year in advance with the land and the seed. The grower learns to observe critically his own and other fields and put theory into actual practice. The judges accumulate a fund of valuable data in relation to weed pests, smut, rust, and methods of cultivation. In the West, for example, one of the first things learned was the discouraging fact that fully ninety per cent. of the prize-winning fields were first crops from the land, showing the swift deterioration taking place in the fatuous grain-growing system so commonly practiced, which sooner or later must be abandoned for more rational methods. As time goes on it is probable that the field-crop competitions will be modified in form so as to take in a considerable variety of crops and apply to other processes on the farm.

Independent Opinion re Education

In another column Prof. S. B. McCready, Director of Elementary Agricultural Education for the province of Ontario, essays a reply to the editorial "Why?" appearing in "The Farmer's Advocate" of September 26th. He takes the ground that we are doing pretty well, but might do better, and appeals for united interest and support.

It is nothing to the purpose to pat ourselves on the back, and boast of having the best schools, the best teachers and the best educational department in the world. We have already been doing that too long, and the worst feature of the present educational situation in Ontario is the dry rot of self-satisfaction, which has impregnated the people of the province with the idea that they have the best school system in the world. It is just that sort of contentment that quickly relegates an individual, a community or a system to the back-number class, and that is just where we are getting. Let us take a little outside evidence.

At the Ontario Corn Growers' Convention in Tilbury last February, this subject was discussed by an old Ontario boy, Prof. A. E. Chamberlain, now of Minnesota, who began life as an Ontario school teacher over thirty years ago, and has been interested in educational institutions in several of the Northwestern States. According to reports, Prof. Chamberlain expressed the opinion that our rural schools had not kept pace with those in other parts of the world, and that we had made little if any improvement along this line in the last twenty years. Following this address, J. O. Duke, a wide-awake and substan-

tial farmer of Essex County, contributed a pointed letter to "The Farmer's Advocate" so thoroughly in line with our views that we quote a part of it in complete answer to Prof. McCready's letter.

"Now, we have been patting ourselves on the back and assuring ourselves, and even making the assertion to others, who by the way, pay little attention to our boasting, that we have the best school system in the whole world. Can it be that we are mistaken in what we think we have, and that our rural schools, instead of being the best, as we are boasting they are, are really not very good—are really among the poorest? When I look closely, I find that my own children, thirteen and fourteen years old, have already left the farm in order to secure even a fairly good education. I find that our old schoolhouse, part of which was built over sixty years ago, is just as overcrowded and unsanitary as ever. I find that, while the children who have attended the old school are naturally as bright-looking as any children anywhere, they have great difficulty in passing the Entrance examinations. In fact, many of them never succeed in passing at all.

"And yet so much of the time in this common rural school is taken up in preparing pupils for to prepare him for his life work, if he is to be a High School, and none at all given the child farmer, that, maybe, after all, our school system is to blame for lack of rural population, though really it hurt us to be told so in as many words."

Education in Ontario.

Editor "The Farmer's Advocate":

As a reply to the editorial dealing with Ontario schools under the heading "Why?" in your issue of September 26th, I beg leave to submit the following statement. I do so with the object of securing for the schools of Ontario the interest and faith of the people of the province. I believe that we can best make for the advancement that so many people desire to see by encouragement, and the development of an optimistic outlook.

It should not be forgotten by those who criticize schools, teachers, courses of study, methods of teaching, and Departments of Education, that throughout the world at large there is great unrest at the present time in the field of education, as evidenced in expressed dissatisfaction with courses of study, in the shortage of teachers, in the need for more financial support, and in the appointment of commissions to investigate conditions and find remedies.

In this unrest Ontario shares, but it can be honestly claimed that we are at least no worse off than most other places. And nowhere are the educational authorities striving harder to meet the difficulties of the situation. Progress is being made and will continue to be made.

NOTHING TO BE ASHAMED OF.

- Permit me to offer my beliefs in the matter:
1. I believe that there are no better schools, taken as a whole, in America than those of Ontario.
 2. I believe that nowhere in America is there a better body of teachers than those to be found in the schools of Ontario.
 3. I believe that there are no schools in America more carefully supervised and inspected than those in Ontario.
 4. I believe that there are no schools in America receiving better support from the people at large and from the government, than those in Ontario.
 5. I believe that there are no schools in America, taken as a whole, making for more progress in the new demands that are being placed upon schools everywhere.
 6. I believe that, with the help of everybody, we can make our schools still better.

HOW I KNOW WHEREOF I SPEAK.

In the face of the criticisms that are often made, this may look like stupid optimism. Permit me further to offer some support for my beliefs:

1. I have been a school master in Ontario for nearly twenty-five years, and have taught in all grades of schools.
2. For the past seven and a half years my duties have been to promote the teaching of agriculture in the schools through the training of teachers at the Ontario Agricultural College, and to help the work forward in all other possible ways.
3. In connection with my work I have visited a large number of schools throughout the province with inspectors, have attended several Teachers' Conventions every year, have taken part in the conventions of County Trustee Associations, Corn Growers' Associations and other organizations promoting agriculture.
4. I have seen something of other schools outside of Ontario through travelling.
5. I have come into personal contact with a great many educationists from the United States,

Great Britain, New Zealand and Australia, who have visited our College at Guelph, and from them learned at first hand regarding the work, the problems and the status of the schools in other countries.

6. I have made it my business to become informed regarding the schools, particularly rural schools, in all parts of the English-speaking world, through correspondence with teachers and educational authorities, and by the exchange of reports, etc.

EVERYBODY'S HELP NEEDED IN ORDER TO MAKE PROGRESS.

For further progress we must use the means that are at our hand; there is little gain to be made from quarreling with our tools! And this should not be forgotten. We must expect to go forward slowly in a cause that can advance only in proportion as the general interest of the people at large is aroused to make demand for progress.

Let everybody help!

S. B. McCREADY,
Director of Elementary Agricultural Education.

When They Learn.

People will stand for restrictions on movements of commerce and labor until the effects of these become acute. Then the demand for relief grows loud and insistent. Instances: Temporary reduction of duty on cement importations to the West; relaxation of immigration regulations to secure harvest help for the Prairie Provinces, and the growing American demand for lower duties on foodstuffs. Immense aggregate burdens are patiently borne, a little here and a little there, so long as the load does not ride too heavily on any one spot. Until then, people merely complain about the difficulty of making ends meet, without knowing why it is so. The realization of some one big drain or tax opens their eyes and teaches a lesson in first principles.

HORSES.

Autumn is usually a good time to buy horses, but a poor time to sell.

Considering the comfort of the horse, and the welfare of his feet and legs, there is no better flooring for the box stall than hard clay.

Change the colts from grass to dry feed gradually. Give them a little hay and grain when brought in for the night, and allow them on grass during the day.

Few horsemen can afford to do without bran in their winter feeding. Its loosening effect upon the bowels of horses makes it very valuable when they are on dry feed, and besides it has a high protein content.

When harvesting the turnips, store a few in a convenient place for the horses. There is no better system regulator for them, and they eat them with much relish when once accustomed to them.

Take care of the colts' feet. Keep their toes short. The best way to do this is by exercise, but sometimes they grow out even when considerable of this is given. Under such conditions it is necessary to shorten them and level up the foot.

In feeding the horse or colt which has been on pasture or dry feed, care is necessary to keep up his appetite. Feed lightly on hay and keep his manger well cleaned out. Do not feed too much. It is better to keep a keen edge on his appetite than to have to coax him to eat.

Keep the poultry out of the horse stable. Hens and hen roosts in the horse stables mean lousy horses. See that the pullets in search of shelter from the cold are placed in the poultry-house, for horses and hens do not go well in the same building.

No horse was ever intended for close confinement. It is well to remember this at stabling time, and arrange to give them as much exercise as possible. Work is the most profitable, but where there is not enough of this for all the horses, the paddocks should be utilized daily.

This is the stallion's off season, and in many cases he is "off" in the strongest sense of the term. Three months in the year is not enough to care for him. He needs exercise during the winter as much as during the breeding season, if his usefulness is not to become impaired. Judicious feeding is also just as necessary as at any time of the year.

The place for the horse-blanket at this season of the year, if the horse has been driven and is warm, and is compelled to stand for some time in a more or less exposed position, is not in a neat fold under the cushion, but spread out to its full size and securely fastened so as to best cover the horse. This is the way to prevent a chill and other complications, and prevention is ever better than cure.

When buying a horse, take note of the general health and condition of the animal, and how it has stood the work given during the examination. If severe distress is noticed, coupled with an apparent high state of healthy conditions, look out for evidence of drugging, especially with strong alteratives, such as arsenic, very commonly used by unscrupulous dealers to produce an artificial appearance of good condition. After severe exercise, the evidence of arsenic will appear in a vivid red, and sometimes a blue, line along the gums, and also at times by severe diarrhoea and abnormal thirst. The use of digitalis, in order to hide the incipient symptoms of broken wind, will be detected both before and after exertion by an intermittent pulse. The use of cocaine, opium or morphine can be detected during the examination by the abnormal varying of the size of the pupil of the eye, and also occasionally by the breath after galloping.—Horse World.

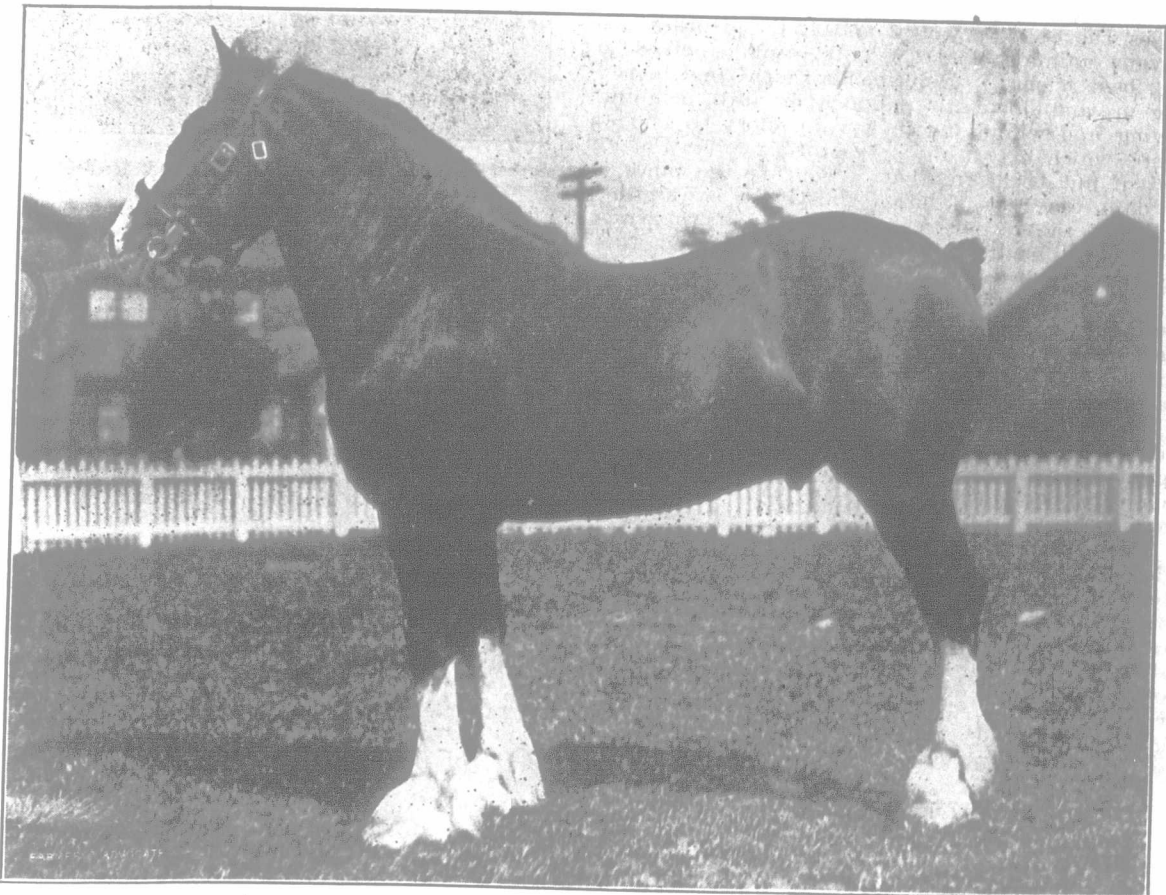
Fall Care of the Work Horse.

Next to spring seeding fall is perhaps the busiest season for the work horses on the average farm. There is after the harvest cultivation, deep fall plowing, silos to fill, roots to harvest, often necessitating a long haul over soft ground, other teaming to do and as time goes on and winter approaches, chilly winds, cold rains, mud and slush, add to the troubles. It is not always the easiest matter to keep the horse in good heart, his coat sleek and prevent his losing flesh at this time, when after a steady and heavy summer's work, all his energies are required for one last rush to finish before "King Frost" shuts off further work on the land for the year. A little extra effort, and a little closer care are necessary on the part of the teamster.

It is never good policy to allow the horse to get run down or thin in the fall, as it means extra feed during the winter to bring him up to his usual good fit. Consequently it would be much better to add an extra quart to his grain ration during this short but trying period just before winter, and by a little extra cleaning and at-

tention counteract as much as possible the unfavorable conditions, which combine to deplete the animal in flesh and spirits. At this season the horse's blood is thickening up in preparation for the cold winter to come. His coat is also becoming that thick natural blanket intended to protect him in all kinds of fierce gales, and low temperatures. Because of this he sweats easily, and when at work in the field—the days are often quite warm at this season—he perspires copiously and his hair being very thick and often quite long retains the moisture, and he goes to the stable quite wet. He must be kept out of drafts or chills, colds and worse complications may result. It is a common sight when going to the stable after the evening meal to find the work horses still wet, and at times they have not completely dried off by the next morning, at time to prepare for the next day's work. This is hard to remedy, and often it is impossible to get the horse dried off at night, but extra cleaning will add materially to his comfort. Even if the horse's coat is wet in spots, a thorough currying and brushing should be given every night after the day's work. This at least straightens out the hair, relieves a great amount of the itchiness and irritation to the skin, due to dirt and perspiration adhering thereto in a gummy state, and leaves the horse in a much better condition to enjoy his evening meal and his night's rest. With his hair matted together, as is often the case, and the pores in his skin clogged with dirt exudation, the horse cannot be comfortable, and his condition at this or any other season depends largely upon his comfort. In the morning before going to work repeat the cleaning and do it thoroughly. Time spent in this manner is time well spent, for less difficulty is experienced in keeping the horse in condition, and he is in better heart to tackle his day's task. If the stable is cold or drafty, a light blanket at night might be an advantage. At any rate it would aid in keeping the hair short and the coat bright and glossy, and would in this way be a factor in the prevention of excessive perspiration. This would save much work in cleaning, also a short coat would mean less dust and easier cleaning.

These remarks apply more particularly to the body of the horse. The legs are perhaps the most neglected part of the horse on many farms in the fall. Autumn rains mean mud, and lowering temperatures mean slush and snow, and altogether mean clods frozen on the horses' fetlocks, dusty legs which when not well cared for result in mud fever, or scratches or some form of these, any of which is hard to treat under prevailing conditions of weather, and work to be accomplished. Heat and cold operating on the skin, alternately, wet, friction, pressure and dirt are commonly given as contact or local causes of these diseases, and all these operate with all their force upon the farm work-horse in the late days of autumn. When the mud clings to the horse's legs, the first impulse of the driver usually is to wash the mud off with warm water. Washing is not good practice unless the legs are rubbed



Macaroon (15936).
Clydesdale stallion; bay; foaled 1908. Second in class at Toronto; first and champion at London, 1912. Imported and owned by T. H. Hassard, Markham, Ont.

thoroughly dry immediately after each is washed with cloths or wisps of straw and bandaged. This is impracticable with farm horses under most conditions, so it is better to avoid washing altogether. The accumulations of mud and snow do not as a usual thing reach the skin, generally clinging to the ends of the hair. These clods will soon dry and may be brushed away which is the best treatment, but they should not be left on longer than the time required to dry them. Dry cleaning of horses' legs is always better than washing during the fall work. Clipping the horses' legs in the cold weather of late autumn should not be practiced, as it is a fertile cause of skin diseases.

The horse must be kept in a dry, warm, comfortable stable, be well fed, that is fed in proportion to the demands made upon his system by extra work and changing weather conditions; and as far as possible do not overheat him, or yet allow him to become chilled, and keep him cleaned regularly, fed and watered at the same time daily, and give him a comfortably bedded stall, and a full manger at the end of each day's labor, for which he will amply repay you day after day.

Weaning the Foal.

As the autumn grows into early winter, the many colts which have not already been weaned, will be separated from their dams, and as this is a critical time in the colt's life, it is necessary to put forth a little extra effort in his behalf that his growth is not injured by the more or less adverse conditions which of necessity are associated with this separation. Where the mare must do her share of the fall work it is better that the colt be weaned earlier, but many there are who do not take the trouble to stable the colt by himself until after the fall rush is partially if not quite over. By this time, especially if the mare has been worked hard during the season, her milk-flow is getting quite scanty, and under most conditions the colt, provided he is well-fed on grain and good roughage, would do just as well as far as food is concerned if he were separated from the dam. The important question is, has the colt been taught to eat grain and other feed? It is often the case that the colt has run with his dam on grass, has had the opportunity of supplementing his milk ration by foraging and has received no special attention as to feeding. Under such circumstances he can scarcely be expected to take hold and eat oats the first time the opportunity is given him. Such a colt should not be weaned until he has learned to eat, and the quickest way to teach him to do this is to let him eat with his mother, provided she is not ugly with him, which is sometimes but not often the case, or to provide for him a small box from which he exclusively may eat at leisure. If he eats well before being weaned, he will receive little setback from the standpoint of nutriment by the loss of his mother's milk.

The hardest thing to overcome is the actual loss of the companionship of the mother, which causes the colt to worry and fret. Horses are nervous animals, and the colt being deprived of his "best friend," often spends much time in running up and down his paddock or stall neighing, pawing and whinnying in a vain effort to find an escape which may lead at least to company of his kind, if not to his mother. To take the place of his dam the best possible substitute is another colt. If the owner has two colts of the same age little difficulty from fretting is likely as they can be turned together and the presence of another colt seems to drown their trouble to a great extent. If a colt of his own age is not available, use a yearling or two-year-old, but arrange the feeding so that the weanling gets his share of the feed given.

For best results it is necessary to keep the foal which is being weaned out of sight and hearing of his dam, as every time they see or hear each other only serves to prolong the period of fretting by reviving their memories.

The main point in the weaning, all things considered, is feeding the colt. On no account stint the feed. Give all he will eat up clean, but do not keep the manger full of stale hay or stale oats. Just feed that amount which is readily eaten before time for the next feed. There is nothing better than crushed oats with a little bran added and some authorities advocate a little boiled linseed. Start the colt on a small quantity of grain and increase it as his appetite warrants and as colder weather approaches. A little clean, sweet milk can often be used to advantage at weaning time. It is well to commence with whole milk. Gradually substitute sweet skim milk until it entirely takes the place of the whole milk, which in too large quantity is not in the best interests of the colt's later usefulness. Select the best of everything in the way of stock feed for the colt; keep him clean, dry, reasonably warm and thriving as well as possi-

ble. The colt is the horse in the making and his value when mature depends largely upon his feeding during his first winter.

LIVE STOCK.

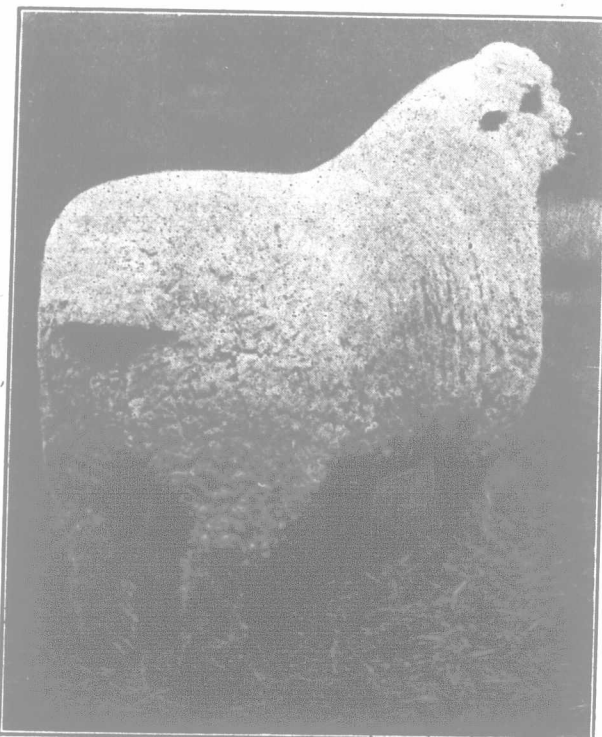
A few feeding lambs are generally a good investment. They require little space, are easily fattened, provided they are the right type, and bring comparatively quick returns.

Fertility of the soil never wanes where livestock farming is practiced, provided a judicious use is made of the manure and of crop rotations.

Early spring litters are desirable, but unless a warm place is available for the sow at farrowing, it would be advisable to defer breeding her until such time as warm weather would be assured at the time the litter arrives.

Stock feeding offers ample opportunity for the exercising of business ability. It often happens that feeds on hand may be sold at good profit, their place in the rotation being taken by other food which may be purchased at a relatively lower price. Dollars may be saved in the fattening of the stock in this way alone.

Have you had good success from the rape pasture this fall? Perhaps its need has not been felt to such an extent as in seasons of drier weather and shorter grass, but next year may be dry again, and in any season wet or dry rape is a good pasture. Shaw estimates that one average acre of rape will produce from 200 to 250 pounds of mutton.



Two-year-old Oxford Ram.

First prize and champion at Toronto and London, 1912, and first at Chicago International, 1911. Owned and exhibited by Peter Arkell & Sons, Teeswater, Ont.

When the feeders are first put in the stalls do not make the mistake of crowding too much feed to them. They have not been accustomed to a large concentrate ration, and they are not capable of making good use of it. They must be fed up to a full ration gradually or they will go "off their feed," and fail instead of gain in flesh, at a loss to the feeder. It is also advisable to commence with some of the lighter grains, and gradually increase the degree of concentration as fattening proceeds.

The time for stabling the stock is near at hand. What is the condition of the stable? A wet day can often be very profitably employed in cleaning up in preparation for the winter. A good sweeping including ceiling, walls and floor, gets rid of a lot of dust, dirt and unsightly cobwebs, and an application of whitewash will brighten things up, and put the stable in a more sanitary condition to shelter the stock for the winter.

The degree of finish which it is possible to get on an animal in a certain length of time, depends largely upon the condition of the animal at the time feeding commences. A steer very low in

flesh must be fed over a longer period than one in fair or good condition in the beginning, and is not so likely to reach the highest finished condition. The degree of finish is what determines to a large extent the price received in the spring. When buying feeders it is safe to pay a considerable margin more for the cattle in good condition than for those very thin, as a good deal of time is lost with the latter class in adjusting their digestive systems to heavier feeding, and they are not nearly so likely to reach the "top notch" in their finished state.

Farm Curing of Wiltshire Sides.

There is no meat just quite as good as home-cured meat. This is especially true of bacon, and the farmer is usually in a very good position to cure his own and thus get it at first cost. Loudon M. Douglas gives a method of bacon-curing on the farm in the current report of The Transactions of the Highland and Agricultural Society of Scotland. The curing pickle recommended is 14 lbs. of salt, 1½ lbs. of saltpetre, 1½ lbs. of dry antiseptic (boron), 1½ lbs. of cane sugar and 32 lbs. or 3 1-5 gallons of water. The total bulk should be five gallons and it should all be mixed together, boiled and skimmed until clear. The liquid when cool should give a test of about 95 degrees F. on the salinometer and if it is shown to be weaker than this figure it should be brought up by the addition of salt. The pickle should be kept in a clean barrel or other receptacle in the curing-room, and should be drawn into the pickle-pump when wanted.

To cure the meat it is necessary first of all to fill the pocket-hole in the shoulder with a small muslin bag containing salt and about 5 per cent. of saltpetre and dry antiseptic added. The sides should then be pumped all over the fleshy parts with the pickle, the needle of the pump being well inserted and the pressure maintained at about forty pounds per square inch. As soon as this is complete the sides should be sprinkled all over with an equal mixture of ground saltpetre and dry antiseptic and should then be laid on the floor of the curing-house. When in this position the belly part should be raised by means of an oak stave so as to form a saucer with the ribs and the side should then be sprinkled over with a fairly heavy layer of fine salt. One side is treated the same as the other, the first one being laid in a bed of salt on the floor, the others being laid one by one with the oak stave under the belly part on the top of one another until they reach the height of about six sides, or, where room is not available, a greater number may be stacked in this way. Usually on the farm, however, it is not necessary to stack the sides very high. At the end of fourteen days the bacon will be mild-cured, but for ordinary farm meat will be too mild and it will be necessary therefore to sprinkle a little more salt on the sides and allow them to remain in the cure for fourteen days longer should it be intended that the bacon should be kept for a long period. The bacon will be somewhat salty, but will be proof against rust and will keep in that condition for many months. After the bacon is cured it is taken out of the cellar, and if there is any salt remaining it is knocked free from the sides. The bacon is then hung up to drain or it may be turned in the cellar rind upwards so as to get rid of the excess of pickle. This will occupy three or four days, after which the sides may be taken out of the cellar and hung in a cool, dry loft so as to dry. It is a mistake to hang them in the kitchen, as the varying temperatures cause putrefaction and rust. If it is intended to have smoked bacon, this can easily be prepared by smouldering some oak sawdust in a confined space in which the bacon is hung. A large barrel is often used successfully for this purpose, but a small smoke-house can be easily constructed of brick, three or four feet square and almost twelve feet high. In this the bacon can be hung pretty high up, and so it is smoked with cool smoke which gives it by far the best flavor.

In the curing of hams the process is pretty much the same as in the curing of bacon. The ham is trimmed so as to make a shapely article, and this is done previous to the cure as also afterwards. The hams are not generally pumped, but are purged by being thrown into a pickle, and allowed to remain there overnight. Next day they are taken out and the blood is squeezed from the blood-veins. The needle of the pump is then inserted along the blood-vein in each ham, and one stroke only is given so as to ensure that some clean pickle has reached the dangerous parts, such as the knuckle-joint. The aperture formed is closed with the finger, and the hams are laid on the floor of the curing-house, and are covered over with a mixture of saltpetre and dry antiseptic, then salt in the same way as the bacon. The shank of the ham, however, should always be pointing downwards during the process of cure. It is a very good rule to follow in the

curing of hams, that for a mild-cured article a day should be allowed after the first three days for each pound in weight, and for a ham to be kept any length of time, two days should be allowed per pound after the first three days.

THE FARM

What an Amateur Farmer Saw on a Trip. — II.

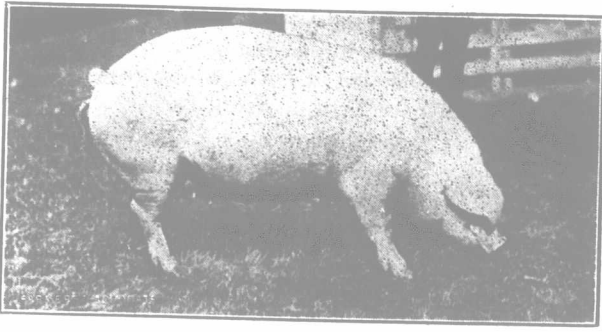
In Dublin, as afterwards throughout Ireland, we found donkeys, little patient beggars, small out of all proportion to the carts and loads they drew, much more commonly used than we had expected, notwithstanding all we had heard of Irish donkeys. Upon the streets of some of the smaller places they were more numerous than horses. At Drogheda, on the Boyne, some three miles from where King William crossed the little stream and made history and romance, a young farmer of the neighborhood told me that donkeys commonly sold at from one pound ten to three pounds. One of his neighbors had recently sold one to an Englishman for seven pounds, but it was an extra-fast and good animal and was, moreover, well sold. The same informant told me that wages paid an adult farm hand in that part of Ireland were about five shillings a week with board, or twelve shillings without. This was confirmed by another farmer of Wexford county. The Wexford farmer, living near Ferns, told me that a good farm horse there would sell for about thirty-five pounds, and a good horse of the hunter type (and the Irish hunter is a type rather than a breed) for eighty to one hundred pounds and up. There are, however, many "misses" in breeding hunters. At and around Glengariffe in the south west of Ireland we were surprised to see the high, luxuriant, blossom-laden fuchsia hedges, and palm trees twenty-five to thirty feet high, growing splendidly in the open without having had any winter protection. Even in the more northerly part of Ireland fuchsias grow all year out of doors, but not so luxuriantly as in the south. From Glengariffe we travelled by motor about sixty-five miles by a tortuous course through the McGillicuddy Reeks, and other mountain ranges to Killarney. But little of the country was or could be cultivated. It did, however, yield peat, and peat bogs were everywhere, and cattle, sheep, donkeys and goats pastured upon the hillsides, with some tilled land in the valleys. At Killarney we were in the home of the pretty little Kerry cattle, most of them black, some of them red and all of them highly prized by their owners, as are also the little black Dexter cattle, popular in the same district, not any higher than the wee Kerrys, but somewhat more blocky and better beefers. From Killarney we went, by Tralee, to Limerick, the "City of the broken treaty." At Patrick's Well, near Limerick, we visited a farm of somewhat over fifty Irish acres, (eleven Irish acres being equal to fourteen English or Canadian acres). Here I saw, ready for the mower, a meadow that looked as though it would yield a good two tons of cured hay to the acre—it was high and very thick. The very capable widow lady who owned and managed the farm, assured me that she had been upon the farm forty years, and that this field had been in grass during the whole of the time, and for probably twenty years before. No re-seeding had been done, but the field had been frequently fertilized, sometimes with barn-yard manure and sometimes with commercial fertilizer. Some years the field was pastured, other years it was mowed. Speaking of the thatched roofs, which many of her neighbors used, she said they were warm in winter and cool in summer, but expensive to keep in repair. She told me that they sold their lambs in September for 28 to 30 shillings, that their land being rather light they followed dairying, and the raising of store cattle and sheep, but did not fatten cattle.

At Limerick, after visiting the harbor on the Shannon, the largest river in the Kingdom, the castle, the treaty stone and other sights, we spent a short time at a pig fair. It was well attended, they were trading as is only done at an Irish Fair. Our jaunting car driver told us we would only see "boniffs" offered for sale, and he explained that a boniff is a small pig purchased by one who wants a pig not for immediate killing but to feed. Men and women were there to sell and buy, though the buyers pretended a great deal of indifference. I noticed one woman standing in a small cart with three chunks of pigs at her feet on the floor of the vehicle. It made a full cart. With great enthusiasm, a vendor would grab a prospective buyer by the lapel of his coat, and dwell earnestly upon the merits of the animals he had for sale. One shouted to another with whom he had been haggling—and who was walking off—"Just in a whisper now, we'll make it four pound five." Another cries to a probable buyer "a decent luck penny now at twenty-eight." No

need for hurry, much need for patience, and for knowledge too, when dealing in such a market.

At Athenry we visited the public schools. I asked one of the teachers about the peat they burned. He said coal would cost them about 28 shillings per ton and peat only about 5 shillings, and that a ton of peat would be equal in fuel value to about a half ton of coal. Some peat leaves a red, some a grey ash. Some leaves a great deal of ash, and other peat very little. The lower the depth from which dug the better the peat. The Irish "bog oak" from which is made various Irish ornaments, as crosses, pipes, harps, towers, etc., is from oak trees found buried in the lower depth of the peat bogs.

In Ireland meadow sales are very common, often keeping the local auctioneer of a neighborhood busy for a long season, for their having is much more prolonged than ours. The following



Chester White Sow. First in class, and champion, Western Fair, London, 1912. Exhibited by W. E. Wright & Son, Glanworth, Ont.

is a copy of a poster I got at an auctioneer's office in Mullingar, for a sale on July 17th. I got other posters from him for similar sales on the 19th and 22nd of the same month.

MEADOWS.

J. DONOHUE has been favored with instructions from Mrs. Anne Kiernan

TO SELL BY PUBLIC AUCTION On Wednesday, 17th July, 1912, AT FAIR GREEN ROAD, MULLINGAR, 14 acres prime Old Meadows, in lots to suit purchasers. Terms and Conditions at Sale. Sale at 5 o'clock.

JAMES DONOHUE, Auctioneer, Mullingar.

Examining the farm implements in a Mullingar agency ware-room, I saw that some of their stock had come from American, and some from English and Irish shops. Noticing a mower made in Wexford, I remarked that I did not know that any farm implements were made in Ireland. The agent replied that the Wexford foundry sent its machines not only through Britain, but also to Italy and other parts of the continent, and even to the Argentine.

We sailed from Larne, up the coast from Belfast, to Stranraer, Scotland. We rather marvelled at the mahy very large potato fields on the way from Stranraer to Ayr, and were told that potatoes are now the most important agricultur-

al product of Ayrshire. Many large fields had already been dug to supply early potatoes to Scotch and English city markets. We sailed from Ardrossan to Lamlash, on the Island of Arran. The island is about twenty miles by twelve, and is a miniature Highlands, with some good farming land, especially towards the south. We were told that less land is cultivated on the island than in former years, because of the greater depredations of the deer.

From Edinburgh we travelled north by the Highland Railway going for sometime through manufacturing, farming and coal-mining country, and then into the mountains, the peaks of the highest of which were here and there ornamented with patches of snow, lying in the more sheltered places, still bidding defiance to a July sun. The scenery was fine, but there was but little attempt at soil cultivation. The rocky mountain sides gave little chance. Some cattle and many sheep pastured upon the heather-clad hills. The red or "bell" heather was in bloom, and added much to the beauty of the mountains. The "bog" heather (occasionally white) blooms somewhat later and is more highly esteemed, for its blossom does not as soon fade as does that of the bell heather. It is said that fire often runs through and destroys the heather, whose place is then taken by a fern or bracken which nothing will eat. A short distance south of Inverness, the chief town of the North Highlands, a better country is reached, and I saw there as good fields of oats as I ever saw. We went further north to Fowlis on Cromarty Firth, through fairly good farming country 'all the way. The kindly Scotch station agent at Fowlis told me that the country continues good for about 25 miles further north, then more mountain country is reached, with level land, but a bleak and unkindly climate beyond. From Inverness we travelled by steamer down the Caledonian Canal south-westerly, to Oban, the pretty and beautifully situated commercial capital of the Western Highlands. It was a most enjoyable day, made more interesting by views of old castles all the way. Here again we saw neat stacks, and much hay and pasture, many cattle and black-faced horned sheep, but not many grain fields. I was surprised not to have seen more of the Highland cattle, but was told by one of the officers on the boat that they had taken thirty head of them into Oban on their morning trip, and a butcher in Oban told me that many of them are marketed there, and that on the Island of Skye and along the mainland west coast scarcely any other cattle are kept, none other being able to stand the severe climate and scanty feed. They are worthless as dairy cattle, but make prime beef. The butcher said the sweetest and best flavored mutton they had was from the black-faced horned sheep, a carcass of one of which was then hanging in his shop. He had last year sent two of them to Egypt for stock purposes. They are very hardy and yield a fair fleece. Next day, as we went from Oban through the Trossachs country by rail, steamer and coach, we saw several fine herds of the Highland cattle—proud fellows with bright, bold, outstanding eyes, long, regular and pointed horns on very erect heads, coats of red, dun, brindle and sometimes white hair, four or five inches long, hanging about them, broad-chested and with a fearless and dignified bearing and mien equal to that of the proudest Highland soldier; these splendid, heather-feeding



Violet 3rd of Congash. Senior grand champion Aberdeen-Angus female at Toronto and Ottawa; also champion at many Western shows. Owned by J. D. McGregor, Brandon, Man.

fellows forage for themselves, save probably one feed a day from a stack of coarse hay during a severe winter storm. Our Trossachs trip ended at Aberfoyle, and from there to Glasgow the farming country is good, with large potato fields, oats, and plenty of grass, Clydesdale horses and Ayrshire and Shorthorn cattle, the Ayrshire appearing to be the popular dairy breed in Great Britain and Ireland.

On the ship coming home I had several interesting conversations with Mr. Sutherland, a giant farmer and school teacher from Caithness, as he said, "at the top of the map." I said to him that I had concluded, after reading what agricultural papers I had been able to pick up in Britain, that the British farmers used much more commercial fertilizers than we do in Canada. He replied that they do use a great deal, and that they cannot profitably farm without. He said that in the far north of Scotland they raise store cattle and sheep, sending two-year-old steers and one-year-old lambs to be fattened by farmers further south. He said the Shorthorn was most commonly used for feeding, but that the Polled Angus is being more used than formerly, because of the considerable amount of tuberculosis among the Shorthorns.

In concluding a rambling letter, let me say that I have not made any attempt to give an account of a trip, but rather to jump from point to point, and touch upon whatever I saw to interest me in connection with matters agricultural. My observations led me to or confirmed me in certain conclusions.

The great advantage to a farming community of good roads.

That one should think twice, and then several more times, before cutting down a tree.

That Ontario, especially on lands adapted, should have many more sheep.

That we can profitably use much more commercial fertilizer than most of us have been using.

That we can well do with less expensive, room-taking, landscape-disfiguring, weed-sheltering fences than are seen on many Ontario farms.

That we can easily better adapt our methods of farming, and the crops we grow and stock we feed, to the peculiar character and soil of our different farms, remembering that what would be good and successful farming on one farm, might be bad farming and quite unsuccessful on another farm in the same neighborhood.

That while we cannot have permanent meadows and pastures as they have in Britain, we can make up for it by growing corn and filling silos as they cannot.

That while we, because of the greater cheapness of our land and the greater cheapness of their labor, cannot always, with profit, farm as carefully as the farmers in the lands across the Atlantic, it will pay us to approach their carefulness and avoidance of waste much nearer than we often do.

That while it will pay a man of sufficient capacity and capital better to well farm 200 acres than 100, there are many farmers making much less money improperly cultivating large farms than they could make more easily and with less worry, properly tilling smaller holdings.

That we make a mistake when we conclude that Old Country farmers are for the most part slow and behind the times, and lacking in enterprise. We are in at least as great danger as they, and quite as much inclined to get into ruts and farm unintelligently.

That the Ontario farmer has as good an opportunity to make a living, and something over for a rainy day and old age, and has as many advantages as the tiller of the soil in any other part of this good old world.

Grey Co., Ont.

H. H. MILLER.

Whole Ensilage.

Editor "The Farmer's Advocate":

An American agricultural paper relates the experience of a Connecticut dairyman, who says that uncut bundles of corn may be put into a silo. The method of ensiling the uncut corn is as follows: The bundles of corn are bound with tarred twine. The bundles are then placed in the silo in regular order, the butts all one way, tops lapping to right or left as the sheaves are woven in. They are dropped in, one at a time, over a chute, so they reach the middle of the pit without interfering with the men working there. They come out in the reverse order with little trouble. If the silo is a good one, and the whole silage packed carefully, it keeps well and is as closely eaten by the stock as if cut.

Does "The Farmer's Advocate" know anything of this method of curing corn? It is urged in favor of this method, that it does away with the expensive machinery and other costs incident to cutting.

York Co., Ont.

J. D.

[Note.—This idea was tried in the early days of silo experience and given up. The labor of

getting the corn into a silo, especially a high one, and the inferior keeping of silage made from whole corn, particularly around the sides and in the corners, far outweigh the economy effected by the saving of machinery.—Editor.]

Home Growing of Root Seeds.

Notwithstanding the fact that the growing of corn for silage is increasing yearly, and upon many farms at the expense of the root crops, the latter crops still hold an important position in Canada's agriculture. Ontario alone grows annually upwards of 100,000 acres of swede turnips and nearly 70,000 acres of mangels, to say nothing of the acreage of sugar beets and carrots. Roots still have their place in the winter feeding of our live-stock, and every live-stock farmer who can secure the labor to care for the crop recognizes this fact by growing at least a small acreage to supplement his silage and other roughage, in the winter ration of his cattle, sheep and swine, and occasionally horses. There is no better winter system regulator and renovator for the stock among our farm crops than roots. They keep the bowels loose and the digestive system active. They add a succulency to the ration much relished by the stock, and not available in any other stored feed. Beyond their actual feeding value, as far as the various nutritive food properties contained are concerned—they act almost as a condiment when fed with other feed—they have a value which no feeder can afford to despise. The root crop is still a very important crop, and will continue to be so.

Seed selection is as years go by receiving more attention from farmers generally. It has grown steadily in connection with the more important cereal crops, grasses and clovers, but most of these are annuals, and seed is produced from the seed each year. This is not the case with roots which, being biennials, require two years to produce seed. Because of the amount of labor and length of time involved, and because in the past there has been a fairly large supply of these seeds on the market at comparatively low prices, few Canadian farmers have ever attempted to grow their own seed. In fact root seeds have not been extensively grown by seed companies in this country, Europe being the source of the supply of most Canadian seedsmen. One reason for this is that labor may be secured in European countries at much lower cost than in this country, thus enabling growers over there to put out the seed at lower prices than Canadian growers could do, and make a reasonable profit.

Root seeds are a source by which many noxious weeds gain access to the farm. Some of the worst of these pests have been found in mangel, turnip, beet and carrot seed. Clean farms are not in the majority, and it is important that those which are not now rendered less productive by the ravages of weeds, be kept clean for seed-growing purposes, and it is equally important that the owners of those already infested make a strenuous effort to get rid of the robber plants, and the first step in this direction is the sowing of clean seed. It should not be difficult for the average farmer to grow enough mangel or turnip seed for his own use, and it should not be any great amount of trouble to harvest that seed without having it become contaminated with foul weeds.

Vitality is of first importance in the selection of any seed, perhaps more so with root seeds than with many other classes. It is well-known that the Old Country seed-growers seldom send their best seed to Canada. This may be partially because we have in the past demanded cheap seeds and they sent us what we asked for, but it is only natural, the greater portion of their trade being their home trade, that they will endeavor to satisfy their largest customers—home buyers. The result is old seed and poor seed is sold in large quantities. Roots require a maximum amount of labor, and to be a profitable crop a good stand is imperative. Old seed does not germinate so quickly, so easily, or yet so strongly as does new seed, consequently there is a big risk involved in sowing it. Mangel and beet seed require considerable moisture for germination even when the germ is strong, and turnips are often sown in a dry hot time when it is necessary to have the most vital seed to ensure even germination.

These seeds can be grown in Canada, and if root growers do not feel like paying our seedmen a sufficiently high price to warrant their going into the business on a large scale to supply the country with home-grown seed, why not try it on a small scale on the farm. If the farmer selects his own roots and produces his own seed, he knows then how old it is and what variety it is. For several years past experiments have been

carried on at the O. A. C., Guelph, Ont., with home grown and imported seed, and the home grown has given good results. In 1909 and 1910 mangel seed of the Yellow Leviathan variety stood at the head of the list for percentage germination, with 116 per cent., while several varieties of the imported seed ran as low as 80, 70, 60, and even down to 16 per cent. In an average for three years of all seed, a German variety imported directly from Germany stood highest in germination, but in the Yellow Leviathan variety—a variety which has gained much prominence in Ontario—Canadian grown seed stood first with 123 per cent., while the same variety of seed imported gave as low as 62 per cent. germination. In the case of varieties which may have beaten Canadian seed, it must be remembered that the seed was imported from the best European growers, and is by no means a fair average of the European seed sold in Canada, being of a much higher quality. If home-grown seed of one variety can beat foreign seed of the same variety, why should the same not hold true of many or all varieties? Germination is not all. Of the different lots of Yellow Leviathan seed sown at Guelph in 1909 and 1911, the highest yield per acre was obtained from seed grown at the College. So far very little work has been done with Canadian grown root seeds, but these results would tend to show that they have an advantage over the very best imported seed, and a wide margin over the nondescript poorer class of European seed which finds its way to our markets. Turnip, beet and other root seeds may be just as easily and successfully grown here as mangel seed. Home grown seed is acclimatized, is suited to the soil upon which the roots are grown, may be more thoroughly selected and is almost surely to be more vital, the grower always knowing the age of the seed he is using.

Selection must start with the roots in the fall. It is best to go into the field and select a few well-grown shapely roots, and store them in a pit, in a cool cellar or in sand. They must not freeze and they should not heat. Do not select over-large or malformed roots. Medium sized smooth bottoms will be found most satisfactory. Be sure they conform to the recognized shape of the variety. If not they may be sports, reverted types, or possibly another variety which may have accidentally gained access to the seed used upon a former occasion. Leave considerable leaf on the root when topping, shake the dirt off carefully, and place in a cool cellar. It is difficult to pit a small quantity successfully, as they often freeze unless a great depth of covering is placed over them, which tends to heat them. Stored in sand in the cellar, or in a loose pile they will keep very well, and when spring comes they are removed to the field, planted and worked throughout the summer. When the seed is ripe it should be harvested and threshed by hand. The growing of the seed at home gives ample opportunity for selection. The most suitable roots are picked from the field, and if any of them do not do well during the seeding year a chance is left to reject the entire plant, and again with the seed it can be so cleaned as to do away with all shrunken or poor seed. There is no excuse for the presence of weed seeds in the root seed grown at home on the farm. While the price of labor in this country may curtail to some extent production of root seeds on a large scale by seed firms, the small amount necessary on the average farm makes it quite possible for the farmer, with very little extra labor or expense to produce his own.

If any readers of "The Farmer's Advocate" have tried home production of root seeds, we would invite them to give their experience through these columns.

Hauling Barbed Wire Around Corners.

Editor "The Farmer's Advocate":

Barbed wire, once having been strung upon a fence, becomes no easy article to take down and transfer to another part of the farm. This is especially so when a fence corner has to be negotiated, unless, of course, a person goes to the trouble of winding the wire upon a spool again, which is slow, tedious, hard and dangerous, not to mention the trouble this method of shifting wire gives when you start to unwind it. Recently when I was confronted with the problem I tried the following method and found it very successful:

Having taken the wire from the posts, by means of a clevis whiffletree and horse, I pulled it along to the first corner, around which I had to transfer it. About three feet from the corner post I drove a three-foot stake into the ground about two feet, so that it would slope away from the corner post at an angle of about 45 degrees. To the bottom of the stake I attached an iron pulley by means of a piece of wire. I then put the end of the barbed wire through the pulley, hitched on again at the other side, and away we went without any trouble whatsoever.

Sask.

HAROLD HODGE.

A Word with Farmers.

Editor "The Farmer's Advocate":

The difficulties and drawbacks of your calling are not to be set aside lightly. You have much to cause you anxiety, and sometimes not a little annoyance. You are at the mercy of the weather and the markets, not to mention accidental blight of your crops, or ailments among your stock. We are more than sorry for you in a sunless rainy season, such as this has been, with the grain laid flat, and the harvest prospects not as good as in former seasons. Yet your life is not all "mud and misery," for there are some things to counterbalance the drawbacks.

You have a free, open-air existence that keeps you healthy and helps to make you happy. Your weekly visits to town are pleasant breaks in the routine of your lives, and townspeople often envy you as you drive along with your smart horse and buggy. But what about your farm workers, and the conditions under which they live and work. Is there nothing you can do to improve the well-being of your farm laborers? Think of them sometimes, for it's not what we have done for ourselves, but what we have tried to do for others, that counts most at the end of the day.

Your married worker needs your help and sympathy. He has a wife and family to keep, and his services to you will be all the more devoted for the kindly word and kindest act on your part, and that of your "missus." It is human nature to value highly appreciation and recognition of labor honestly and faithfully done, and your work will proceed all the more smoothly when the laborer knows that you are pleased with it. Your married workers are anchored and steadied with the care of a household, and the responsibilities of a family. But your unmarried men are on quite a different footing. It is your duty, and the good farmer will not shrink it, where a free house is provided on the farm, to see that it is comfortable and as home-like as in the circumstances it can be made. Lastly do you not think that an occasional half-holiday would be a great boon to your workers as well as a benefit to yourself? It is worth considering and weighing carefully all that can be said both for and against, and you will look at both sides of the question before coming to a decision. Grey Co., Ont. "MAC."

Weed Seeds Measured as Grain.

Editor "The Farmer's Advocate":

Knowing the editor of "The Farmer's Advocate" to be an up-to-date farmer, as regards the destruction of noxious weeds, I think he will gladly insert the following, as a warning to farmers in general, with perhaps some of other valuable advice added. I have threshed on my own farm and have been at threshings the last twenty-six years and over, and have always noticed as separator pulled out of the barn after threshing a pile of bad weed seeds, the pile varying according to condition of the farm. I have seen as much as ten or fifteen bushels of ragweed, thistle, mustard, etc., seed, that could be burned up with little trouble. On the contrary this year I noticed on several farms, when separator pulled out there was not one quart of noxious weed seeds there. Where are they? The farm has still a number of noxious weeds among the grain at threshing time. My idea is they are in the straw stack (that is a few that will not grow, perhaps.) The majority have gone in among the grain, and been measured at the rate of 3 cents per bushel for threshing, to be fed to horses, cows, etc., and go out in the manure next year to reproduce their kind fifty fold; so if there should be a poor grain crop, a good weed crop will be assured, to the threshers' financial benefit. Perhaps it is a new kind of separator; if so I advise the farmers to employ a thresher who owns one of the old machines of ten-years-ago manufacture, if he wishes to keep even with noxious weeds. Some may say you can run them through the fanning mill. How many farmers are there who clean up the grain they feed on the farm? If that is not sufficient argument against running them down with the grain, who wishes to pay 3 cents per bushel for the distribution of noxious weeds this year, and then increase and so on? WILD MUSTARD.

Note.—We fully agree as to the importance of carefully separating noxious weed seeds from the grain at threshing, but we believe nearly all threshers conscientiously do so. In some few cases it may be overlooked, and the farmer does well to keep an eye on the matter. The thresherman who did our work this year not only separated the weed seeds, but also some six or seven bushels of flax seeds grown with the grain, refusing to pay for threshing this quantity. Of course there are threshers and threshers just as there are separators and separators. Upon this

point the comment of a local company manufacturing threshing outfits will be of interest.

Editor "The Farmer's Advocate":

"We partially agree with the writer of this article, that the farmer should be very particular to see that the threshing machine he engages to do his work is properly fitted for separating the noxious weed seeds from the grain, and not allowing them to go out in the straw.

"We have always been very particular with our machine on this point. It is fitted with screens to take out all noxious weed seeds that can be sifted out. There are some seeds that are so light that they will blow over the shoe with the chaff. It is impossible for a threshing machine to separate these light seeds from the chaff and straw.

"There should be strenuous legislation against the allowing of weeds to grow on farms, and the spreading of weed seeds by a thresher. The machine should be thoroughly cleaned out before leaving every barn, so as not to carry seeds from barn to barn.

"In reference to the writer's contention that the new machines are at fault, we know of some machines that have no device for separating weed seeds. We would not care, however, to mention the names.

"It is up to the farmer to ascertain before engaging a thresher, whether his machine will separate the weed seeds from the grain or not." A. W. W.

Electricity on the Farm.

Electricity seems destined to be the farmer's best hired man. The Hydro-electric Commission of Ontario is carrying on an active educational campaign, and is arousing keen interest among farmers of Western Ontario.

In addition to the work of the Commission, some individual farmers have shown commendable enterprise in testing electrically driven machinery on their own farms. The experience of farmers in such a matter is of considerable interest. R. E. Gunn, proprietor of Dunrobin Stock Farm at Beaverton, Ontario, has furnished to the new official publication called "Conservation", some details concerning the use of electricity on his farm:—

"Electricity costs me \$175.00 per annum at the farm for 100 lights and 20 H.P. in motors. This low rate was secured from the local power company for the reason that they had power going to waste, and wished to get some return for it. The power company built the line to the farm (two miles) and put in and own the transformers. I wired the farm buildings, and bought all other equipment.

"In relation to other powers as to cost, you can readily see that it is much cheaper than any other form of power, except possibly that which could be generated by water, if we had it.

"It is a most efficient power for farm purposes. We run our milking machines, pump water, grind feed, cut hay and straw, cut wood, fill silos, and run other machinery where belt driving is possible, and have no trouble in any way. The motors need but slight attention, which is more than can be said of any other power available such as steam or gasoline, both of which we have used.

"Its advantages are:—
(a) Low cost. (b) Ease of operation. (c) Ease in moving power units from place to place owing to light weight. (d) The little attention required to operate. (e) Speed in starting."

Mr. Gunn claims that electricity can be generated profitably by the farmer if water-power is available, and he is inclined to the view as expressed to "The Farmer's Advocate" that where waterpower or other electric service is not available, it would pay to generate it with gasoline power for lighting houses and barns, and for use on some household articles where direct gasoline-engine attachment is impracticable. He further states that the insurance companies show a preference for the use of electricity if the wiring is done by a reputable firm of electricians.

Perennial Stitchwort.

Our Lochaber Bay, Que., correspondent writing of the Perennial Stitchwort, an imported weed described in a former number, says that this weed is bad on about half an acre in one of his best fields. This field since the weed was first observed has been in grain two years and hay one year. It quite smothered out the grain and young grass in a few places.

This is an innocent looking plant resembling a narrow-leaved chickweed. The report shows what it can do by its perennial root and prolific seeding power. The former maintains it in the meadow, and the latter enables it to resist the ordinary cultivation of the grain field.

From Leamington to London.

In Western Ontario no season of the year yields the student of nature and lover of agricultural pursuits such delightful pleasure and profitable enjoyment as that of early autumn. In journeying between the above mentioned points, the traveller traverses one of the most richly endowed and fertile sections in our fairest of fair provinces. While the harvest of early cereals has been gathered, yet there remains in the fields of tawny stubble, sufficient evidence to demonstrate the abundance of harvest reaped. But that which makes a trip at this season enjoyable is the fact that over a large area the farmer is devoting his attention to the harvesting of our most profitable crop.

The opportunity for such a journey presenting itself, your correspondent gladly availed himself of the privilege. The trip was not accomplished by the nineteenth-century mode of travelling, i. e., by palace-car or swiftly-propelled automobile, but in an open buggy behind a slow-going draft horse. Whatever may be said against this slow mode of travel, it has its advantages. It affords ample scope for observation, and likewise opportunity for conversation. In pursuing this method the traveller is able not only to note carefully the varied conditions in rural districts, but also ascertain to some extent from the knowledge of others, the processes which gave use the different discernible phases in agricultural life. To attain the end in view main roads were avoided as far as possible without lengthening the distance. Our starting point being in the garden of Ontario, we were prepared to meet with many changes which we believed would await us in a drive which took in part of three counties. The comparisons drawn between the methods of farming pursued, character of crops produced, and general line of farming followed, were valuable to the sojourner, yet space is available to the recording of but a few. The first stage of our journey lay through the now far-famed corn lands of Mersea East, Tilbury and Raleigh. Here the eye was ravished with a view of such crops of maize as are rarely witnessed in any land. Fields of corn with golden tassels rustling in the wind rose like a miniature forest of bamboo, while from the many-rooted stocks hung suspended ears of richly colored ripening grain, bursting through its velvety covering, as if anxious to display its beauty. Here were also to be seen not a few orchards bending beneath a weight of choicest fruit, and one orchard in particular that of Mr. Walker, 11th Con., Mersea, deserves special mention. Nowhere in our journey did we behold such apples and pears. Trees were neatly and evenly pruned. The clean trunks, limbs and dark foliage gave evidence of careful oversight. Passing through the noted Chatham plains, rich in their strong clay deposits (bearing a striking resemblance to the bottom lands of the Western States or Red River Valley) were to be observed the damages wrought by continued wet weather during August and September, in stooks of grain rotting in the fields or stacks growing green in farmyards. Improperly constructed roads were almost impassable for heavy traffic, and more than one threshing outfit was hopelessly stranded until conditions altered. Leaving Prairie Siding, we entered a much older-settled section of Ontario, and noted sorrowfully the dilapidated, neglected appearance of many an old and one-time beautiful homestead. Weeds luxuriated on every side. Fences were sadly in need of repair. Buildings bore traces of many a hard-fought battle against the elements of nature. Their sides were racked and rent, while roofs were broken and bent. Doors hung upon a single hinge or lay prostrate along the ground, venerable orchards displayed a most forlorn and dejected appearance. These conditions were if anything more prominent in many sections after passing eastward from Chatham on the bank of the Thames. Many farms still retain the old rail fence, in more than one instance almost entirely hidden by a tangle of wild flowers, briars and underbush, an abundant growth of fodder was observed wherever the gaze turned, while the almost entire absence of both cattle and sheep was especially noticeable. Indeed one of the most frequent questions asked was "Do you know where I can buy a number of cattle?" The reasons for such a scarcity are several such as being compelled in former years through the scarcity of fodder to dispose of stock, the difficult experience in procuring laborers to either till the soil or perform the winter chores. One aged farmer, the possessor of four hundred acres of just such land, said the Prairie land and city allurements had robbed him of five stalwart sons, and made farming under present conditions in labor circles an impossibility. The crying need of to-day is not so much the procuring of men to man western harvest-fields and threshing-outfits, but men, strong, stalwart, scientific, men to till the rich soils of Kent, Essex and Middlesex, now lying idle. The man who will successfully solve

the vexatious labor problem of our present day will be worthy of empirical recognition. Around Thamesville there are a goodly number of farms manifesting a spirit of thriftiness, but it was when the neighborhood of Melbourne was reached that we found ourselves in one of those rich dairying sections scattered over Southern Ontario. Here again corn was in the ascendancy not for ripening but ensilage. Fields of roots were in evidence, while herds of sleek well-fed cows were pasturing on every side. A few miles west of Delaware there is a landscape view which, once witnessed is not easily forgotten, where the broad valley of the Thames stretches away to the north and south. Passing through this tract of rich lowlands we return northward by way of Lambeth to London. Here also may be seen testimonials of time's ravages in decaying and neglected farms. Nearing the city we passed the now widely known "Advocate" farm, Weldwood, and truly the words applied by Israel's shepherd King in his description of Mt. Zion apply here, "beautiful for situation is Weldwood." As a well-watered portion in a desert, or a cultivated oasis in a wilderness, it stands as a demonstration of what can be, has been, and is being done by following safe, sane, scientific lines of farming, within easy reach of every enthusiastic, energetic, soil-tiller. What is wanted all over southwestern Ontario is just such practical demonstrations of up-to-date farming as may be noted by a passer-by at Weldwood.

Essex Co., Ont.

A. E.

Maryland Investigations re Liming.

In summing up the results obtained through investigations of the Maryland Experiment Station on the rate of diffusion and deflection of different limes, in different types of soils, the following facts are observed by L. B. Broughton, author of Bulletin 166, "How is Lime Distributed through and Lost from Soil."

Different substances have very different rates of diffusion, and in consideration of the salts used in this investigation the most diffusible salt of any is calcium sulphate; magnesium carbonate is considerably less diffusible than calcium sulphate; calcium carbonate is less diffusible than magnesium carbonate; calcium oxide is but little less diffusible than calcium carbonate, calcium phosphate less than either the carbonate or oxide, and barium hydrate considerably less than either of the six salts studied.

The rapidity of diffusion depends on the difference in the concentration of the salts; the greater the difference the more marked the effect will be.

Diffusion is considerably influenced by temperature, and becomes more rapid in respect to some salts as the temperature rises.

Of the three soils used, salts diffuse most rapidly through the sand soil; less rapidly through the loam soil and only to a slight extent through the clay soil.

The movements of salts in a soil are to a large extent governed by the physical constitution of the soil; the soil having the coarser particles allowing the salts to diffuse more rapidly than the soil with many small particles.

The amounts of lime removed from the soil by the drainage water is the greatest source of loss of lime to the soil, and the extent of this loss depends entirely on the kind of lime added to the soil, and the kind of soil limed.

The carbonic acid in a soil plays no insignificant part on the influence of diffusion of lime in the soil, checking the movement of calcium oxide by forming insoluble carbonates, and forming more soluble salts with the insoluble forms as calcium phosphate, carbonate, sulphate, and magnesium carbonate.

The amount of lime removed from the soil, by the crop is in the most part very small, yet it is one of the principal means by which lime is taken from the land. In considering the exhaustion of the soil by the crop it is readily seen that exhaustion by this means is in no way so great as is suffered by depletion.

THE PRACTICAL APPLICATION OF THE RESULTS.

Clay soils held or fixed all kinds of lime better than sandy soils.

The loss of different kinds of lime from a clay soil was much less but relatively the same as with the sandy soil.

The results with the loam soil stood approximately between the clay and sand soil—showing that the greater the amount of sand in a soil the less is its capacity for holding or fixing lime, or in other words the more sand in a soil the more frequent should it be limed.

Magnesium lime suffered a greater loss through drainage than calcium lime.

Carbonate of lime was more easily removed by drainage water than caustic or burnt lime.

Gypsum or "land plaster" was more easily

lost from the soil by the drainage than any other form of lime.

These results would seem to indicate that the presence of sulphates in the soil, which could unite with the lime of the soil, would have a tendency to cause a loss of lime through leaching.

Cleaning Grass and Clover Seeds.

(From a circular issued by the Seed Branch, Ottawa.)

Any good fanning mill, in which thorough control over the air current is obtained and a series of four or more riddles and sieves may be adjusted at will, may be fitted and operated to

It is most important to have a full equipment of both wire and perforated-zinc riddles and screens of all sizes made for small seeds. The want of any one of these may entail a waste of good seed or other loss many times greater than the total cost of the full equipment of screens.

Before fitting the mill for cleaning, trails by hand should be made with the screens arranged in series, one over the other, to determine what screens should be used to produce the best possible results with the least possible waste of good seed. It will very often be found practicable and profitable to the farmer to make two grades in preparing his grass or clover seed for market. If, however, the seed has been taken from a weed-infested field, it is usually to the advantage of the producer to sell it in an uncleaned condition to a wholesale merchant who can clean it with special power cleaners.

SIZES OF SCREENS.

For grass and clover seeds the following sizes of screens are employed:—Wire cloth, (sizes given are the number of wires to the inch each way), 32x32, 30x30, 28x28, 26x26, 24x24, 22x22, 20x20, 4x30, 4x28, 4x26, 4x24, 4x22, 4x20, 3x18, 3x16 and 3x14.

Perforated zinc, (sizes given are the diameter of the perforation in parts of an inch), 1-15, 1-16, 1-18, 1-20, 1-22 and 1-25.

Ridging Land in the Fall.

A certain amount of heavy clay soil is ridged every autumn in order to place it in better tilth the next spring for seeding, and to somewhat hasten the seeding season. It is a well known fact, that loose soil will retain more moisture than packed soil, and consequently fairly deep fall plowing is resorted to. A rough surface is also advised for heavy soil during the winter. Clay owes its tenacity to a colloidal material upon which the peculiar heaviness and stickiness depend. It is astonishing what an effect this small amount of colloidal kaolin—only about one and one-half per cent. of the whole—has upon the soil. Clay is made up of very minute particles, and the smaller the particles the greater the cohesion of the mass. Thus it is that clay is more impervious to water than other soils. The tenacity of a clay soil depends greatly upon the condition of the colloid clay contained in it. To make it friable and easy to work, it is necessary to flocculate the particles. Lime or chalk is used for this purpose, and frost is a very effective agency. When a soil freezes, more or less slowly as it always does, the water in it forms a clear ice, the colloid clay is concentrated, and finally separated the particles coagulating or flocculating. The more of such soil that is exposed to the direct action of frost the better. Here is where fall plowing leaving a rough surface is beneficial. The rougher the surface the greater the exposed area. This being the case ridging would have a still more beneficial effect.

Ridging, provided the rows run at right angles to the lay of the land, aids in diminishing washing of the soil. Never should the rows be run parallel with the slope, as they would tend to promote washing. In these days of disappearing forests together with the rapid increase of wire fences, it is often difficult to hold the snow in the fields. Ridging is a great help in keeping the field covered with this natural blanket, thus giving the field a more even distribution of moisture in the spring. These things are important.

The increased exposed surface has a more or less marked effect upon the drying of the soil in the spring. The more soil exposed to sun and wind the greater the early evaporation, and consequently the soil is in condition for tillage earlier than it otherwise would be. This is important as almost invariably early sown seed produces largest yields, and besides it facilitates farm operations by allowing the farmer to keep well ahead of his work.

Ridging cannot be profitably practiced under all conditions. A well underdrained loamy soil is not in as great need of it as the heavy clay. Light soils are not so much benefited. It means extra labor at a busy season, and the land must have previously been plowed to a fair depth because it is necessary to have it loose for either the double mold-plow—which is the most satisfactory plow to do it with or the single plow

to cut and cover satisfactorily. Where land is plowed to a fair depth soon after harvest and cultivated a few times to kill weeds, it is in a good state for ridging. If a double mold-plow is not available a single plow may be utilized, it doing better work if it does not clean too freely. With a good team and the soil in fair condition, from three and one-half to four acres may be ridged up daily. It is worth a trial under some conditions as heretofore outlined, and may be done at the last moment before freezing up.

THE DAIRY.

Cows exposed to late fall rains during the cold nights will very soon show a considerable reduction in yield of milk.

The food that a cow gets has a very important bearing on the amount of milk given. Yet the same amount given to each of two cows does not cause them to produce like quantities of milk. The output of the cow is the real measure of her value, and it can only be accurately ascertained by weighing her milk.

The slime which accumulates on the inside of a separator bowl should be carefully removed and burnt at once, says Prof. H. H. Dean, in his book "Canadian Dairying." Never allow this to dry and be blown about on the farm as it may spread disease, he cautions. Neither should it be allowed to go into a drain from the dairy as it may clog the drain.

A certain amount of exercise is necessary with all classes of live-stock, milk cows not excluded. When kept under the best sanitary conditions it is doubtful whether very much exercise is needed, but under most conditions a little outdoor exercise tends to maintain vigor, and the greater the vigor the greater the cow's usefulness as a milk producer. Besides getting exercise, there is nothing like fresh air for stabled stock, and an hour or two daily in a sunny yard is beneficial to all classes of stock.

Dairying is specialized farming, and for most profitable returns must be operated as a specialty. Nothing but the best cows should be considered, and these high producers require careful attention in breeding and feeding, that the maximum production of milk be reached without injury to the fecundity of the cows, or to their constitution, or that of their offspring. It is a nice point to divide just where the limit of real profitable production lies. A cow that breaks a record under forcing, but fails to breed again represents a great loss, for with just a little less strain on her system she might have become a producer of more of her kind. This is perhaps the most possible result, but forced production due to too long lactation periods, early breeding or too frequent milking and over-feeding may cause the progeny to be weakened, and the ultimate result if persisted in would be a degenerate race with an over-drawn dairy type, but no constitution to back it up, no digestive capacity for manufacturing rough feed into milk. Heavy production is where the profit lies, and comparatively few cows in the country do their best, but there is no doubt that milk production may be forced to such a stage where it is injurious to the breeding possibilities of the cows.

Ropiness in Milk and Cream.

Ropiness in milk is one of the most serious troubles with which milk dealers have to contend. This condition, which is objectionable more on account of its unwholesome appearance than from any known harmful effect which it produces, has received its popular designation from the viscid, slimy consistency which characterizes the affected milk. The cause has been found to be the action of certain bacteria, and a number of apparently different species have been described as possessing the power of producing the ropy condition.

This trouble, which is widespread and of considerable economic importance to milk dealers and butter makers, should not be confused with the abnormal changes in milk which accompany an inflamed condition of the udder, frequently called "garget." Milk drawn from udders in this condition is more or less thickened by the presence of pus, or may in addition contain white, tough, solid masses of casein, which pass through the duct of the teat with more or less difficulty. Milk in such condition is by some called ropy, and consequently it has been asserted that a diseased condition of the udder is the cause of all ropy milk. The investigations which have heretofore been made do not throw any definite light upon this alleged cause.

My observations upon the occurrence of ropi-

ness in milk in creameries, and the identification of *Bacillus lactis viscosus* as the cause, show that the ropiness brought about by that organism, although appearing only in the surface layer of milk, may become of considerable commercial importance.

Last summer the appearance of ropy milk was brought to notice by a milk dealer, who, having suffered severely in loss of custom by its occurrence, applied to the Agriculture Station for aid. He was instructed to dampen the udders of the cows with dilute carbolic acid before each milking. This measure, which is of value in preventing filth on the udder from falling into the milk, was carried out faithfully without benefit. A careful study was made of the conditions under which the outbreak occurred.

All of the milk handled by this dealer was supplied by one dairy consisting of twelve cows. The surplus of milk over that disposed of on the route was used for butter making, the deep-setting system of creaming being used. The cream on the surface of the cans of milk which stood in water at a temperature of from 45 degrees to 50 degrees F. (7 degrees to 10 degrees C.) became viscid in from twenty-four to forty-eight hours after setting, so that it would adhere to a table fork, stringing out in a ropy mass. The viscosity was more marked in the surface layer of the milk, and hence in the cream. It is for this reason that the trouble is incorrectly regarded as a fault peculiar to cream. No complaint was heard from those customers who consumed the milk within a few hours. Some of them, however, kept the milk until the following morning, when the cream would be ropy.

An examination of the ropy cream revealed the presence of *Bacillus lactis viscosus*. To find out through what channels the milk became infected, it was proposed to collect samples of the milk at each step in the processes to which it was subjected between the cows' udders and the deep-setting cans where the ropiness becomes manifest.

In taking samples of milk from each cow, the udders and teats were moistened with a weak solution of carbolic acid, this being the only safeguard taken to prevent the access of dust. Glass milk bottles were scalded and kept sealed with paper covers, except at the moment the samples were drawn. The wide mouth of the bottle offered considerable opportunity for the entrance of dust particles which might convey the bacteria had the particular species in question been adhering to the udder. Other samples were drawn into test tubes, the mouths of which presented a smaller area for the reception of dust.

Cultures were made from the milk of each one of the cows on two different days, the bacteria present in the milk of each cow being thus obtained in pure culture. From the first twelve samples there were obtained five apparently different species, none of which, when grown in sterile milk, brought about the viscid condition. None of the species at all resembled the organism sought. During the period that the cultures were being made from the milk, the ropy milk was constantly present in the creamery.

In addition to examining the milk samples collected, a bacteriologic examination was also made of those substances which might harbor obnoxious organisms such as stable dust, particularly that dislodged from the udder, unclean utensils and faeces. Sterile milk was inoculated with bits of rubbish from the floor of the stable, dust from the beams overhead, cow hair, water from the drinking trough, and sawdust from the icehouse. None of the samples of sterile milk thus artificially contaminated became ropy, although all underwent some sort of fermentation. Cultures were made from the faeces of a cow, but the bacteria found threw no light upon the problem.

An examination of all of the other probable sources from which the bacteria might have gained entrance to the milk having revealed nothing, attention was turned to the utensils with which the milk came in contact. It would be a very simple matter for a milk vessel, which had once contained ropy milk and which had not afterwards been properly cleansed, to again infect normal milk placed in it.

Upon one occasion the milk aerator in use at the farm barn was found in an unclean condition, it having been carelessly rinsed when last used. Cultures were made directly from the milk remaining in the apparatus. Several small quantities of sterile milk were exposed to infection in the pails used for milking, and also by pouring through the mesh of the strainer pail. Inoculations were made directly to culture media from the accumulated mass of filth on the border of the brass strainer. Such an accumulation, although innocent in appearance, is nevertheless teeming with bacteria which infect the milk which passes through the strainer. None of the cultures made from the accumulated filth revealed the presence of the bacteria causing ropiness, nor did any of the milk samples become viscid. It was noted, however, that the bacteria found in the filth of the aerator were identical with those found growing in the milk which had been poured over it; also, that those in cultures from the filthy

strainer were the same as those found in the milk poured through it. These facts are of interest as illustrating how directly filth may influence the keeping qualities of milk by introducing bacteria. It should also be noted that the filth itself cannot cause ropiness in milk, unless there are present in it the bacteria which possess that power.

It is important now to note the results obtained from a similar treatment of the milk in the creamery. The evening's milk was brought to the creamery and placed for the night in deep-setting cans surrounded by ice-water. That of the morning was aerated and brought to the creamery, where it was again strained before delivering. A brass-wire strainer was used constantly because it was of such size as to fit over the top of the cans, forming a convenient device for holding a cloth strainer in place. For this reason all of the milk passed through the one strainer and always into deep-setting cans. The milk strained in the evening remained in the cans over night. The meshes of the strainer were obstructed by an accumulation of filth, the result of a lack of thorough cleaning. They had become obstructed to such an extent that the reservoir would become half full of milk before the pressure of the accumulated fluid was sufficient to force its way through the meshes.

Three different quantities of sterile milk were successively exposed to contamination on the surface of the strainer. All three samples and two of four samples from the deep-setting cans became viscid. The viscid condition was caused by *Bacillus lactis viscosus*.

Greater care in scalding the utensils brought the trouble to an end. All small utensils were immersed in boiling water for three minutes, and the larger cans were filled to the brim with scalding water, which was allowed to remain for the same length of time.

The importance of thorough scalding of vessels which have once contained ropy milk is urged upon the consumer as well as the dealer. Bacteria may readily be transferred from running water to milk by the agency of mud, which, drying upon the udder, may be dislodged during milking. Milk utensils which have been used for containing water should be scalded before using again for milk. The apparent purity of water used about a creamery gives no assurance that it is free from bacteria.

Chatauqua Co., N. Y.

T. A. TEFFT.

POULTRY

B. C. Egg-Laying Contest.

September the twentieth marked the end of the eleventh month of the international egg-laying contest, being held under the joint auspices of the British Columbia Poultry Association, Vancouver Board and the Provincial Government. With just one month to go the interest was keener than ever. In class one for non-sitters the first thirteen pens are White Leghorns, the leading pen No. 2 having laid 920 eggs, nearly one hundred more than its closest rival, No. 9 with 838 eggs. In class two, including the general-purpose breeds, pen 33, Rhode Island Reds, is leading with 782 eggs, with pen 38 White Wyandottes second with 771 eggs. Third stands pen 31 Rhode Island Reds with 695 eggs, and fourth and fifth two pens of Barred Rocks, 26 and 37, with 687 eggs and 670 eggs respectively to their credit. In this class, pen 40 Silver Laced Wyandottes at the commencement held first place for four months, but is now at the bottom of the list with 402 eggs all told. The race has been a good one, and another contest is contemplated.

Fattens His Own Poultry.

Editor "The Farmer's Advocate":

For about seven years we have been fattening our own surplus cockerels and scrub pullets. Having some seventy-five or one hundred cockerels and pullets to market, and being only offered fifty cents a pair, when I could put them up and feed them some extra, and sell them for one dollar and a half a pair, I thought it was wise to try fattening, as the local market takes all I have to sell. I have never shipped away, so I know nothing about that part of the business.

We use crates six and a half feet long, eighteen in. wide and twenty in. deep (inside measurement), covered with slats two in. apart. Bottom slats are lengthways of crate. Front ones on end for the birds to feed through. Slats are hinged on top in three parts, for putting in and removing birds. Crates are divided into three apartments; each part will hold four or five birds. A V-shaped trough is fastened in front of crate for birds to feed from. We take chickens weighing from 2½ to 4 lbs., first dusting with insect powder, then putting 12 to 15 in a crate, leaving them in for three weeks. Birds are fed a mash consisting principally of ground oats with the coarse hulls sifted out. Sometimes we use cornmeal, about one part to two of oats, but as

we find this gives the birds a yellow flesh, and as we like a white-fleshed bird, we use mostly ground oats. This is mixed with skim milk or butter-milk. If sour or thick all the better. This mash will almost find its own level in a pan. We do not feed them for the first day. After that we feed three times a day for the first week nearly all they will eat. Then the last two weeks we give them all they will eat up clean. They should get water to drink every day; also grit about once a week. We never give beef scrap, as we find the milk does just as well. We have tried Plymouth Rocks and Orpingtons, but find Wyandottes fatten most easily, and are plumper. We kill by dislocating the neck and plucking immediately.

We can get from 5 to 7 cents a pound more for fattened poultry than unfattened. After one lot of poultry is taken out the crates should be sprayed with some disinfectant or louse killer. Pictou Co., N. S. C. McCALLUM.

APIARY.

"Stung."

If "The Farmer's Advocate" or any other agricultural journal took for granted and published all the remarkable stories bearing on agriculture which are to be found in the newspapers, the result would be an extraordinary weekly assortment of buncombe. Yet there are thousands of farmers and country folk—to say nothing about the city people—who do not appreciate the difference in editing between the newspapers and the agricultural publications. Consequently they believe one about as readily as the other, and delight in the curious and marvellous agricultural items which they read, often crediting the newspaper editor for enterprise when they should criticize him for gullibility, carelessness or fraud. A case in point seems to be the following extract from a Toronto paper, which received it from a London correspondent by special cable.

"The stingless bee is the next product of a man's ingenuity. Mr. Burrows, an apiarist of the Town of Loughton, in Essex, after two years of experiments has obtained a species of bee which can be handled by a child in perfect safety. He mated the Cyprian drones and the Italian queens, the result being the production of harmless insects which, however, are splendid workers. It is claimed that they are less liable to disease than the ordinary honey-gatherer.

"It appears that the new product has a sting, but it is useless as a weapon of offence. Yet they die when they lose it."

With reference to this important despatch we append a racy comment received by "The Farmer's Advocate" from Morley Pettit, Provincial Apiarist for Ontario.

"Of all the newspaper stories made out of whole cloth, this is the limit. As you know, no radical change in the life and physiology of any organism has been materially accomplished with only two years experimenting and as all beekeepers know, if you cross Cyprian drones with Italian queens, you will get a result that is far from stingless. My earliest recollections of life in the apiary are of a particular corner of the apiary where bees of just this parentage had their hive. I was always careful to keep as far from that part of the apiary as possible, and whenever it was necessary to open those Cyprian crosses I always managed to have the smoker going particularly well, as the Cyprian bees and their crosses are the crossiest bees that any beekeeper ever undertook to handle. The Cyprians are particularly good workers, but from this characteristic of being hot-tempered and unreasonable, and almost impossible of control by smoke, they are not kept to any extent for commercial purposes."

GARDEN & ORCHARD.

United States Standard Apple Barrels.

A law which comes into force on July 1, 1913, will establish throughout the United States a standard barrel and standard grades for apples when packed in barrels. The standard barrel for apples is to be of the following dimensions:—Length of stave, 28½ inches; diameter of head, 17½ inches; distance between heads, 26 inches; circumference of bulge, 64 inches outside measurement; capacity, 7,056 cubic inches, as nearly as possible.

The apples are to be graded according to their diameters, and the barrel may be marked "Standard grade minimum size 2½ inches," or 2½ inches, or 2 inches, as the case may be. Each barrel is to contain only one variety of apple, the name of which must appear on the barrel, together with the place of production and the name of the packer. The law imposes a penalty of one dollar and costs for each barrel sold or offered for sale which is misbranded.—(Board of Trade Journal.)

Tomato Monstrosities.

About the middle of April of this year one of the Farmer's Advocate editorial staff sowed in a hot-bed, for trial, seed of a new early pink variety of tomato received from an American seed house, and at the same time seed of a well-established sort, Chalk's Early Jewel, and another variety, Early Detroit, which ripens a little later. About May 9th plants of the two former were transferred to the cold frame, and on May 21st the Early Detroit. On June 6th some plants, then well grown, of the early pink variety and of Chalk's Early Jewel, were removed to the open rows of the garden, and on June 21st another lot of plants of all three sorts. Previously, on May 23rd, large plants of another early pink variety received from a local gardener were also planted in the same garden. The soil was a good clay loam, well manured the previous fall and well drained. During May and early June there was considerable cold, wet weather, but the various kinds were grown under similar conditions. The vines soon began to show young fruit on the early pink variety, and about the same time on the Chalk's Early Jewel and on the other early variety transplanted on May 23rd. The new early pink showed probably the most remarkable assortment of malformation in tomato fruit that we have ever seen, a couple of them, by no means the worst, being illustrated herewith. They were of every conceivable shape, some of them being like a doughnut, and others "doubles," or showing what seemed to be an effort on the part of nature to produce a later and smaller fruit alongside the larger. Some were covered with rough excrescences. This habit persisted as the fruit continued to form and ripen on through the season, though not quite so badly as at first. The Chalk's Early Jewel, while not perfect, grew fairly well-formed fruit, and the Early Detroit and the local early pink were normal and good. Ripe fruit was picked on August 3rd. Whether the new pink variety was the result of artificial crossing or a selection, we were unable to learn. In order, if possible, to secure light that might be of practical service to growers regarding the scientific reasons for such extraordinary growth, samples were collected and sent to the American house from which the seed was obtained, and to several experts on the subject, with a statement of conditions.

The reply of the seed growers, which did not, however, touch the problems of morphology or pathology involved, but laid the blame in a cursory way on "soil and climate," was as follows:—

"Would say from the specimens this variety deteriorates in your section, though it is seldom, if ever, that we find rough fruits on that variety in this section. It is not unusual to find what are considered first-class varieties of fruits deteriorating almost beyond recognition in certain localities. This change of character is undoubtedly due to soil and climatic conditions."

Prof. J. E. Howitt, Department of Botany, Ontario Agricultural College, writes as follows:—
"I have examined the malformed tomatoes sent under separate cover. Such deformed fruits are frequently produced by early varieties of tomatoes during the early part of the season. Later the same plants produce normal fruits. It is impossible to say, with certainty, what causes the production of these malformed fruits, but in all probability it is due to imperfect pollination. The pollen which is produced early in the season is not so likely to be as strong and vigorous as that produced later, and this may account for the imperfect pollination and the production of the malformed fruits."

T. G. Bunting, B.S.A., Assistant Horticulturist at the Central Experimental Farm, Ottawa, writes:—

I examined the two varieties of tomatoes that you sent, and find that these have been very imperfectly fertilized, and this explains, I think, to a great extent, the poorly formed and shaped fruit. As you say, the weather was cold and wet during May and part of June, and it would be at this time your fruit would be set, the weather, consequently, not favoring a perfect fertilization of the blossoms. Another reason that might be given for the imperfect fruit, is that the variety is probably not a good one. Some varieties are much rougher than others, and have a larger proportion of poorly formed fruit. We have been carrying on a selection in the Earliana tomato, and, when selecting our tomatoes, we endeavour to select only plants that have uniformly smooth and well-formed fruits on them, and, where it is followed systematically, I believe the quality of the fruit can be greatly improved."

In a later letter, Mr. Bunting adds:—

"I did not intend to give the impression that the wet and cold weather alone caused the malformation of the varieties of tomatoes that you sent to us. The variety or strain would have considerable to do with this, as well as the cold and wet weather. For instance, in the Earliana tomatoes we have many strains growing this year. Among these are some that are quite smooth and uniform; others irregular or rough to a considerable extent, and many not market-

able. This may be due to the strain or variety not having been carefully selected. For seed, in our selections, we endeavour to select from plants of uniformity, good size and productiveness, with the idea of continuing these characteristics in the succeeding generations."

Paul Work, Professor in Horticulture, New York College of Agriculture, Cornell University, writes:—

"Tomatoes vary greatly as to uniformity and shapeliness under different soil conditions. Earlianas, for instance, have a much greater tendency toward roughness when grown on the heavier upland soils, while on lower soils they may be very smooth. There is also wide variation between strains in this respect. In the case of a new variety, the characteristics are not always thoroughly established, and there may be marked reversion to some aboriginal type. The condition that is found in the specimens which you sent does not offer the appearance of malformation due to imperfect pollination. I am not sure

School, a well-known authority, gets close to the real heart of the subject in the following comment:—

"As examples of malformations, these tomatoes are the most remarkable I have seen. There is nothing on or about them to suggest disease or accident. My belief is that the explanation of their departure from the normal symmetry of the fruit is to be found either in the pedigree or in the reaction of pollen on the coatings of the ovule, but most probably the former. On poorer soil, or in less favorable weather, the deformities would likely be present in the carpels just the same, but less conspicuous because less tissue in them."

"The pistil of the tomato has a complex placenta projecting far into the carpels. The stigma is insect pollinated. If there is reaction of the pollen on the environing tissue of the ovule, it is conceivable that ovules fertilized from flowers of different strains growing in the same field might develop in somewhat modified carpels. But the

much greater probability is that we have here an illustration of Mendel's law, and that these plants bearing the malformed fruits are in the unfluxed middle lines from two probably good parents. If so, the seed from the malformed fruits will produce plants, some of which will bear symmetrical, early, pink fruit, and others of them will bear unsymmetrical fruit.

"I am of opinion that the originator of this strain has been in too great haste to send out the seed before he has separated the strain by judicious

selection. In that case, the seedsmen will likely receive conflicting reports from the growers, for there will be plants—some like one parent, some like the other, and as many hybrids as either, and in this class the unsymmetricals will appear."

One important lesson lies on the surface of this interesting and, to gardeners and canning factory patrons, most important discussion. 1st, That growers should be very careful not to plant extensively a new, untried tomato, no matter how glowingly listed in the seed catalogues; and another for seedsmen or dealers is, that they should not send out for general culture the seed of a new variety that has not been well-established as meritorious.

An Experience in Tomato Culture

In contrast with the malformations illustrated on this page, we publish a photogravure of a good representative sample of the Plentiful Tomato, which has been grown for some years with success in Western Ontario. It was originated by Angus McInnis, of London, Ont., who, for a quarter of a century, has made a speciality of tomato culture and other garden crops. Beginning with the Mikado, a potato-leaf tomato of good quality, though roughish, he crossed it with Livingstone's Beauty, a very good variety, and the resulting product he recrossed with the Acme, a nice smooth pink tomato; and, by selections called the Plentiful, a popular pink tomato of medium to late ripening habit. Alongside the Plentifuls he was growing an early pink variety, and from a natural cross he selected what he has named McInnis Early Pink, which he has been growing for some four years with very satisfactory results as to yield, earliness, smoothness and color for domestic use. For canning factory purposes he finds a red tomato preferable. Mr. McInnis has been growing tomatoes on the same soil for over twenty years with apparently little, if any, deterioration in quality, but a falling off of nearly one-half in yield. For field crops he sets the plants about four feet apart in rows seven feet between, and in a good growing year the intervening space is nearly all filled with vines. Care in manuring, culture, and selecting seed from good fruit growing on a healthy prolific vine, are the secrets of his success.

In storing cabbage most people place the heads in a cellar with all the leaves and roots attached. Many market gardeners have a better plan. They cut off the stalk as though preparing the heads for market, but leave two or three rough leaves to protect the more tender parts. They then pack in ordinary cabbage crates and rack these crates up in the storage place, leaving a gangway every third or fourth tier for air circulation.

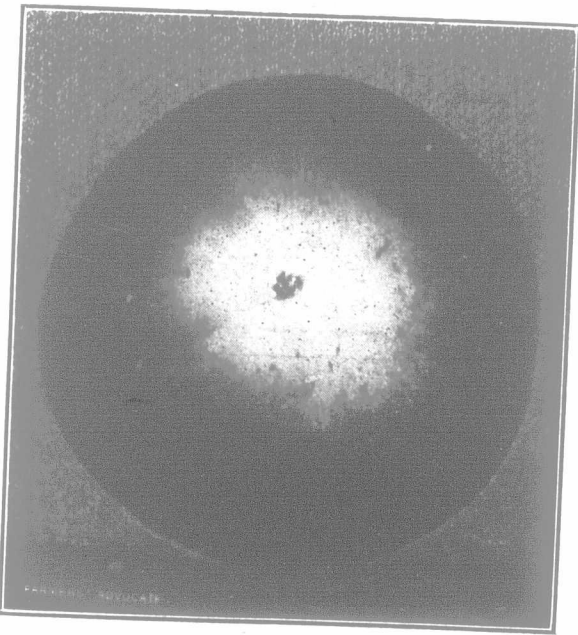


Malformation in New Tomato.

but what I agree with the expert who says, "The variety is not a good one," that is, its type was not sufficiently fixed to insure its permanent value. However, I want to look into the matter further."

On a later date Mr. Work writes us as follows:—

"What I have learned within the last few days does not support the idea that this difficulty represents a reversion to an ancestral form. The earlier types of tomatoes were almost invariably quite smooth and perfect although small. The tendency toward the production of monstrosities under certain conditions may be and, I am inclined to think, probably is a characteristic of the variety in question; and such being the case, one could say little more about the reason for it



Well-formed Tomato.

than he could about the reason for one variety being red and another pink. The fact that the Chalk's Early Jewel was not similarly affected would rather support this idea. Some varieties tend to produce misshapen pistils, which result in abnormal fruits. This characteristic may be readily noted in the flowers. I have seen it many times in forcing varieties of tomatoes, particularly among the ones that set first. Another possibility would be some sort of injury to the bloom. Cold occasionally brings about such results, as might also spray or mechanical injury."

John Dearness, M.A., of the London Normal

British Columbia Fights the Blight.

During the excessively damp summer in the dry belt of British Columbia, there has been a very bad outbreak of blight that has been most admirably handled by the orchardists. The rapidity with which this pest can spread is hardly credible and it takes a great amount of determination to go into a fine big tree, and saw out branch after branch. It goes hard to have to cut into a fine row of trees, just coming into bearing, that one has set out and tended faithfully, each year pruning and cultivating till they are uniform and shapely. Yet this is what we have had to do, and it is a credit to the Okanagan orchardists that they had the grit to stay at the work till it was done, and done so thoroughly.

A peculiar observation has been made by those watching the action of this pest, that is, that the McIntosh Red and Yellow Newton Pippin were practically immune. On the other hand, the Salina Pippin and Spitzenberg were simply covered with it. Baldwin and Nonesuch were very lightly affected in most places.

What effect this will have on the setting out of new orchards it is hard to say, but it is probable that the Spitz., will receive still less attention in future, for it has dropped off in popularity, and it is likely that McIntosh Red will receive another increase in favor. It has become very popular here, and large shipments of this variety of apple are being sent to our very best markets, and are bringing big prices.

The Yellow Newton Pippin has been very popular with those catering to the English markets, and because it is a fertilizer of the Jonathan, which has made such a good name for the Okanagan apples, and now that it has shown this marked resistance to blight, its friends will be still louder in its praise, for it has a fine flavor with us here and develops a good color.

The treatment of the blight is very exacting, and must be applied promptly. The government officials passed down the valley going through the orchards, and tied a strip of red tape to the affected branches which indicated to those not familiar with the pest in mild form, that the branch must be cut off. These men, known locally as the Pest Specialists are doing a good work here, and their prompt action is preventing any serious pest from getting a foothold in the fruit districts.

The disease appears on the branches and affects the leaves. The spots on the branches look like a blister which might have been caused by fire, and the fruit on affected branches turns black and withers, the leaves look frost-bitten, gradually dying. The younger the branch the farther back from the spot the branch must be severed, till on "this-season's-wood" from eight to ten inches back from the spot is not too far to cut. Frequently dipping the shears and saws in a solution of corrosive sublimate, 1 to 1,000, is absolutely necessary, or the shears will spread the disease. The branches should be gathered and burned, with constant watch kept for fresh outbreak of the trouble.

Blight is a dangerous enemy, and this season has left a wholesome respect for its power to devastate.

Last season we had a little trouble with black spot and apple scab, but it would seem that we have gone to the root of this matter, and have successfully handled it also, for this season there is practically none of it seen.

We had been practicing clean cultivation for a long time, and experts on the disease seem to think that clean cultivation favors its spread. This past season and last fall there was a large percentage of this district put under cover crop as a result of this advice. We also sprayed with lime-sulphur immediately after the blossoms of the apple had set. Our treatment seems to have worked for trees which last year had crops that simply could not be marketed on account of the black spot and scab, this year are entirely free. It is just possible that the damp season has also helped us somewhat in this, while it hindered us in the fighting of the blight.

British Columbia. WALTER M. WRIGHT.

A Packing and Orchard Demonstrator.

P. J. Carey, Chief Fruit Inspector for Western Ontario, has been appointed Packing and Orchard Demonstrator for the Fruit Division, Ottawa. Mr. Carey has shown particular aptitude for this kind of work, and the demand for his services has become so insistent that the Minister of Agriculture has decided to create a new position as indicated above. R. R. Waddle, Dominion Fruit Inspector of the Lake Erie counties, is promoted to the position of Chief Inspector for Western Ontario.

Representations having been made to the Minister of Agriculture that unscrupulous packers

were taking advantage of the fact of there being no inspector at Sault Ste. Marie, to supply that market with inferior and badly packed fruit, he has appointed a local man, George Honsberger, as fruit inspector for that district. Mr. Honsberger will probably visit Sudbury and North Bay occasionally.

The reorganization of the fruit inspection service during the present season enables the staff to cover many points which formerly received no attention from the inspectors. The plan of having chief inspectors for limited districts is working out well, and has added greatly to the efficiency of the work.

The Apples.

By Peter McArthur.

Ekfrid, Oct., 8th: The apple picking has commenced—in our orchard. Most of the orchards in this district are stripped—and thereby hangs a tale. When Leslie Smith, of the fruit branch, came to see the orchard last Saturday, he was inclined to praise me warmly for not having been stampeded into picking my apples before they were ripe. His words sounded good, and I should like to have deserved them, but the plain truth is that I was unable to get started earlier. And I was worrying about it too, but it seems that once more luck has been with me, and without knowing it, I was doing just right. A little more luck like that, and I'll begin to think that this is not so bad a world after all. Mr. Smith was very emphatic in saying that none of the apples were fit to pick before this week. Then how about the Kings and Baldwins, that were shipped to England and the Northwest two and three weeks ago? It looks to me as if they should still be ripening on the trees here in Ontario. I do not know what the law is regarding this, but it strikes me that unripe fruit should not be shipped any more than other kinds of culls.

A correspondent writes from Alberta, saying that the apples they are getting are small and sour, and not at all like the apples they used to get in Ontario. A visitor from the West told me about a barrel of Greenings he bought last fall. Instead of being ripe and full-flavored, they were withered, tough and tasteless. This looks as if they had been picked too green. I know it is said that apples should be picked a little on the green side so that they will keep, but there must be a limit to greenness. Another friend who saw Canadian apples advertised in England went to buy some, and was ashamed to find such inferior fruit. If this mad rush to be first on the market means shipping unripe fruit, it should be stopped.

Marketing the apples is bringing me in touch with all sorts of strange things. To begin with, I am not popular with the trade. No apple-buyer has come to my orchard so far, and the letters I have written to commission men are still unanswered. Looks as if I were going to be left out in the cold, doesn't it? But as they used to say when I was a boy, "There are more ways of killing a cat than by choking him with hot butter." The newspapers have allowed me to do a lot of advertising in the course of my writing, and the result is that I have enquired regarding the orchard, and several good offers, from New York, Fort William, Manitoulin Island and Edmonton, not to mention the one from Scotland, which appeared in "The Farmer's Advocate" a couple of weeks ago. I am dickering for the best price I can get, and in the meantime preparing to have the apples properly packed. Mr. Smith assured me that they should grade about ninety per cent No. 1. That shows the value of thinning, and he said I had not thinned severely enough. The trees are still over-loaded. At this point I want to give Mr. Clement, and the Department of Agriculture full credit for the results obtained. All I claim for myself is credit for having enough gumption to take advantage of the encouragement that the Department is willing to give to anyone who wishes to handle an orchard according to the best methods. I also followed their instructions as closely as I could, with all the haying we had to do, and the delays caused by wet weather. The result has surpassed my wildest dreams. The orchard has produced over twice as many apples as on the previous year, and the fruit is all sound and clean. As far as the production of fruit is concerned, the methods of scientists are absolutely justified. I doubt if there could possibly be a better demonstration of what can be achieved by one year's work. I know it has been a good year for apples and all that, but other orchards got the benefit of the same favorable conditions without giving anything like the same results.

But to get back to the question of selling. Of course the Department cannot help me with that. If there is to be a demonstration of how apples should be sold I shall have to attend it myself, and I am inclined to think that selling products of this kind to the best advantage is more than half the battle. Farmers who have sold on a basis of a dollar a barrel tell me that they are so discouraged that they do not feel like attending to their orchards another year. As they have to do the picking, help at the packing, and do all the hauling besides boarding the pickers and packers, the margin of profit is altogether too small. Some orchards in this district have been sold on a basis of fifty cents a barrel, the buyer to do all the picking, packing and hauling, besides boarding his gang. Where the orchards have been sold for a lump sum, it is doubtful if many owners will do as well as this. That doesn't seem enough. Of course I haven't sold yet, but I think it is worth while trying to act independently. I hear it said that there is a combine among the buyers and commission men to keep down prices, but as usual it is hard to get evidence of such a conspiracy. It is quite true that we have all the usual symptoms. There is only one buyer operating in the district, and orchardists who thought of dealing with commission men, have been discouraged. If I sold at prevailing rates I could not expect to get more than a hundred dollars for the apples in sight, and I am willing to take a chance. If I get a better price than my neighbors, it will be because of the advertising the fruit has been given, and possibly that may point the way for others. By advertising their fruit in the proper centers, they may be able to get customers with whom they can deal directly. I shall also be able to find out if a man acting independently is in danger of having his operation hampered.

I understand that the various Apple-Growers' Associations are managing to find markets for their apples at much higher rates than are being paid. If that is true there is something radically wrong. In a country like Canada, it should be possible for any citizen to reach his markets just as successfully as an organization. Of course, by organizing, the apple-growers are able to effect many economies, but if it is necessary for them to organize in order to reach the markets successfully, there is something wrong that should be remedied at once. If organizing enables the associations to force higher prices than they should, that is also wrong. I do not think I could work up any more affection for a "Farmer's Trust" than for any other kind. In a recent speech, the Hon. Mr. White, Minister of Finance, stated that one of the greatest problems of the future is the proper marketing of country produce. He is unquestionably right. And it is a problem that is worthy of his best ability. As the railroads are practically built at the expense of the public, and as their location is purely arbitrary, it seems to me that some way should be devised by which all citizens can get their produce on the market on the same footing. If I want to send a letter anywhere I can send it on the same basis as anyone else, because the Post Office is a purely public institution. This is a question to which I have given very little study, but in looking at it casually I fail to see why our transportation system should not be so arranged that a man would not be handicapped so much as he is now by the fact that the farm on which he has made his home is far removed from the great centers of population. I have no hesitation in saying that there will be enough apples wasted in Ontario this year to have supplied all the towns and cities with good fruit, if it had been possible to have it transported to market at a reasonable price.

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THE FARM BULLETIN.

The Bean Crop.

J. B. Stringer & Co., in a bean circular issued from Chatham, Kent Co., Ont., on October 1st write in this vein concerning the bean crop situation: "We have had a year that has been somewhat different from the ordinary, as during the months of August and September, beans in every township of this section got a great deal of rain, which gave the vine a good strong growth, so that we have extra heavy vines, fairly well loaded with pods, but as we had a few very hot days in the forepart of September and heavy rains at the same time, the water covering the low lying sections of the bean fields had the effect of scalding, and thus killing out large portions of the crop, more especially in the eastern section, which reduced the yield, so that we will not have more than about 80 per cent. of a full average.

"Our farmers at this writing are having fine weather, and harvesting is in full swing, and if the rest of the week is fine, large portions of the crop will be saved in good condition."

British Columbia's Leading Show.

The Agricultural Show at New Westminster, B. C., has long been considered the greatest exhibition west of the mountains. This year's outcome has been no disappointment to the management, despite the fact that inclement weather prevailed for the opening days. Manager Mackenzie had things in good shape, and an official opening by Hon. Price Ellison on Tuesday was followed by another opening on Thursday by His Royal Highness, the Duke of Connaught. Thursday easily could be credited with being the big day of the show. Every person seemed to turn out to see the Royal Governor-General and the displays.

While live-stock is well in evidence at New Westminster, it is only in the dairy-cattle classes and perhaps in Clydesdales that there is anything really choice, with quality enough and sufficient numbers to give keen competition. This year swine breeders were not very much in evidence. Sheep, however, were there in good numbers, especially in the short-wooled classes. Beef cattle were conspicuous by their absence, with the exception of a few Shorthorns.

It is in the display of agricultural products, however, that New Westminster's show reigns supreme. Individual exhibits were really choice, but the management has made good in the matter of district exhibits. This year over a dozen districts had attractive displays of as big a variety of farm products as they could collect. The management appreciating the value of such features at their annual exhibition brought in an outside judge, in the person of L. H. Newman, Secretary of the Canadian Seed Growers' Association, Ottawa, Ontario. Mr. Newman is a graduate of the Ontario Agricultural College, and has officiated as judge of agricultural products at many fairs in different parts of Canada. He had associated with him R. M. Winslow, Chief Horticulturist of the province, to assist with the fruits, and Henry Rive, Chief Dairy Instructor, to help with the dairy and meat products. The work was well done, despite the fact that it was a very difficult task. Naturally some of the districts are disappointed, but they need not feel discouraged because of the fact that they did not get first award at this year's show. Practically every exhibit was sufficiently creditable to warrant the judge in giving it a prize. Four prizes were offered of \$500.00, \$400.00, \$300.00 and \$250.00. With the first award went the big Dewar Shield, won last year by Langley District. Points were awarded as follows: Fruits, fresh, 300; fruits, preserved, 200; fruits in acids, 100; grains and agricultural seeds, 250; garden vegetables, 250; forage plants, 250; dairy products, 250; field roots, 200; arrangement, 200. This gives a total of 2,000 points. When the judges were through with their work, the winners stood as follows: 1, Langley; 2, Salmon Arm; 3, Mission; 4, Burquitlam; 5, Comox; 6, Kamloops; 7, Morinville and St. Albert.

For the special district fruit display, Salmon Arm got first, Penticton second, and Enderby third.

It is very difficult to particularize in regard to the merits of the displays arranged by the different districts. Langley, Mission, and Salmon Arm had greater variety than the others. Kamloops was particularly strong in fruits and grains, but did not have enough variety in all products to warrant the judges in giving it a high score on the total. Displays from the leading districts included excellent specimens of garden vegetables and field roots. Cabbages, cauliflowers, squash, pumpkins, etc., had great size and rare quality. For the most part also, alfalfa, corn and such desirable fodder crops were distinctly in evidence. The Mission exhibit included strawberries and blackberries recently ripened from a second crop. There was also a huge tree-like sunflower 12 feet or more in height, and with a head 18 or 20 inches across. Salmon Arm had in addition to a fine array of roots, vegetables and fruits, some fine honey and a colony of bees. An attractive banner told onlookers that all the farm products in sight were "grown without irrigation."

The general vegetable and field-root displays also included a great variety of choice quality. In some cases, however, size was about the only thing that would commend the article on exhibition. Potatoes were particularly good. They were there of all varieties and sizes, the medium-sized ones with very shallow eyes being most in evidence.

CATTLE.

Reflecting the interest that is being taken in dairy husbandry in the Pacific Province, all the dairy breeds were well represented. Jerseys were decidedly the strongest, local breeders being obliged to compete against the fine herd of B. H. Bull & Son, of Brampton, Ontario. This herd had won the lion's share of the awards at practically all the big exhibitions in Canada this year. It had also appeared at the Victoria

Show. Among the number were several animals that won top awards at Toronto Exhibition a few weeks ago. Local breeders, however, were well to the front, and got enough awards to lead them to conclude they have good stock. Holsteins and Ayrshires also included animals of rare merit. The Government Stock Farm at Coquitlam had some of their fine Holsteins in the stables, but did not compete. Two good herds of Guernseys also appeared in the ring. Awards throughout the dairy classes were made by James Boden, of Danville, Quebec.

Exhibitors of Jerseys in addition to B. H. Bull & Sons, were E. H. Barton, Grimmer Bros., A. H. Menzies & Son, and Fry & Taylor. Bull won both championships, getting the male honors with his senior calf, Brampton Stockwell King, and the female honors with the two-year-old heifer Brampton Gipsy. The Brampton herd had first prize in every female class excepting one, and they have the honor of being the breeders in this instance. Young stock from such sires as Blue Blood, Stockwell, Imported Fereor, Arthur's Golden Fox, Brampton Cicero and Noble of Oaklands were greatly in evidence. They have high quality, and also show a great capacity for milk production. Following are the awards in detail:

Bull, 3 years and over—1, Bull; 2, Barton; 3, Grimmer. Bull, 2 years and under three—1, Fry & Taylor. Bull, 18 months and under 2 years—1, Bull, on Brampton Noble Combination; 2, Menzies; 3, Grimmer. Bull, 12 months and under 18—1, Bull, on Brampton Cherry Fox; 2, Bull; 3, Fry & Taylor. Bull calf, 6 months and under 12—1, Bull, on Brampton Stockwell King; 2, Bull; 3, Fry & Taylor. Bull calf under 6 months—1, Menzies; 2, Fry & Taylor. Champion Bull—B. H. Bull & Sons, on Brampton Stockwell King.

Dry cow over 3 years—1, Grimmer; 2 and 3, Barton. Cow, 3 years and over—1, Bull, on Brampton Noble Topsy; 2 and 3, Fry & Taylor; 4, Grimmer Bros. Heifer, 2 years and under 3—1, Bull, on Brampton Gipsy; 2, Bull; 3, Fry & Taylor. Heifer over 18 months and under 2 years—1 and 2, Bull; 3, Fry & Taylor. Heifer under 18 months and over 12—1, Bull; 2 and 3, Fry & Taylor. Heifer calf, 6 months and under 12—1, Bull; 2 and 3, Menzies. Heifer calf under 6 months—1, Bull; 2, Fry & Taylor; 3, Menzies. Champion female—B. H. Bull & Sons, on Brampton Gipsy.

For aged herd, B. H. Bull & Sons had first; Fry & Taylor, second; and Grimmer Bros., third. Bull also had first for young herd, with Fry & Taylor second, and Grimmer Bros. third. For three animals get of one sire, Bull was first, Menzies second, and Grimmer Bros. third. For two animals, produce of one cow, Bull had first and Barton second.

Holsteins were shown by T. R. Pearson & Son, J. W. Hollingshead, W. S. Dickey, and J. M. Steves, of Steveston. The bulk of the exhibit was put up by Pearson. Steves had three fine heifers there, but did not bring out his large herd, because of the fact that he had not time to get them in shape. Dickey had only three animals, and Hollingshead a like number. Dickey managed to win the championship in females on his fine cow. He also had the first-prize heifer under 18 months. Steves had the first-prize heifer 18 months and under 2 years, and also won the top award for three animals, get of one sire. Pearson won with his aged herd and also with his young herd, and two animals, produce of one cow. His aged bull was made male champion.

Competition in Ayrshires was put up by Shannon Bros. and Joseph Thompson. Shannon Bros. had 7 firsts and 3 seconds, while Thompson had 5 firsts and 7 seconds. Shannon had the champion bull in Brookside Chief, bred by John McKee. The champion female also came from the Shannon herd. For aged herd, Shannon was first and Thompson second. With young herd, Shannon had first, and Thompson second and third. For three animals, get of one sire, Shannon was first, and Thompson second and third. Two animals, produce of one cow, resulted in Shannon again being on top with Thompson second.

The fight for awards in the Guernsey class lay between Dr. Knight and Charles Hawthorne. Awards were fairly evenly divided. Both exhibits are in fine line for strong herds.

Shorthorns were shown by Hon. T. W. Paterson. Some of them are choice specimens, and would win in strong competition.

HORSES.

In the horse classes there was not a very brilliant array with the exception of the Clydesdale breed. There was, however, choice quality in many of the individuals. William McKirdy, of Napinka, Manitoba, placed the awards for heavy horses, and John A. Turner, of Calgary, in the light breeds.

In Clydesdales there was keen competition throughout. The exhibitors included Shannon Bros., Captain Watson, John Savage, A. Paterson, A. Davie, J. Tomblene, H. Trimm and Pem-

berton Stock Farms. For the most part the fight for top places lay between Captain Watson, Savage and Shannon Bros.

In the aged class Shannon won on Brown Spots, by Drumflower; Trimm was second on Rex; third went to Pemberton Ranch, on Bonnie Dean, by Dean Swift. In the three-year class Savage won with his home-bred Hailey's Comet, by Royal Citizen. He is a big, thick quality horse and one that is hard to beat. Capt. Watson was second with Baron Wallace, by Baron's Craigie. The two-year-olds included Watson's quality champion King Vivers, by Dunure James, and out of Favorite of Dornoch. He has stood first at Kilmarnock and also has beaten The Dunure, the Cawdor cup winner. Savage stood second with Royal Savage. For yearlings, Savage was first and Shannon second.

In females, Captain Watson had first brood mare, second yeld mare, third two-year filly; first yearling filly, and first and second filly foal. His yearling, Roseleaf, by Baron's Craigie, was female champion. Shannon had first yeld mare and second two-year filly. Savage had second brood mare, third yeld mare, first two-year filly, third yearling filly and second filly foal.

In Canadian-bred Clydesdales, Savage had first in three-year-olds, on Hailey's Comet, and also first in two-year stallion, first in two-year filly, second in colt foal, and first in three, get of one sire. Shannon had first yearling stallion, second in two-year filly and third yearling filly. Savage had first for two animals, produce of one mare, and Shannon second and third. Savage's three-year stallion was Canadian-bred champion.

Captain Watson got the J. Savage cup for largest exhibit of live-stock owned by one man, and Shannon second. Savage also won first for two heavy-draft animals, Savage was first agricultural team, and second to Colony Farm, in draft team in harness. Savage also had first for four-horse team as well as for best draft horse raised and owned in British Columbia.

There were a few nice Percherons, Shires and Suffolks, but competition was not keen. Likewise also in Hackneys and lighter breeds. In single drivers and pairs there were a few real good ones.

PIGS AND SHEEP.

Swine fell far short of being equal to last year's display. It was only in the Yorkshire sections that there was keen competition. Very fine animals of this breed were shown by Joseph Thompson, McClughan Bros., and T. R. Pearson. The prizes were well distributed, and the judge, D. C. Flatt, of Hamilton, Ont., found specimens worthy of the award all through.

Alex Davie showed some nice Tamworths. There were also Berkshires owned by D. Fetteli, and a Chester white sow owned by Dr. Knight.

A special pen of three bacon hogs, any breed, resulted in Thompson getting first and third, and McClughan second. Other specials for best boar and two sows, and for best exhibit on the grounds went to Thompson.

That British Columbia flockmasters are getting into the right kind of sheep was shown by the different breeds brought before the judge, John A. Turner, of Calgary. Oxfords, Shropshires and Southdowns were out in good numbers, and many of them showed quality.

Joseph Thompson had a nice flock of Lincolns, J. Richardson had good Lincolns, and also a pair of Leicester rams to take firsts from E. H. Barton's exhibit of that breed.

J. Richardson and Grimmer Bros. fought for honors with Hampshires, and filled every section. In Oxford Doves A. Davie and McClughan Bros. had strong flocks, the former having some of Peter Arkell's stock. Davie got all the firsts and one second, and the McClughans the seconds and thirds.

In Shropshires, honors were evenly divided between the quality flocks owned by Hon. T. W. Paterson and P. H. Wilson. The former had four firsts, four seconds and a third, and the latter three firsts, three seconds and five thirds.

Southdowns were shown by Dr. A. T. Watt and C. T. Higginson. Awards were pretty evenly divided, Watt getting first, and Higginson second for pen. C. Hawthorn showed Dorsets, and Jas. Thompson and J. Richardson, Suffolks.

For three rams bred in B. C., McClughan's Oxfords were first, Wilson was second and Davie third. For three ewe lambs bred in B. C., Paterson got first, Davie second and McClughan third.

Oxford Down specials for best ram went to McClughan, 1 and 2, and for ewe to Davie, 1 and 2; for best pen of four, either sex, Davie was first and McClughan second. A special for best ram and two ewes of medium or short-wooled breeds resulted: 1, Paterson; 2, Wilson. Higginson got a silver medal for best fat wether, and Davie a special for best flock on the ground bred in B. C.

A. Davie also had a few goats. Poultry of all classes was well represented; Rocks, Wyandottes and Leghorns were particularly strong.

Light-Weight Hogs at a Discount

Editor "The Farmer's Advocate": We are pleased to enclose you extract from letter received from Messrs. Bamford Bros., 10 Mathews St., Liverpool, who are our agents in Great Britain. We thought this letter might be profitably read in your columns.

Messrs. The Collingwood Packing Co., Gentlemen:-

"Respecting light meats: Canadian light meats, particularly in Cumberlands and long ribs, are not so saleable as American meats in the same averages, on account of the Canadian being thicker in the shoulder and thinner in the flank, in other words poorer quality meat, and not so suitable for the regular requirements of the trade. It is certainly not a very flattering statement to make, but Canadian light meats have to wait almost every instance for American to get cleared, or it has to be sold at a lower price. In other words, animals which these Canadian light-weight meats are made of are not matured, the result being that American meat of similar weight has the preference in point of sale, and Canadian, although it cost more, has to be sold at less money. These remarks apply particularly to light average weights of Cumberland cut, and long ribs, which are of little or no use on this market unless during a time of great scarcity, and then only because of the scarcity, and not because the meat is either wanted or appreciated. In all cases moreover, owing to the unsuitability, the goods when sold have to be disposed of at a very large discount from normal weights, and we would very strongly urge upon you the necessity, if you must take these hogs, to cultivate a trade for the product at home in preference to shipping to this side. You have several times explained the difficulty you are under in regard to these light hogs, but whilst this is the case, it should be at least easier to sell the product at home than to send it on here. The same remarks apply with almost equal force to light Wiltshire sides. Anything under 46 lbs. has an exceedingly limited outlet, and is only taken as a rule from sheer necessity. No matter how good the trade may be, generally speaking, these extremely light weights of sides, such as 37 39 or 40-42 lbs., drag all the time and they are only sold with difficulty.

"Long-cut hams made from very light-weight animals are very little in request, excepting about Christmas time, when they are used largely for presents, but ordinarily speaking the trade in them is a small one as there is so little cutting in them, the preference being given all the time to 14 lbs. or over. We know, of course, that other packers have to take light hogs as well as yourselves, but they have the same difficulty in disposing of this class of meat as we have, as the trade in this country runs almost entirely on well-fed meat from mature animals.

"It ought to be possible to draw the attention of the farmers to these points, and there should be a sufficient community interest among packers to try to bring about some improvement in this direction. BAMFORD BROS."

Canadian packers have all suffered very severely during the past few months through a great number of light, unfinished hogs being sent to market. It may be urged that packers have the matter in their own hands, and should not buy this class of hog, which, in theory, sounds like a good argument, but competitive buying on the part of the various packers' drovers at every shipping point is so severe that any drover that will rigidly discriminate against these light, unfinished hogs or refuse to take them from the farmer, would soon find his competitor taking his droving business from him. In any event whether the blame can be directly traced to the packer, to the drover, or to the farmer, we believe that a thorough realization on the part of the producer of the serious loss that is entailed through the marketing of these unfinished hogs, will at least go part of the way to eliminating the evil. COLLINGWOOD PACKING CO., LIMITED.

Tillsonburg Milk-Condensing Prices.

Some time ago the Borden Milk Condensery at Tillsonburg, Ont., set their prices to patrons for the season's milk at \$1.40 per cwt. for October, \$1.50, Nov.; \$1.55, Dec.; \$1.55, Jan. (1913); \$1.55, Feb.; and \$1.40, March. Owing to the increased cost of milk production, and the fact reported that the company were paying much more for milk at their establishments in New York, Illinois and Michigan, the milk producers supplying the Tillsonburg establishment, who had formed themselves into an association, asked for an increase which the company was not disposed to grant. About two-thirds of the patrons declined to sign their contracts, and little milk came in, whereupon the company voluntarily added 10 cents per cwt. to the October price, and the difficulty seems to have been adjusted in that way.

Real Education.

The Toronto Globe expresses approval of the conception of education discussed in "The Farmer's Advocate" of October 10th, adding a few sound observations from which we quote in part.

"The amount of time and money wasted in public schools because of inadequate conceptions of education and unskillful applications of them in practice is appalling.

"It is necessary however to bear in mind, that the practice of acquiring ready-made knowledge by the process of memorization is not confined to the public schools, primary or secondary: it pervades all educational institutions where the lecture system is the method practised. It is just as futile, so far as education is concerned, to give information to an adult as it is to give it to a youth or to a child. At every stage in life from infancy to old age the individual acquires real education only by discovering facts for himself, and drawing from them conclusions correct or incorrect, mostly the latter. Knowledge so acquired at first hand does furnish discipline of a truly valuable sort, and it is more enduringly remembered.

"The infant learns to speak in his way, and in some more advanced state of civilization he will similarly learn to read. He learns in this way the properties and uses of numbers, and if he is rightly treated in school he can be made to discover for himself all the ordinary devices that facilitate the process of computation. Taught by the inductive plan he may find out for himself the properties of all ordinary things belonging to his material environment, and may be able to bring to bear on their adaptation to his wants whatever he may have in the way of inventive faculty. Ordinarily school life is a stagnant pool when it ought to be, and might easily be made a running stream. And then teachers and parents wonder why aggressively active boys play truant. They may just as reasonably wonder why a prisoner cannot resist the impulse to escape when he finds the way open to do so."

Apple Prices.

Among the recently reported sales of Western Ontario apples are those of the Independent Arkona Fruit Growers' Association, \$2.75 and \$3.00; Watford Association, \$2.00 and \$2.50; Arkona Fruit Growers' Association, \$2.15 and \$2.50; Forest Fruit Growers' Association, \$2.25 and \$2.65. Most of the Eastern Ontario Associations are reported holding for advanced prices which the English market quotations seem to warrant. Nova Scotia Gravensteins have been selling in the Old Country up to 18 shillings, and a good many Nova Scotia apple sales for the Canadian West at \$1.50 per barrel are being cancelled.

Ontario Beeves to the States.

A recent feature of the Ontario beef-cattle business has been the shipment of beeves to American markets such as Chicago, Buffalo and New York, in the face of the heavy American duty. In one week seven car loads left Ailsa Craig in North Middlesex, and some prime stock went from Oxford County. Ten and eleven cents per pound compared with about six cents in Toronto stimulated the movement.

Poultry Extension Work.

One of the first men appointed under the plan of Poultry Extension Work, recently adopted by the Dominion Live Stock Branch, is T. A. Benson, who will have charge of it in the Province of Prince Edward Island. The appointment is largely the result of the interest that was apparent last summer when an official of the Live Stock Branch, at the invitation of the Provincial Department of Agriculture, made a tour of the Island, and held a series of poultry meetings. Mr. Benson is a native of Hertfordshire, England. He came to Canada in 1904, and for two years had charge of the broiler business on the farm of Peter Reid, Chateauguay Basin, Que. He has since had valuable experience in poultry work at Macdonald College, and subsequently in the organization of poultry circles in Ontario Co., Ont.

F. M. Clement, B. S. A., a 1911 graduate of the Ontario Agricultural College, Guelph, Ont., and since his graduation District Representative of the Ontario Department of Agriculture at Dutton, Elgin Co., has been appointed professor of Horticulture at Macdonald College, St. Anne De Bellevue, Que. He took up his new duties the first of October. Chas. W. Buchanan, B. S. A., a classmate of Mr. Clement and for some time assistant in the Dutton office, afterwards being Representative in Kent County succeeds Mr. Clement. G. P. McRostie, B. S. A., of the class of 1912 goes to the Kent office.

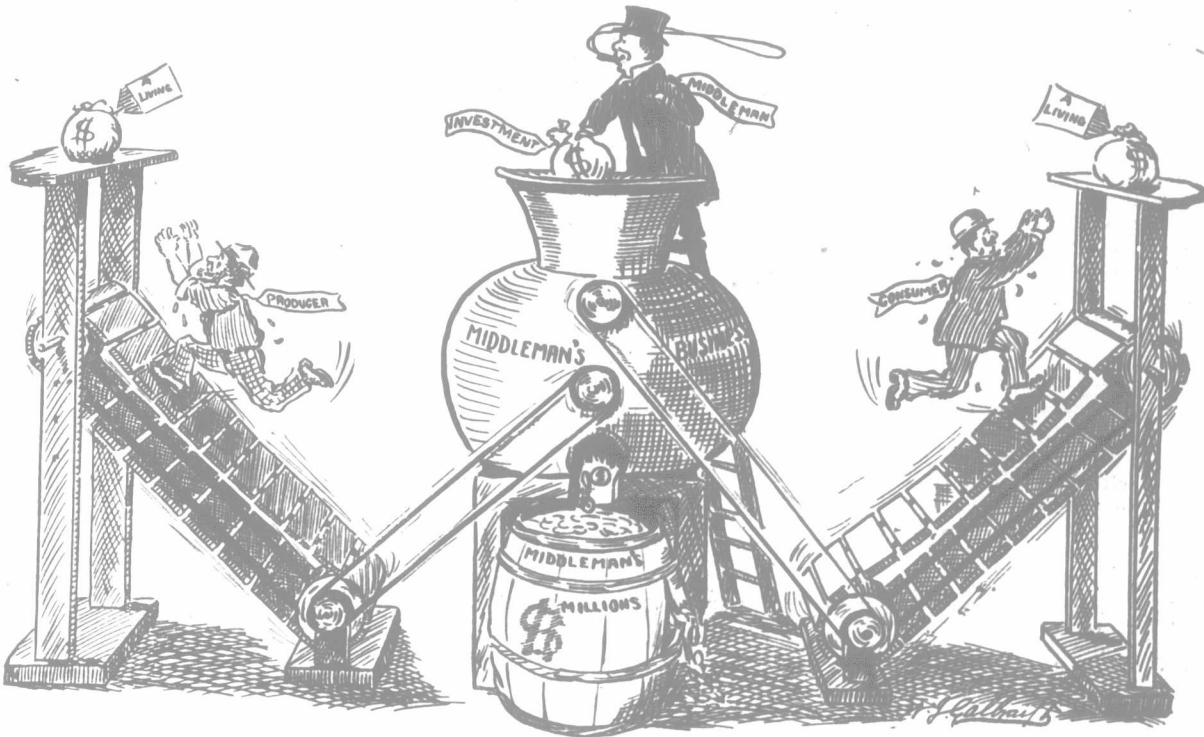
Experience and Demonstration.

Editor "The Farmer's Advocate": Two or three days after my letter on "Practical Education" appeared in your issue of May 30th, the Department of Labor, Ottawa, sent me a printed copy of Dr. Robertson's address on "Illustration Farm," which was given before the Select Standing Committee on Agriculture and Colonization, also the explanatory leaflet on "Neighborhood Improvement Associations."

I was aware that a railroad company was making arrangements for demonstration farms in the West, but those remarks I made along this line in that letter was simply the result of my own observations. It was a pleasant surprise to learn that Dr. Robertson had been studying this question for some time, and that we were to have illustration farms in the near future. It is to be hoped that all farmers will send for a copy of Dr. Robertson's address, which will be given free of charge to all who apply for it to the Publications Branch, Department of Agriculture, Ottawa.

Dr. Robertson says in this address: "I would not like, with the experience I have had; to take a farm owned by a Government and maintained by a Government and try to make it pay. The employees would be paid by salary under the Government; and the research side, the new experiment side, perhaps even the show-appearance side, would outweigh the effort to make it pay."

When I mentioned in my letter on "Practical Education" that I could not see any reason why a Government farm would not pay, the plan that I believed would prove satisfactory was to put the farm in charge of a competent man, the general management and crop rotation to be under the direction of agricultural experts, except a few acres, which would be left to the man in charge of the farm, for the purpose of studying local op-



The Middleman's Mint. Middleman—"All they can stand" is my motto.

portunities, to grow whatever crop or crops would be likely to give the most profitable returns; this man to be paid, not with a salary, but to be given a share of the profits. This plan would likely keep in check any desire for research, new experiments, or show appearance.

I have heard it said that many of our most successful farmers are rather conservative in their ways (when I say successful, I am comparing them with the average farmer). Some of these successful farmers, whose farms may be selected for illustrative purposes may not be willing to accept, in full, the instructions given by experts and others interested. They may not make as good use of the valuable information, gained by research and experiments, as would men who were selected because of their adaptability to this work.

Perhaps the following "little experience" may prove encouraging to some of your readers.

I said in my last letter that I did not always favor a change of occupation, and position gave me an excellent opportunity to observe the average farmer and his methods of living. Although I had hardly an elementary knowledge of farming, I believed that there must be "something wrong some place." The familiarity of the average farmer's hardships seemed to deaden them to the absurdity of not making an effort to improve present conditions. I often thought I would like to know more about farming. Five years ago a small farm came into my possession. When I announced to some friends that I now was the owner of a farm there was some surprise; when I told them what farm it was there was a regular gale of laughter. I had no agricultural training or education of any kind; my occupation did not leave me with much leisure time, and for years this farm had been growing weeds of all kinds in "peace and plenty." One little man remarked that he would not like to walk in a certain part of it without an axe to blaze his way among the burdocks. There were also wild gooseberries and raspberries, and what proved even worse to exterminate, some sort of a thorny growth about 4 feet high that had to be cut with an axe for two summers before a plow could go through the land. It was further pointed out to me that the buildings were only shells and not fit to stable the registered cattle which I had purchased for the farm, and that by the time I had the buildings up and the place in working order, I would have spent much more money than I could ever hope to get out of the place under any circumstances. I explained to my friends that I had taken all these apparent difficulties into consideration, and had also laid my plans before one of our "Agricultural pathfinders." The advice I received was very encouraging, provided I was careful in selecting the man to be put in charge of the farm. He had also outlined the general management of the work and arranged crop rotation. I ventured to tell these friends, that I believed we were better without any knowledge of farming, if we were willing to learn from competent men, than to be crammed with inferior knowledge and hampered with bad habits and customs and out-of-date methods. I knew it would take considerable money for the new buildings, but I believed that some tar paper and cheap lumber would fit the old ones for use for a little time. This we did. I further explained that I intended to follow, as far as possible, the poor man's hard road; in other words, I planned to pay all expenses every year, interest on the money invested included in expenses, and then devote the balance of cash on hand to improvements. If there was no money for improvements, they would be done without. The first year I could not pay expenses out of the proceeds of the farm, but that only happened once and I find new buildings, but I believed that some tar paper day scarcely anyone would recognize the farm. Good crops, sometimes extra good crops, have taken the place of the weeds that once ran riot in this wilderness. Our corn and roots are generally the best in the neighborhood. Last year we had 1,600 bushels of mangolds on one acre. For three years we have sown 18 lbs. of alfalfa, with 2 bushels of peas and oats mixed, per acre. The peas and oats are cut for green feed, and often measure over five feet high. The alfalfa makes sufficient growth to protect the roots after the feed is cut. This year two cuttings of alfalfa, that was sown last year gave a yield of 4 tons per acre. True, we might expect good crops from this soil. Then one head of cattle per acre is kept besides two or three horses, and 70 to 80 fat hogs which are marketed in the year. This means a large quantity of manure, but there has never been but one man on the farm that placed the value on manure that we are taught to place on it. Their instructions are to draw it away every day, as the stables and pens are cleaned, and put on some part of the farm. There is always a place for it, but most of them say so much manure is not needed, and if they can manage it, they pile it in little heaps about the doors or leave in one pile and dig a trench to run the liquid into an open drain that is not far away, even at times when they are not busy. The new dairy barn which I built and paid for out of the proceeds of the farm, is built on the most ap-

proved plans,—cement-block foundation, steel stalls and stanchions, with water system installed. I have built a silo, which holds sufficient corn to last the stock from the time it is filled until the green corn is ready for use the following year. The farm is not what it might be yet; there is room for further improvements, which I hope to make in the near future, but in view of the fact that I had no agricultural education, never did one hour's work on the place, could not give personal superintendence except a little in summer—at other times I would not see the farm for a month—and depended almost entirely on the general information given in the agricultural publications which I not only subscribe to, but read, I appear to have made a better rate of progress than many farmers who have farmed for years, and work hard on their farms almost every day of the year. I have found by personal experience that ill-directed effort and misspent energy give poor returns.

Our best agricultural papers devote considerable space to "Questions and Answers" for the benefit of their subscribers. On two occasions I was very anxious to have advice from experts; the question and answer department could hardly give the information in time. I knew that our agricultural experts could hardly attend to their duties and send individual answers to people who might wish to ask questions, but the urgency of the case lent me courage, and I laid my unexpected difficulty before Prof. Grisdale. Later on, I was again confronted by a dairy problem and wrote Prof. Dean. Both gentlemen very kindly replied by return mail giving the desired information. (We have many prominent men whose names are kept constantly before us by the public press. The remuneration given these men for services rendered, is often two or three times as much as what is paid our agricultural experts—we'll say nothing of mysterious cheques, which are so difficult to trace—how many of these men would halt in the routine of their work or amusements, to show a disinterested kindness to a complete stranger? And to listen to them talk of what they have done and are going to do for humanity, one would think that if the "Recording Angel" were to take any stock in what they say, it would be a difficult matter to decide "whose name should lead all the rest.")

But to return to the advance sheets on "Illustration Farms," Dr. Robertson speaks of and calls our weeds a "national danger." When a man of Dr. Robertson's authority and moderation, expresses himself in this way, it is surely time for the most of us to pay more attention to these Spring-time Robbers, whose evil results follow us all the year around. I seldom go on a railroad journey in summer without seeing acres of land on the railward track, on each side of the steel rails, producing a mass of bad weeds of all descriptions. If farmers really understood and believed how great a loss follows the growth of weeds, they would hardly allow the rear end of their farm to be seeded down in this way. There are reasons why we hesitate to say to well-meaning but careless neighbors what we might say, when they, year after year, allow weeds on their farms to increase and be spread in all directions in various ways, but we are not obliged to consider the feelings of a Railroad Co., (if they have any feelings). Evidently farmers do not realize that weeds are one of the great factors that cause them to leave their farms and move in new directions.

Grand-father's clock and grand-mother's old lace and china are very valuable and fashionable to-day; so also is their furniture. Nearly everything grand-father and grand-mother possessed is prized except the farm, and the perseverance and ingenuity which enabled them to possess it.

There were Titans with such storage-batteries of will-power and energy, that nothing could bar their progress—the long trying ocean voyage before they reached Canada, was only a commencement of the struggle; long journeys through trackless forests, which often sheltered foes, who crouched unseen, with gleaming tomahawk; through underbush and swamp, where bears, wolves and lynx lay and waited for time and opportunity to secure their prey; rivers and streams to be bridged or forded, homes to be built of the growing trees. Many of us are descendants of these people. Need we (the average farmer) sell grand-father's farm or continue to live a life which has too many hardships, unnecessary hardships and privations? I would again suggest the reading of Dr. Robertson's address. He has said nothing in it that is "too good to be true."

We need not hesitate to enroll under any or all of our agricultural leaders. We never find these men spreading graft and corruption by example or teaching. They do not belong to the class of soldiers who march to the beat of the drum and are moved in any direction by the blare of jingoes' tin horns. Their aim is not the draining of life-blood from mistaken and deluded humans, nor yet the wholesale destruction of homes and countries. The aims of our agricultural leaders are "better farming," and consensually "better living." Heaven provides their weapons; science,

literature and art develop under their teachings; peace and prosperity follows the individual and nation that embrace their doctrine.

BELFAST CAMPBELL.

Our Educational Steam Roller.

Significantly given the most conspicuous position in as staid a publication as the University Magazine (Toronto), for October, is a contributed article which arraigns our modern educational system as a species of "intellectual death." Some more reasonable system, insists the writer, must be evolved, for one of the chief definite objects of which is to enable its disciples to pass examinations, loading them up in the process with a lot of useless lumber in the form of "information," acquired under the spur of a fatal spirit of competition. By way of amelioration, observes the writer, the main principle to be observed is to cease teaching the child "how things are to be done," and let him do them. One might call it the apprenticeship system in opposition to the academical. Instead of setting children to learn complex rules as to how this or that is to be done, let them get to work on the thing itself, and watch over them to see that they do not stray too far out of the direct road.

Nothing that the Farmer's Advocate has said in its crusade for a more enlightened educational program for the rural public schools, is quite as severe as the concluding paragraph of the article in the University Magazine:—

"The present overwhelming desire seems to be to put the cart before the horse. The last thing asked of any child is that he should do anything; but instead, year in and year out, he is told about the doing of it until all natural interest in the subject is extinguished. He is painfully taught not only how things are to be done, but how they are not to be done, and it is only the actual doing of them that is scrupulously avoided. Indeed, the answer to the old riddle, as to what it is that keeps going round and round without getting there, might be accurately and promptly given as "the modern system of education." A great deal of the unhappiness in our present life is due to the want of harmony from which pupils who have been subjected to a regime of this kind necessarily suffer. In such instruction, the intellect alone is engaged, and the other faculties are allowed no chance of participating and cooperating with it. Yet, it is only by cooperation that any healthy and satisfactory results can be attained. The academical method is an unnatural one; it may produce talent of a sufficiently striking kind; it certainly does produce an almost unlimited amount of cleverness in every department, but, like all unnatural things, it is incapable of mating and breeding successfully—the talent and cleverness are sterile, and, like Jonah's gourd, wither by the morning."

Storing Seed Corn.

In order to obtain satisfactory results with the seed corn, which we have so carefully selected, is planted, it will be necessary to cure the corn well this fall before the freezing weather comes. Otherwise the moisture stored up in the ear, no matter how dry it may appear to be, will not be removed in time and the germinating power of the seed will be injured. In fact, the curing of seed corn is as essential as its maturity and selection.

There are several practical ways of curing seed corn. Big seed corn dealers often have large kilns where they dry their corn with artificial heat. This practice is not economical for the average farmer, however, and simple methods must be employed. Who is there who will forget the long strings of corn that used to hang in grand-father's garret, where so many happy days were spent in play? This old-fashioned method of curing corn is still a good one, if the windows are opened wide during the good days to let air circulate in the room, thus drying the seed.

A corn tree made of an upright 4in.x4in. set on a standard and in which are driven tenpenny casing nails upon which the ears are impaled is another method of curing seed corn. The corn tree may be placed in the garret, or any other out-of-way place in the house or shed. Seed corn may also be cured by placing it on racks, or by scattering it about thinly on a floor in a dry place where the mice or rats will not bother it. There are many different farm methods of storing corn, all of which are good. The thing which must be impressed, however, is the fact that corn should be cured well. No matter what the method is employed, good air circulation must be secured. It is an indispensable necessity, if high germinating power in the seed is aimed at.—Ray P. Speer, Minnesota College of Agriculture.

MARKETS.

Toronto.

REVIEW OF LAST WEEK'S MARKETS

At West Toronto, on Monday, October 14th, receipts of live stock numbered 43 cars, comprising 812 cattle, 152 hogs, 615 sheep and lambs, 19 calves, and 16 horses. No business was transacted. Good cattle were scarce on the market. A large number of common stockers came in. Packers quote \$8.25 for hogs fed and watered, and \$7.90 f. o. b. cars.

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

	City.	Union.	Total.
Cars	91	352	443
Cattle	1,372	5,325	6,697
Hogs	1,707	6,529	8,236
Sheep	1,659	5,678	7,337
Calves	96	506	602
Horses	15	63	78

The total receipts of live stock at the two markets for the corresponding week of 1911 were as follows:

	City.	Union.	Total.
Cars	233	200	433
Cattle	3,091	2,251	5,342
Hogs	5,561	5,965	11,526
Sheep	3,754	3,041	6,795
Calves	356	82	438
Horses	2	53	55

The combined receipts of live stock at the two markets show an increase of 10 cars, 1,355 cattle, 542 sheep and lambs, 164 calves, and 23 horses; but a decrease of 3,290 hogs, in comparison with the same week of 1911.

Cattle receipts, while liberal, were not as large as for the previous week, but quite equal to the demand. Trade in the fore part of the week was sluggish, and prices for the best cattle were barely steady, while for the common, inferior, light, Eastern Ontario butchers' and stockers, of which there was a heavy supply, values went down from 25c. to 30c. per cwt. For the first time in many weeks, all offerings of heavy export steers were taken, as the Swift Co., of Chicago, bought 200 for export, and quite a few loads of them were taken by the abattoirs for local killing.

Exporters.—The Swift Company, of Chicago, bought 100 steers on Tuesday for the Liverpool market, 1,225 lbs. each, at \$5.90 to \$6; on Wednesday, the same company bought 100 steers for the London market, at \$6 to \$6.15.

Butchers.—Choice selected butchers' cattle sold from \$6.12½ to \$6.40, but only one load was taken at the latter price, and probably 250 cattle, all sold, out of all cattle delivered, ranged from \$6.12½ to \$6.35; loads of good butchers' sold at \$5.60 to \$6; medium, \$5.25 to \$5.55; common, \$4.75 to \$5.15; inferior, light butchers', \$4 to \$4.50; cows, \$2.75 to \$5.25; bulls, \$3 to \$5.25; canners' cows, \$1.75 to \$2.50.

Stockers and Feeders.—Choice, heavy, feeding steers, 1,000 to 1,100 lbs., sold at \$5.50 to \$5.75; steers, 900 to 1,000 lbs., at \$5.25 to \$5.40; stockers of all grades, ranged from \$3.75 to \$4.75, and a few 800-lb. steers of choice quality sold at \$5.

Milkers and Springers.—An excellent demand prevailed all week for good to choice springers. Prices ranged from \$50 to \$80 for the bulk, and a few got \$90 and \$95, while one extra-quality cow brought \$100.

Veal Calves.—Prices were, if anything, a little stronger for choice veal calves. Common calves sold at \$3.50 to \$5, and good to choice, \$6.50 to \$8.50, while extra-choice calves brought \$9 to \$9.25 per cwt.

Sheep and Lambs.—The sheep and lamb market closed a little stronger at the end of the week than at the commencement. Lambs sold from \$6 to \$6.25, the bulk going at \$6.10 to \$6.15; cull lambs sold at \$5 to \$5.50; light ewes sold at \$4 to \$4.50; heavy ewes and rams, at \$3 to \$3.50.

Hogs.—The packers commenced the week by paying \$8.25 for selects fed and watered, and \$7.90 to \$8 f. o. b. cars at country points, and closed at \$8.35 fed and watered, and \$8 f. o. b. cars at country points.

BREADSTUFFS.

Wheat.—New Ontario wheat, 93c. to 95c., outside; old No. 2 red, white or mixed, 96c. to 98c., outside; Manitoba No. 1 northern, \$1; No. 2 northern, 98c., track, lake ports; feed wheat, 70c., at lake ports. Oats—Manitoba, none offering. Ontario oats—New, 35c. to 36c., outside; old No. 2 white, 44c. to 45c.; No. 3, 42c., outside points. Barley—For malting, 60c. to 63c. (47-lb. test); for feed, 48c. to 60c., outside. Corn—No. 2 yellow, 73c.; No. 3 yellow, 72c., bay ports. Peas—No. 2, 90c., nominal, outside. Buckwheat—70c., outside. Rye—No. 2, 72c. to 73c., outside, nominal. Flour—Ninety-per-cent. Ontario winter-wheat patents, \$3.80 to \$3.85, seaboard. Manitoba flour—Prices at Toronto are: First patents, \$5.70; second patents, \$5.20; in cotton, 10c. more; strong bakers', \$5, in jute.

HAY AND MILLFEED.

Hay.—Baled, car lots, track, Toronto, \$12.50 per ton, for No. 1. Straw.—Baled, car lots, track, Toronto, \$10 to \$10.50. Bran.—Manitoba bran, \$22 to \$23 per ton; shorts, \$26; Ontario bran, \$23 in bags; shorts, \$25, car lots, track, Toronto.

COUNTRY PRODUCE.

Butter.—Market steady, and prices unchanged. Creamery pound rolls, 28c. to 30c.; creamery solids, 27c. to 28c.; separator dairy, 27c. to 28c.; store lots, 21c. to 24c.

Eggs.—New-laid, 28c. to 30c., by the case.

Cheese.—Large, 15c.; twins, 15½c.

Honey.—Extracted No. 1 clover honey, 12c. per lb.; combs per dozen, \$2.75 to \$3.

Potatoes.—Ontario, car lots, track, Toronto, 65c. to 70c. per bag.

Poultry.—Receipts have been very large the past week. Prices for live birds were: Geese, 9c. per lb.; ducks, 12c.; chickens, 12c. to 14c.; hens, 10c. to 11c.

HIDES AND SKINS.

No. 1 inspected steers and cows, 14c.; No. 2 inspected steers and cows, 13c.; No. 3 inspected steers, cows and bulls, 12c.; country hides, cured, 13c. to 14c.; country hides, green, 11½c. to 12½c.; calf skins, per lb., 13c. to 17c.; lamb skins, 50c. to 75c.; horse hides, No. 1, \$3.50 each; horse hair, per lb., 35c.; tallow, No. 1, per lb., 5½c. to 6½c.

WOOL.

Unwashed, coarse, 13c.; unwashed, fine, 14½c.; washed, coarse, 19c.; washed, fine, 22c.; rejects, 16c.

TORONTO SEED MARKET.

Alsike No. 1, per bushel, \$10.50 to \$11; alsike No. 2, per bushel, \$9.50 to \$10; alsike No. 3, per bushel, \$8 to \$9; timothy No. 1, per bushel, \$2 to \$2.50; timothy No. 2, per bushel, \$1.25 to \$1.75.

FRUITS AND VEGETABLES.

Receipts of fruits have fallen off, and grapes are about the only line that is being delivered in large quantities at the wholesale market. A few peaches are still coming. Prices to the trade are as follows: Peaches, 40c. to 75c. per basket; tomatoes, 30c. to 40c.; pears, 40c. to 60c.; plums, 60c. to 65c.; grapes, six-quart basket, 15c. to 20c.; large basket, 30c. to 40c.; gherkins, 75c. to \$1; cucumbers, 75c. to \$1; quinces, 40c. to 50c. per basket; cabbage, crate, \$1; celery, per dozen, 25c. to 35c.; apples, per barrel, \$2 to \$2.50; per basket, 20c. to 30c.

Cheese Markets.

Watertown, N. Y., 16½c.; Brockville, Ont., 13½c. to 13¾c.; Ottawa, Ont., 13½c.; Kingston, Ont., 12½c. to 13½c.; Madoc, Ont., 12 15-16c.; Stirling, Ont., 12 15-16c.; Campbellford, Ont., 12 15-16c. to 13c.; Vankleek Hill, Ont., 13½c.; Listowel, Ont., bidding 13½c., no sales; Napanee, Ont., 13 3-16c.; London, Ont., bidding 12½c. to 13½c., no sales; Cowansville, Que., 13c.; butter, 29½c.; St. Hyacinthe, Que., 13½c.; butter, 28c.; Canton, N. Y., 17c.; butter, 31c.; Victoriaville, Que., 12 13-16c.

British Cattle Market.

John Rogers & Co., Liverpool, cable quotations for Irish steers making from 11½c. to 12½c. per pound.

Montreal.

Live Stock.—Supplies of common and medium stock are still large on the local market, and as a result the price of these is a little on the easy side. Some choice steers sold at 6½c. per lb., and some fine stock at 5½c. and 6c., but the bulk of the trading was in good stock, which ranged around 5c. to 5½c. per lb. Medium sold as low as 4½c., and common were 3½c., while canners' stock was 2½c. per lb. Offerings of sheep and lambs were light, and demand was good, the result being that prices were firm. Ontario lambs sold at 5½c. to 6c. per lb., while ewe sheep brought 3½c. to 3¾c. per lb. Select hogs sold at 8½c. to 8¾c. per lb., weighed off cars. Calves were \$3 to \$15 each.

Horses.—Although demand was very fair a fortnight ago, there was very little activity last week. A few were selling locally, lumber camps taking some heavy stock. Prices continued firm. Heavy draft horses, weighing from 1,500 to 1,700 lbs., \$300 to \$375 each; light draft, 1,400 to 1,500 lbs., \$225 to \$300; light horses, 1,000 to 1,100 lbs., \$125 to \$200; broken-down animals, \$75 to \$125 each. Choice saddle or carriage horses, \$350 to \$500 each.

Dressed Hogs.—Dressed hogs were rather easier in price, and sold at 12½c. to 12¾c. per lb., for fresh-killed, abattoir stock.

Potatoes.—The market was 65c. to 70c. per 90 lbs., car lots, track, for good potatoes, jobbing lots being 25c. to 30c. more, bagged. Poor stock was plentiful, and cheap.

Eggs.—Select eggs, 30c. to 31c. per dozen, while No. 1 stock was 28c., and seconds 28c.

Syrup and Honey.—The market was steady, syrup being 8c. to 8½c. per lb., in tins, and 6½c. to 7c. in wood. Sugar was 8½c. to 9c. per lb. White-clover comb honey was 10½c. to 11c. per lb., dark grades being 7c. to 8c. per lb. White extracted was 8c. to 8½c., and buckwheat 7½c. to 8c. per lb.

Butter.—Prices had advanced another ½c. in the country, making the cost as high as 28½c. Townships points. Locally, 28½c. to 29c. was quoted. By Monday, 14th, a further advance had been recorded, creamery selling here in small lots at 29c. to 30c. Supplies light. It is thought a scarcity may develop during the coming winter.

Cheese.—Finest Western colored or white cheese was steady, at 13½c. to 13¾c. per lb. Finest Townships, 13c. to 13½c. per lb., and Quebecs, ½c. less.

Grain.—The market for oats was steady, No. 1 feed extra oats being 54c. to 54½c. per bushel, car lots, ex store, while No. 1 were 1½c. less than, and No. 2 half a cent more than the price mentioned. No. 2 feed oats were 51½c. to 51¾c., and sample oats about that price also.

Flour.—Prices were steady. Manitoba first-patent flour, \$6.10 per barrel; seconds, \$5.60, and strong bakers', \$5.40, in wood. Ontario winter-wheat patents were \$5.25 to \$5.35 per barrel, and straight rollers, \$4.95 to \$5 per barrel, in wood. Flour in bags was 30c. less.

Milfeed.—Little change. Bran, \$23 per ton, in bags; shorts, \$27; middlings, \$29 to \$30; pure grain mouille, \$36 to \$38, and mixed, \$34 to \$35.

Hay.—The market for hay was rather easier. No. 1 hay, \$14.50 to \$15 per ton; No. 2 extra, \$13.50 to \$14; No. 2 ordinary, \$11 to \$12; No. 3 hay, \$10 to \$10.50, and clover mixture, \$9 to \$9.50 per ton.

Hides.—There was very little change in the market for hides after the recent advance. Beef hides, 12c., 13c. and 14c. per lb. for Nos. 3, 2 and 1, respectively; calf skins, 15c. and 17c., respectively, for Nos. 2 and 1; lamb skins, 70c. each; horse hides, \$1.75 and \$2.50 each. Tallow, 1½c. to 3c. per lb. for rough, and 6c. to 6½c. for rendered.

Chicago.

Cattle.—Beeves, \$5.65 to \$11; Texas steers, \$4.50 to \$6; Western steers, \$5.80 to \$8.90; stockers and feeders, \$4.25 to \$7.40; cows and heifers, \$2.90 to \$8.10; calves, \$7.50 to \$10.50.

Hogs.—Light, \$8.70 to \$9.37½; mixed, \$8.75 to \$9.40; heavy, \$8.65 to \$9.42½; rough, \$8.65 to \$8.85; pigs, \$5.25 to \$8.10.

Sheep and Lambs.—Sheep, native, \$3.25

to \$4.40; Western, \$3.40 to \$4.40; yearlings, \$4.25 to \$5.25. Lambs, native, \$4.50 to \$6.75; Western, \$4.75 to \$6.85.

Buffalo.

Cattle.—Prime steers, \$9.25 to \$9.50; butchers', \$6 to \$8.25; bulls, \$4.25 to \$6.25; stock heifers, \$4 to \$4.75; shipping, \$7.50 to \$8.50; heifers, \$5 to \$7.65; cows, \$3 to \$6.25; stockers and feeders, \$4.50 to \$6.75; fresh cows and springers, \$35 to \$75.

Veals.—\$4 to \$10.

Hogs.—Heavy, \$9.40 to \$9.50; mixed, \$9.35 to \$9.50; Yorkers, \$8 to \$9.40; pigs, \$7.40 to \$7.60; roughs, \$8.40 to \$8.50; stags, \$5 to \$7.50; dairies and grassers, \$8.75 to \$9.15.

Sheep and Lambs.—Lambs, \$4.50 to \$7.15.

GOSSIP.

Forty-seven Clydesdales were shipped from Glasgow for Canada the last week in September. Consigners were John A. Turner, Calgary, Alta.; Dr. McEachran, Ormstown, Que., and Macdonald College, Que.

At the Peterborough, England, sale of Shire colts and fillies the last week in September, splendid prices were realized. Following were the top prices by ages: Two-year-old colt, \$1,400; yearling colt, \$1,000; yearling filly, \$1,300; two-year-old filly, \$900; three-year-old filly, \$1,800.

SALE DATES CLAIMED.

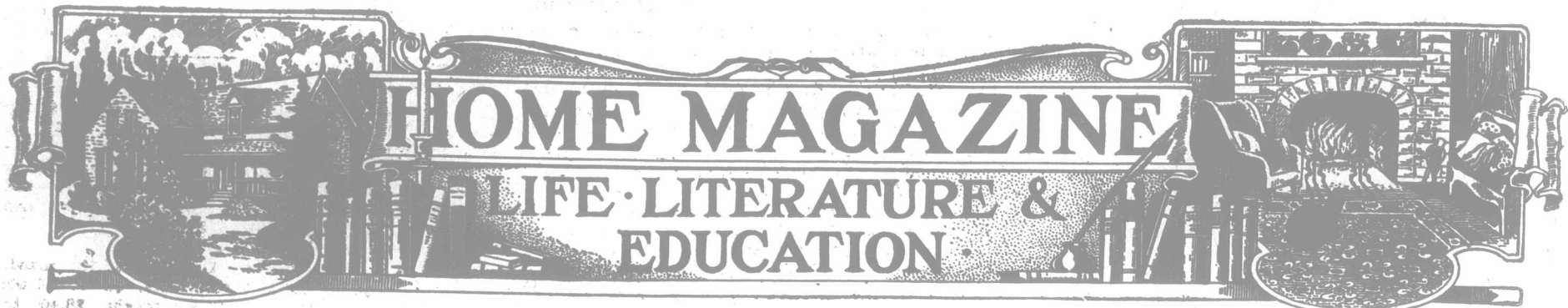
Oct. 17th.—Ira Nichols, Woodstock, Ont., at Simcoe, Ont.; Jerseys.
November—(date to be given later).—D. C. Flatt & Son, Hamilton; Clydesdales.
January 1st, 1913.—At Tillsonburg, Ont., consignment; Holsteins.

A BIG SALE OF CLYDESDALE FILLIES COMING.

At the Union Stock-yards, West Toronto, on a date to be announced later, D. C. Flatt & Son, R. F. D. No. 2, Hamilton, Ont., will sell by auction 50 head of Clydesdale mares and fillies, ranging in age from one to four years. These fillies are now being selected in Scotland, and will represent the best blood of the breed. They will be a good, typical lot, many of them of high-class quality, and many of them in foal. This will be the biggest sale of mares and fillies ever held in Canada, and will therefore offer the best opportunity to the farmers of this country to get imported stock at first hand. Watch out for a full announcement, which will appear soon.

Volume 18 of the Flockbook of the Kent or Romney Marsh breed of sheep, published by the breeders' association of that class of sheep, has recently been published, and a copy has been received at this office, by courtesy of the Secretary and Editor, W. W. Chapman, Mowbray House, Norfolk St., Strand, London, W. C., England. This volume contains the history of 114 registered flocks. There are also recorded the individual pedigrees of 1,898 rams, and 374 ewes. The number of rams exported during the year was 150, and of ewes 102, which indicates a growing popularity of the breed.

The premium list of the Ontario Provincial Winter Fair at Guelph, advertised elsewhere, shows that extra classes have been added in the horse section. For dairy cattle, the prizes have been increased in every class. In the seed section, over \$500 is offered in excess of that offered in any previous year. This increase is partially made up by the Canadian Seed-growers' Association, and partly the increased amount offered for grain from the Standing Field-crop Competition. Several county councils are offering special prizes for amateur exhibitors from their own counties; every section of the premium list being supplemented by one or more of these county specials. A copy of this list may be obtained upon application to the Secretary, A. P. Westervelt, Parliament Buildings, Toronto.



The Rubber Countries.

Not so very many years since rubbers for footwear such as now cost seventy-five and eighty-five cents could be got in any village store for thirty-five cents. Since then various influences have conspired to raise the price, among them the formation of large rubber companies with their own regulation of prices, companies urged on, in too many cases, to any measures—however disreputable—in obtaining their ends, by the wild possibilities of accumulating millions in money presented by the astounding demand all over the world for rubber during the last few years. With the continuous erection of new manufactories, and the need everywhere for machinery of various kinds, has come an increasing use for rubber belting; but the world-wide craze for bicycles, rubber-tired carriages and automobiles explains, perhaps better than anything else, the cry for rubber and yet more rubber—however it can be got. And so while pleasure-seekers roll gaily about, with laughter in zest of the sport, in luxurious ease, enjoying the full delights of pure air, and northern skies and ever-changing scenery, others of the world's children, to supply the very tires that make their luxurious moving about possible, have been driven into deep dank forests filled with deadly exhalations and the almost unbearable annoyance of the stinging insects of the tropics, exposed to dangers from wild animals and poisonous serpents, to wretchedness, and illness, and, sooner or later, certain death that might otherwise have been avoided. For Death ever lurks, in the form of swamp fever and "black vomit" and beriberi, in those pestilential forests where, only, the rubber-trees grow, and the strongest of those brave ones who venture—or hopeless ones who are driven—thither only fall a little later than the weakest.

Since the traffic in rubber began the rubber workers have been lured into the rubber jungles by the offer of high wages. Working for a few months every year at earnings of from \$8 to \$10 per day, a man could soon earn enough, it might be hoped, to enable him to return to his own settlement in affluence for the rest of his days. When he could stay or leave, work or rest as he chose, the life was in some small degree bearable, and both whites and natives were caught by the bait. Then with the increasing call for rubber and yet more rubber, the hand of the companies began to fall heavily and yet more heavily; veritable slave-driving began again; terror and oppression were resorted to get more and yet more work out of the employees. What though the natives employed in the service fell by the score, as in the Putumayo District where the number of Indians decreased from 50,000 to 8,000!—There were yet enough to go round. More natives could be got somewhere,—for the news does not travel readily from the heart of a tropical jungle!

But the news did travel. A few years ago the world was horrified by the revelation of atrocities committed by the white men (chiefly Belgians) along the Congo. More recently stories crept out from the jungles of South America, from the now notorious Putumayo District, stories so horrible that they have fastened upon the "civilized" men there engaged in the managing the collection of crude rubber, the unenviable title of "monsters of the rubber traffic." Among the companies so engaged in this especial locality was at least one of British name and origin, and so Britain could not stand still. With the Peruvian Government she instituted an inquiry. Men were sent to investigate and their reports filled a British Blue Book of 165 pages, mostly a record of barbaric and

inhuman treatment of the rubber workers by white men. The "London Company" withdrew, but, says one of the Blue Book reporters, "The fact that this British Company should possibly cease to direct the original families of Peruvian origin who first brought these forest wares (50,000 slaves) to the English market will not, I apprehend, materially affect the situation on the Putumayo. The Arana syndicate still termed itself the Peruvian Amazon Company (Ltd.) up to the day of my leaving Iquitos on the 7th December last. The

Within the last fortnight or so word has come that a few steps are being taken to ameliorate conditions along the Putumayo. Peru's special commission has formed a police force for the district, and there is a movement—recommended by the Pope, by the British Minister at Lima, the British Consul at Iquitos, and Sir Roger Casement who headed the Commission appointed for investigation by the British Government—looking to the establishment of missions at central points. All this must do something, but a mighty force indeed, and drastic

needs of our modern civilization the natives on the Congo and the Amazon lived natural and comparatively happy lives." . . . No wonder that he should cry, "Can nothing be done to get all shipping companies to ban all rubber associated with conditions which are an outrage on our common humanity? If no ships would carry the rubber the barbarities would be lessened if not entirely abolished."

Vain appeal, it would seem, for what are ships but a very inevitable portion of that great system of commerce which, though so necessary, can be, when untempered with the feelings of ordinary humanity, so hard and stern, a great juggernaut that crushes thousands beneath its wheels in order that the few may gather together millions that they cannot use, and that will make them personally no whit better if not positively worse.

So far revelation of the rubber country atrocities has been confined to the Putumayo district, but there is no surety that somewhat similar conditions do not obtain in other portions of the vast tropical and semi-tropical regions of South America. "The crimes of the Putumayo, horrible as they are," says one of the Blue Book reporters, "have their counterpart, I am assured, in other remote regions of the same lawless forest, although possibly not to the same terrifying extent."

And now, passing this, what of the Amazon jungles? What manner of territory is this into which the rubber-workers must go? What manner of life is it that they must live there day after day, week after week, if they fall not by the way?

These are the questions one asks, with interest stimulated by the revelations about which the world is talking; and the answer comes quickly through a volume recently published by G. P. Putnam's Sons (New York and London).—"In the Amazon Jungle," by Algot Lange.

Mr. Lange spent a year in the very heart of the Brazilian rubber country, to the south eastward from the Putumayo, and his book is a simple yet dramatic record of his travels and experiences. He tells little of the rubber companies,—presumably those with which he came into contact were of a different order from those which have been exposed in the Putumayo District—but he tells much of the perils by flood and forest which the rubber-workers have to encounter throughout that whole vast region. "He started in fine spirits," says Mr. Dellenbaugh, who introduces his work, "buoyant, strong, vigorous. When I saw him again in New York, a year or so later, on his return, he was an emaciated fever wreck, placing one foot before the other only with much exertion, and indeed barely able to hold himself erect."

(To be continued.)



The Sisters.

From a painting by Bouguereau. Exhibited at the Western Fair, Sept., 1912.

whole of the rubber output of the region, it should be borne in mind, is placed upon the English market, and is conveyed from Iquitos in British bottoms. Some few employees in its service are, or were when I left the Amazon, still British subjects, and the commercial future of the Putumayo (if any commercial future be possible to a region so wasted and mishandled) must largely depend on the amount of foreign, chiefly British, support those exploiting the remnant of the Indians may be able to secure."

action, would be needed to keep conditions in this terrible district as they should be. It would be hard indeed to keep watch on all that transpires in a tropical jungle. To establish such a vigilant watch must take time, for money is required, and it seems easier to secure millions for building dreadnoughts than for the protection of suffering humanity, and in the meantime the poor humans suffer and die.

And yet, as Dr. John Brown points out in *Manchester Guardian*, "Until the demand sprang up for rubber for the

The Beauties of Autumn in Nature and in Our Lives

[A paper given by Mrs. Jas. Venning at a meeting of the Harrietsville branch of the Women's Institute.]

The season is always a little behind the sun in our climate, just as the tide is always a little behind the moon. According to the calendar, the summer ought to reach its height about the 21st of June, but in reality it is some weeks later; June is a maiden month all through. It is not high noon in nature till about the first or second week in July. By the first of August it is fairly one o'clock. The lustre of the season

begins to dim, the foliage of trees and woods to tarnish, the plumage of the birds to fade, and their songs to cease; the hints of approaching fall are on every hand. How suggestive the thistle-down, for instance, one of the lightest things in nature, when it brushes lightly over our heads! The first snow-flake tells of winter not more plainly than this driving down foretells the approach of fall.

In the Fall the battles of the Spring are fought over again, beginning at the other or little end of the series. There is the same advance and retreat, with many feints and alarms, between the contending forces, that we witnessed in April and May. The Spring comes like a tide running against a strong wind; it is ever beaten back but ever gaining ground—with now and then a mad "push upon the land" as if to overcome its antagonist at one blow.

The cold from the north encroaches upon us in about the same fashion. In September or early in October it usually makes a big stride forward and blackens all the more delicate plants, and hastens the "mortal ripening" of the foliage of the trees, but it is presently beaten back again, and the genial warmth repossesses the land. Before long, however, the cold returns to the charge with increased forces, and gains much more ground.

The course of the seasons "never does run smooth," owing to the unequal distribution of land and water, mountain, wood, and plain.

An equal poise, however, is usually reached in our climate in October, but sometimes is most marked in November, forming the delicious Indian Summer. Then a truce is declared, and both forces, heat and cold, meet and mingle in friendly converse on the field. Day after day, and sometimes week after week, you cannot tell which way the current is setting. Indeed, there is no current, but the season seems to drift a little this way, or a little that, just as the breeze happens to freshen a little in one quarter or the other. This halcyon period of our autumn is supposed to have derived its name from the Indian, for like him, it is red and yellow and dusky; it is all gold by day and when the moon comes all silver by night. One seems then to be in an enchanted land, and to breathe the atmosphere of fable and romance. Not a smoke but a kind of shining radiance fills all the space.

This is the time of ripening of all forest fruits, when both old and young delight to be abroad in the woods. Things emerge and become conspicuous again. The trees attract all eyes as in May. The birds come forth from their summer haunts and imitate their spring reunions and rivalries; some of them sing a little after silence of months. The robins, meadow-larks, blue birds, sparrows, crows—all sport and call, and behave in a manner suggestive of Spring. The trout spawns. The streams are full again. The air is humid, and the moisture rises in the ground. Nature is breaking camp as in spring she was going into camp. The spring yearning and restlessness is represented in people by an increased desire to travel. Spring is the inspiration, Fall the expiration. Both seasons have their equinoxes, both their filmy, hazy air, their ruddy forest tints, their cold rains, their drenching fogs, their mystic moons; both have the same solar light and warmth, the same rays of sun; yet after all, how different the feelings which they inspire! One is the morning of life, the other the evening; one is youth, the other is age. The difference is not merely in us; there is a subtle difference in the air and in the influences which emanate upon us from the dumb forms of nature. All the senses report a difference. The sun seems to have burned out and grown feeble, and retreats to the south, because he can no longer face the cold and storms from the north. There is a growing potency about his beams in the Spring; a waning splendor about them in the Fall. One is the kindling fire; the other subsiding flame.

Does not the human frame yield to and sympathise with the seasons? Are there not more births in the Spring and more deaths in the Fall? In the Spring one vegetates. His thoughts turn to sap as it were. He makes new wood which does not harden till past midsummer. As Fall approaches the current mounts to the head again, but his thoughts do

not ripen till after there has been a frost.

A peculiar feature of our Fall may sometimes be seen of a clear afternoon, late in the season. Looking across the fields under the sinking sun, the ground appears to be covered with a shining veil of gossamer. A fairy net, invisible at mid-day, and which the position of the sun now reveals, rests upon the stubble, and upon the spears of grass, covering acres in extent,—the work of innumerable little spiders. The cattle walk through it, but do not seem to break it. Perhaps a fly would leave his mark upon it. At the same time stretching from the top of a stake in the fence, and leading off towards the sky, may be seen the cables of the "flying" spider,—a fairy bridge from the visible to the invisible. Occasionally seen against a deep mass of shadow, and enlarged by particles of clinging dust, they show quite plainly, and sag down like a stretched rope, or sway and undulate in the wind. A verse from the poet Walt Whitman, seems to exactly fit this scene:—

"A noiseless patient spider, I marked
where, in a little promontory, it
stood isolated.
Marked how, to explore the vacant vast
surrounding,
It launched forth, filament, filament, fla-
ment out of itself;
Ever unreeling them—ever tirelessly
spreading them.

"And you, O my soul, where you stand
surrounded,
Surrounded in measureless oceans of
space,
Ceaselessly musing, venturing, throwing,
seeking the spheres to connect them,
Till the bridge you need will be formed
Till the ductile anchor hold;
Till the gossamer thread you fling,
Catch somewhere, O my soul!"

No one can take a walk in the woods on a calm October day, without being deeply impressed by the great apparent waste of beauty and creative skill, seen in the faded leaves which rustle beneath his feet. Nature weaves and unweaves her web of loveliness each season, not in

order to mock us with delusive hopes, but to turn us from all things false and fleeting, and teach us to wait and prepare for the true love of our souls, which is found not in the passing things of earth, but in the abiding things of heaven. By the beauty of her autumn loveliness she is appealing to all that is deepest and truest in our spiritual nature, and through her fading flowers and her withering grass and all her fleeting glories, she is speaking to us words of eternal life, whereby our souls may be enriched and beautified for ever. We all do fade as a leaf; but it has been proved that even an annual leaf can be made perennial by grafting it on the twig of a tree, when it changes from a frail perishing leaf into a firm and persisting branch. So our leaf-like life, which must fade in the autumn of earth's doom, by being united through faith to Him whose name is the "Branch" will partake of His everlasting endurance; and nothing can separate us from His love.

The Scriptures represent age by the almond-tree which bears blossoms of the purest white. Then we have the Master's: "First the blade, and then the ear, and after that the full corn in the ear." The beauty of Spring, the splendor of Summer, but the glory of Autumn! Like Autumn in nature it is the crowning glory of our lives. Age may seem frightful to the young, who view it afar off, but it has no terror to them who see it near. It abounds with consolations and also with delights. Why speak of age in a mournful strain? It is beautiful, honorable, eloquent. Welcome the snow, for it is the emblem of peace and of rest. It is but a temporal crown which shall fall at the gates of Paradise to be replaced by a brighter and a better.

Our New Serial.

"Rebecca of Sunnyside farm," the story that made Kate Douglas Wiggin famous, is not "new," but it is so little known throughout our farming districts that we feel justified in using it as this winter's serial story. It is a story for young and old, sweet and wholesome

from start to finish. At an early date we hope to publish a biographical sketch of the writer herself, written by one of her personal friends, a Canadian, Mrs. Alice Blythe Tucker Wilcox, already well-known to our readers through her articles which have appeared from time to time in these pages.

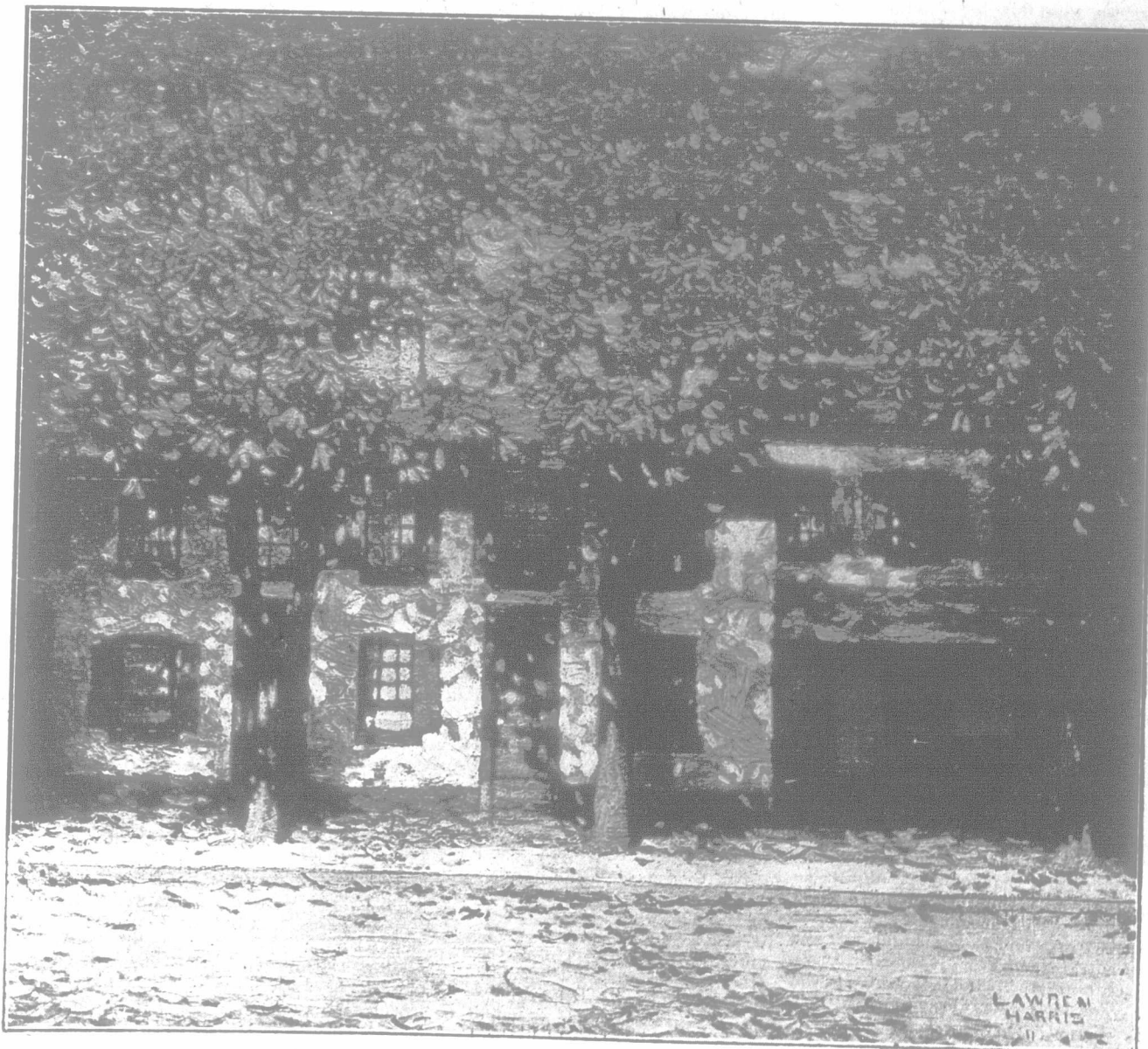
Some Old-Time Echoes.

ON TREK IN THE TRANSVAAL.

XI.

A BOER COURTSHIP.

"I wish you could have seen a Dutch wedding whilst you were in Pretoria," was once remarked to us. As we did not, I must tell what was told us of the manners and customs thereabout: "First catch your hare," applies as aptly to the preliminary step in matrimony as it does to its ditto in cookery. But after, what a dull, prosaic, dead-alive fashion does a young Boer maiden enter the toils! Dumbiedikes might have a Dutch changeling, or Sir Walter Scott might have visited South Africa in his dreams, otherwise how could he have pictured such a suitor? Fancy its being possible for it to be a matter of uncertainty, amidst a bevy of sisters, until the very handkerchief is thrown to one of them, which is the object of the swain's adoration! Yet such is the case usually, and it is harrowing to think of the pangs which might thus be caused to six or more maiden hearts, if each should have laid the flattering unction to her soul that she, and she alone, was the lodestar of love-sick "Pieter's" dreams. Not being a Mormon, "Pieter" (it saves an initial, and Pieter will serve our purpose as well as any other name) must choose one; and, in spite of taciturnity, who knows but that the cunning fellow has long made up his mind which sister he shall ask to become his vrow? His caution and pride alike deter him from making the venture at all, until he and his family have some assurance that she and her family are pretty safe to come to terms. Pieter is very young, but that is no obstacle to his success. Pieter is bashful; and if he were not, it is ordal



Houses, Richmond Street, Toronto.

From a painting by Lauren Harris, O. S. A., Toronto. Exhibited at Canadian National Exhibition, 1912.—The October colorings and sunlight effects in the original were very fine.

enough to render him so, when the actual moment has arrived for him to make his proposals in due form, and in person; for I need not say that if getting a wife depended upon Pieter's writing a love letter, he would undoubtedly end his days a bachelor.

Arrived at the house of his father-in-law-to-be, if fortune favors him, he "off-saddles" by invitation (you have no manners if you do so, be you who you may, uninvited), and enters the forehuis, or general room. He is got up regardless of expense, as far as his own clothes and his animal's accoutrements are concerned, and somewhat sheepishly he goes through the usual round of hand-shaking. Does he, or does he not, contrive to convey by that dumb magic, which can make even a hand-clasp eloquent, the whole tale of his hopes to the maiden he desires to win presently? Do not sayeth not, and the chances are that Pieter feels too many eyes upon him to risk even the little bit of comfort that tender finger-questioning might procure. Then, pity our poor Pieter as he sits patiently until bed-time comes, often not uttering a syllable, and then only to reply to questions apart as the poles from the object of his visit. But, supper and prayers over, he knows it must be now or never with him. If he is invited to remain, he is sure of the consent of the father and the mother; and here let me venture this little remark: woman's rights have never been agitated for or against in South Africa, that I know of; but this is probably because women have so full a share permitted them. No Dutch husband dreams of deciding anything in matters of business, or which can in the remotest degree affect the welfare of his family, without consulting his wife; and he thus realizes the truth of another good old adage, "Two heads are better than one." * * * Pieter, asked to remain, then takes the first step permitted him. He has managed to find out which of the doors leading out of the living-room (in a large Boer house there may be four or five) leads to that which she occupies. There he stands, or sits, if he is wise and there is anything to sit upon, until she passes in. "Now for it, Pieter; pluck up your courage; faint heart never won fair lady," neither will you, without a bolder front than you have been able to wear for these last few weary hours."

A whisper, and kind of a struggle, which is no struggle at all, and a "no," which is so like a "yes" that it will do just as well, and our Pieter has won the day; no, not the day, for it is night, and the question which he has asked, and which after all is equal to the question of questions, is whether she will "sit up" and keep company with him? If she has consented to do this, she has virtually consented to "sit up" with him as long as they both shall live. There is a primitive simplicity about this which robs it of all guile, and lest it shock the sensitive nerves of any tenderly-nurtured, dully-chaperoned young lady in this our England, where "such things would not be tolerated," let me assure her that our young folks have less chance of whispering their sweet nothings unheard, than any nineteen out of twenty engaged couples here, where more outward fences bristle around to guard them from the faintest appearance of even a harmless indiscretion. Pieter is human; so, given the opportunity, he would probably like to kiss Gretchen, and Gretchen would probably like him to kiss her, too; why shouldn't she? But think of the giggles of the five disappointed sisters, from the "ha, ha!" in sardonic tones of the one who really for awhile did think Pieter had peeped out of the corners of his eyes at her, more frequently than he ought to have done, consistently with his not choosing her after all, to the downright not-to-be-choked-down, bubbling-over laugh of the youngest of all, to whom the whole thing is simply a good joke, out of which she at least will take her share of fun. The high, raftered roof is a rare conveyer of sounds; therefore, oh! Pieter, and oh! Gretchen, muffle your kisses, or kiss not at all.

THEIR WEDDING DAY.

Pieter's trials are not ended yet, for here, as in more civilized lands, the bridegroom has the worst of it on his wedding day. Why should this be, I wonder? Their wedding day has come, and there is much to be done before

they subside into the private, humdrum, everyday life which lies before them, back in the old home—her home, for Pieter's wife takes him, not he her, to the old roof-tree, which might be made of Indiarubber, so unlimited are its powers of expansion. They will not start housekeeping for themselves; not they! Their flocks and their herds, the produce of the small number of ewes, heifers, etc., branded with the special mark of each in their babyhood, are now joint property, and it is only when their riches increase with these that at last they may, as comparatively middle-aged folks, with olive branches many, move off into a homestead of their own.

We will fancy the "Dorp," or town, where the ceremony is to be performed by their Dutch minister, or Predikant, to be Pretoria. According to the distance they live from the capital, they have taken from one to eight or ten nights on the road, their "royal" road to matrimony.

Arrived in the Plaas, or square, in which their church is its most prominent, but by no means most beautiful, object, the wedding party outspan, sending their oxen to graze outside the town, tended by a Kaffir herdsman, while they prepare for the great event which has brought them so far. The bride arrays herself as a bride is bound to do, veil, orange blossoms, and all; but beyond these, I doubt if she makes any more purchases by way of trousseau. Pieter, poor soul, hires his wedding garments, and a pain and weariness of the flesh are they to him. He is only thankful to know that as long as his Gretchen lives, he need never, no, never, suffer such discomfort more. Should she die, which, of course, he hopes she will not, why, then, you know—A Dutch widower considers three or four months a long and tedious time of mourning. What better compliment can he pay the dear helpmeet whom he has really loved and faithfully cherished after his stolid way for years, than to replace her as soon as possible?

PIETER IN BRIDEGROOM ARRAY.

Look at our Pieter, now; he would not know himself in the glass, did he possess one, and it is on the card that he may not. An unmitigated "topper," stove pipe, or whatever the real name of that unsightly head-covering, of which our civilized nations have never got the better, crowns him. His unaccustomed feet are stuffed into stiff, shiny-leather boots, instead of his dear old, easy-going "veldt schoons," of home manufacture; his hands into gloves, and the rest of his body is enveloped in a swallow-tail, black cloth coat, white waistcoat, and trousers of a size so accommodating that if they be hired by a lean man of ordinary height he must put up with their bagginess and take a reef in them somewhere to shorten them, so that a bigger man than he may wear them too if so disposed. The ceremony over, Pieter and Gretchen have to exhibit themselves to an admiring world in their new character as man and wife. Arm-in-arm they parade through the principal streets of the town, the husband taking the wife's arm, which may or may not be symbolic of the order of precedence which shall be their rule hereafter. H.A.B.

Hope's Quiet Hour.

God's Stenographers.

Whatever shall be given you in that hour, that speak ye: for it is not ye that speak, but the Holy Ghost.—St. Mark xiii.: 11.

A week or two ago a friend of mine showed me a letter from her niece—a girl in her "teens"—in which I saw these lovely words about myself: "I think she is one of God's stenographers." If there is one thing I want to be, it is that. Week after week the privilege is given to me of sending out God's messages. Week after week I go to Him and ask what particular message He wants to send to you through this Quiet Hour. How could I dare to write about His business unless He made it clear to me what He wanted said? Lately a letter reached me from one of our readers in Alberta, in which she thanked me for answering her question about prayer—a question which, she owned, she had never asked me. God hears questions of that kind; and, if He chooses, even a little child can bring His answer.

Long ago our Lord sent out His disciples, telling them to fear nothing when they were called upon to speak before rulers and kings. Though they were only ignorant men, they were God's messengers, and He not only supplied the message, but also the fitting words in which to deliver it. "I will give you a mouth and wisdom, which all your adversaries shall not be able to gainsay nor resist," He says, and "Whatsoever shall be given you in that hour, that speak ye: for it is not ye that speak, but the Holy Ghost."

Don't put your Bible on a shelf apart, and talk as though the Holy Ghost spoke only through prophets and apostles of old time. The Bible is the most up-to-date book (or books) that we possess. The prophets were not afraid to face bitterest opposition, because they were able to say: "Thus saith the Lord." When they spoke the truth, they knew that He Who is "The Truth" would make His words good.

Baruch wrote down "with ink in a book" the words of Jeremiah; and, when the king in his anger had burned the book, Jeremiah dictated all his words a second time to the scribe. Evidently, Baruch acted as Jeremiah's stenographer; but the prophet was himself writing from dictation, for he says that God had told him to take a roll of a book and write about the sin of his people and the certainty of punishment.

When Moses was told to deliver God's messages to the king of Egypt, he made many excuses. Perhaps he thought he was being very humble, but he was really looking at his own capabilities when he ought to have leaned on God. How modern those excuses, sound: "They will not believe me. . . . I am not eloquent. . . . I am slow of speech, and of a slow tongue." Plenty of similar excuses are put forward nowadays, when God tells His servants to deliver some of His messages. How utterly the excuses of Moses were swept aside by the reasonable declaration that He, Who only can give anyone speech or eloquence, would be with his mouth and teach him what to say. When, even then, Moses pleaded that some other messenger should be sent, we are told the anger of the LORD was kindled against him. If he was afraid to be God's spokesman to Pharaoh, at least he might venture to deliver the message committed to him to Aaron, his brother. Then again came the wonderful promise: "Thou shalt speak unto him, and put words in his mouth: and I will be with thy mouth, and with his mouth, and will teach you what ye shall do."

If the excuses are still being offered, so are the promises. God has still many messages that He wants men to receive, and He still chooses His messengers. Moses was looking after the sheep of another man—acting as a day laborer—when God told him to be His messenger to Egypt. That humble shepherd became one of the most famous men that have ever lived, because he conquered his timidity and went forth boldly as God's spokesman. The Hebrew prophets were great men, and accomplished splendid work. Why? Rauschenbusch says it was because "they looked open-eyed at the events about them, and then turned to the inner voice of God to interpret what they saw. They went to school with a living God, Who was then at work in his world, and not with a God who had acted long ago and put it down in a book."

Why can't we all learn that the God Who long ago sent out prophets and apostles with living messages, fresh from His own heart, is not only willing, but eager to speak through us—through our words and lives.

Lives speak more forcibly than words, taken as a whole, and no one ever knows how far the inspiration of unselfish living may travel. The poor widow, who cast into the treasury of God all that she possessed, may have thought that only God would ever know about her priceless gift—only a farthing—what good could that possibly do? But God can always work miracles through a willing instrument, and the widow's two mites have been a living inspiration to the world nearly two thousand years. She thought the world would know nothing about her self-sacrifice, so have many other women thought.

Last Sunday evening I was walking to church along a crowded city street. As

I passed two women who were talking together, I heard one say enthusiastically to the other: "She just turned in and helped!" That was a sermon in a sentence. The unknown woman who had won the admiration of the speaker was evidently living a life of willing service. She "turned in and helped" when she found an opportunity, not standing aside until something very grand came her way. She had no idea that her willing "self-donation" to work which had no actual claim on her, would be told as a memorial of her from the Atlantic to the Pacific. If she reads these lines, she probably will not recognize her own likeness. The widow who gave gladly into the hands of God her two mites, won thereby undying fame (in addition to the high privilege of inspiring countless thousands of men and women), and yet her name is still unknown. I am sure she would rather have it so, for she gave generously in order to glorify God, not in order to win glory for herself. If a writer employs a stenographer to note down his thoughts, the glory belongs to the author. Yet, if the author is very great, and his words are an inspiration to the world for all time, the stenographer feels that his office is one of great privilege. Who would not count it a high honor to have been the stenographer of Moses, Isaiah, or Shakespeare? What an unspeakable privilege it would have been to have the position of scribe in the little company of the Apostles, to note down the words of the Master of the world, for all generations of men to read. The stenographer of Christ! The stenographer of the Infinite GOD! That high privilege is yours and mine.

He has given me the great privilege of writing about Him every week, but I am not really called to be His stenographer any more than you are. St. Paul told the Corinthian disciples that they were "the epistle of Christ . . . written not with ink, but with the Spirit of the Living God." So, then, we are not only allowed to write the letters of God at His dictation, but we are expected to be His letters. Those who watch the everyday life of a servant of the Most High, naturally judge the Master by the servant. If we are cold and harsh and unlovely in character, we are causing God to be misjudged. When St. Philip revealed the noble yearning of his heart—the desire to know more of God—in his earnest request: "Lord, shew us the Father, and it sufficeth us," the patient yet pathetic answer was given: "Have I been so long time with you, and yet hast thou not known Me, Philip? he that hath seen Me hath seen the Father."

Every loving act, every loving word, every loving thought, is a revelation of the Father to his heart-hungry children. Perhaps thoughts may be the most far-reaching messages of all. The science of psychology is still in its infancy, but the possibility of conveying information telepathically—by "mind-reading"—seems to be an unquestioned fact, as much a reality as wireless telegraphy. Only God knows how far our thoughts can travel, and how much power they exercise. We may not be eloquent in speaking or writing, but we can convey God's messages far more swiftly than the lightning. Are we lazy or careless in exercising this high privilege? How terrible it is to scatter infection of soul-diseases by unbridled thoughts. We are either conveying God's messages or those of His Enemy. We are either helping forward His work or injuring it. We cannot be ciphers in the world's history. God does His greatest work "without observation." The harvest of fruit, grain, or vegetables, is not made suddenly. It comes into existence so secretly that no one can see a flower come out or an apple form.

Yet the seed changes into fruit—fruit which had no existence before—slowly, but surely. And so it is in things spiritual. Who woke up the spirit of brotherhood that has taken hold of men to-day? Why, God wanted that message delivered to this generation, and He dictated it to thousands of His listening stenographers. They told it out to the multitudes. LISTEN!

"We do not always know it when we have The privilege to be God's messengers, Nor who shall be His messengers to us." DORA FARNCOMB.

REBECCA OF SUNNYBROOK FARM — By Kate Douglas Wiggin.

(Serial rights secured from Houghton Mifflin Publishing Company, New York.)

CHAPTER I.
"We are Seven."

The old stage coach was rumbling along the dusty road that runs from Maplewood to Riverboro. The day was as warm as midsummer, though it was only the middle of May, and Mr. Jeremiah Cobb was favoring the horses as much as possible, yet never losing sight of the fact that he carried the mail. The hills were many, and the reins lay loosely in his hands as he lolled back in his seat and extended one foot and leg luxuriously over the dashboard. His brimmed hat of worn felt was well pulled over his eyes, and he revolved a quid of tobacco in his left cheek.

There was one passenger in the coach, a small dark-haired person in a glossy buff calico dress. She was so slender and so stiffly starched that she slid from space to space on the leather cushions, though she braced herself against the middle seat with her feet, and extended her cotton-gloved hands on each side, in order to maintain some sort of balance. Whenever the wheels sank farther than usual into a rut, or jolted suddenly over a stone, she bounded involuntarily into the air, came down again, pushed back her funny little straw hat, and picked up or settled more firmly a small pink sunshade, which seemed to be her chief responsibility, unless we except a bead purse, into which she looked whenever the condition of the roads would permit, finding great apparent satisfaction in that its precious contents neither disappeared nor grew less. Mr. Cobb guessed nothing of these harassing details of travel, his business being to carry people to their destinations, not, necessarily, to make them comfortable on the way. Indeed, he had forgotten the very existence of this one unnoteworthy little passenger.

When he was about to leave the post office in Maplewood that morning, a woman had alighted from a wagon, and coming up to him, inquired whether this were the Riverboro stage, and if he were Mr. Cobb. Being answered in the affirmative, she nodded to a child who was eagerly waiting for the answer, and who ran towards her as if she feared to be a moment too late. The child might have been ten or eleven years old perhaps, but whatever the number of her summers, she had an air of being small for her age. Her mother helped her into the stage coach, deposited a bundle and a bouquet of lilacs beside her, superintended the "roping on" behind of an old hair trunk, and finally paid the fare, counting out the silver with great care.

"I want you should take her to my sisters' in Riverboro," she said. "Do you know Mirandy and Jane Sawyer? They live in the brick house."

Lord bless your soul, he knew 'em as well as if he'd made 'em!

"Well, she's going there, and they're expecting her. Will you keep an eye on her, please? If she can get out anywhere and get with folks, or get anybody in to keep her company, she'll do it. Good-by, Rebecca; try not to get into any mischief, and sit quiet, so you'll look neat an' nice when you get there. Don't be any trouble to Mr. Cobb.—You see, she's kind of excited.—We came on the cars from Temperance yesterday, slept all night at my cousin's, and drove from her house—eight miles it is—this morning."

"Good-by, mother, don't worry; you know it isn't as if I hadn't traveled before."

The woman gave a short sardonic laugh, and said in an explanatory way to Mr. Cobb, "She's been to Wareham and stayed over night; that isn't much to be journey-proud on!"

"It was traveling, mother," said the child eagerly and willfully. "It was leaving the farm, and putting up lunch in a basket, and a little riding and a little steam cars, and we carried our nightgowns."

"Don't tell the whole village about it, if we did," said the mother, interrupting the reminiscences of this experienced voyager. "Haven't I told you before," she whispered, in a last attempt at disci-

pline, "that you shouldn't talk about nightgowns and stockings and—things like that, in a loud tone of voice, and especially when there's men folks round?" "I know, mother, I know, and I won't. All I want to say is"—here Mr. Cobb gave a cluck, slapped the reins, and the horses started sedately on their daily task—"all I want to say is that it is a journey when"—the stage was really under way now and Rebecca had to put her head out of the window over the door in order to finish her sentence—"it is a journey when you carry a night-gown!"

The objectionable word, uttered in a high treble, floated back to the offended ears of Mrs. Randall, who watched the stage out of sight, gathered up her packages from the bench at the store door, and stepped into the wagon that had been standing at the hitching-post. As she turned the horse's head towards home she rose to her feet for a moment, and shading her eyes with her hand, looked at a cloud of dust in the dim distance.

small shape hanging as far out of the window as safety would allow. A long black braid of hair swung with the motion of the coach; the child held her hat in one hand and with the other made ineffectual attempts to stab the driver with her microscopic sunshade.

"Please let me speak!" she called. Mr. Cobb drew up the horses obediently.

"Does it cost any more to ride up there with you?" she asked. "It's so slippery and shiny down here, and the stage is so much too big for me, that I rattle round in it till I'm 'most black and blue. And the windows are so small I can only see pieces of things, and I've 'most broken my neck stretching round to find out whether my trunk has fallen off the back. It's my mother's trunk, and she's very choice of it."

Mr. Cobb waited until this flow of conversation, or more properly speaking, this flood of criticism, had ceased, and then said jocularly:—

"You can come up if you want to; there ain't no extry charge to sit side

"Only two hours," she sighed. "That will be half-past one; mother will be at cousin Ann's, the children at home will have had their dinner, and Hannah cleared all away. I have some lunch, because mother said it would be a bad beginning to get to the brick house hungry and have aunt Mirandy have to get me something to eat the first thing.—It's a good growing day, isn't it?"

"It is, certain; too hot, most. Why don't you put up your parasol?"

She extended her dress still farther over the article in question as she said, "Oh, dear no! I never put it up when the sun shines; pink fades awfully, you know, and I only carry it to meetin' cloudy Sundays; sometimes the sun comes out all of a sudden, and I have a dreadful time covering it up; it's the dearest thing in life to me, but it's an awful care."

At this moment the thought gradually permeated Mr. Jeremiah Cobb's slow-moving mind that the bird perched by his side was a bird of very different feather from those to which he was accustomed in his daily drives. He put the whip back in its socket, took his foot from the dashboard, pushed his hat back, blew his quid of tobacco into the road, and having thus cleared his mental decks for action, he took his first good look at the passenger, a look which she met with a grave, childlike stare of friendly curiosity.

The buff calico was faded, but scrupulously clean, and starched within an inch of its life. From the little standing ruffle at the neck the child's slender throat rose very brown and thin, and the head looked small to bear the weight of dark hair that hung in a thick braid to her waist. She wore an odd little vized cap of white leghorn, which may either have been the latest thing in children's hats, or some bit of ancient finery furnished up for the occasion. It was trimmed with a twist of buff ribbon and a cluster of black and orange porcupine quills, which hung or bristled stiffly over one ear, giving her the quaintest and most unusual appearance. Her face was without color and sharp in outline. As to features, she must have had the usual number, though Mr. Cobb's attention never proceeded so far as nose, forehead, or chin, being caught on the way and held fast by the eyes. Rebecca's eyes were like faith,—the substance of things hoped for, the evidence of things not seen. Under her delicately etched brows they glowed like two stars, their dancing lights half hidden in lustrous darkness. Their glance was eager and full of interest, yet never satisfied; their steadfast gaze was brilliant and mysterious, and had the effect of looking directly through the obvious to something beyond, in the object, in the landscape, in you. They had never been accounted for, Rebecca's eyes. The school teacher and the minister at Temperance had tried and failed; the young artist who came for the summer to sketch the red barn, the ruined mill, and the bridge ended by giving up all these local beauties and devoting herself to the face of a child,—a small, plain face, illuminated by a pair of eyes carrying such messages, such suggestions, such hints of sleeping power and insight, that one never tired of looking into their shining depths, nor of fancying that what one saw there was the reflection of one's own thought.

Mr. Cobb made none of these generalizations; his remark to his wife that night was simply to the effect that whenever the child looked at him she knocked him galley-west.

"Miss Ross, a lady that paints, gave me the sunshade," said Rebecca, when she had exchanged looks with Mr. Cobb and learned his face by heart. "Did you notice the pinked double ruffle and the white tip and handle? They're ivory. The handle is scarred, you see. That's because Fanny sucked and chewed it in meeting when I wasn't looking. I've never felt the same to Fanny since." "Is Fanny your sister?" "She's one of them." "How many are there of you?" "Seven. There's verses written about seven children:—

"'Quick was the little Maid's reply,
O master! we are seven!'

I learned it to speak in school, but the



"She Wore an Odd Little Vized Cap of White Leghorn."

"Mirandy'll have her hands full, I guess," she said to herself; "but I shquidn't wonder if it would be the making of Rebecca."

All this had been half an hour ago, and the sun, the heat, the dust, the contemplation of errands to be done in the great metropolis of Milltown, had lulled Mr. Cobb's never active mind into complete oblivion as to his promise of keeping an eye on Rebecca.

Suddenly he heard a small voice above the rattle and rumble of the wheels and the creaking of the harness. At first he thought it was a cricket, a tree toad or a bird, but having determined the direction from which it came, he turned his head over his shoulder and saw a

o' me." Whereupon he helped her out, "boosted" her up to the front seat, and resumed his own place.

Rebecca sat down carefully, smoothing her dress under her with painstaking precision, and putting her sunshade under its extended folds between the driver and herself. This done she pushed back her hat, pulled up her darned white cotton gloves, and said delightedly:—

"Oh! this is better! This is like traveling! I am a real passenger now, and down there I felt like our setting hen when we shut her up in a coop. I hope we have a long, long ways to go?"

"Oh! we've only just started on it," Mr. Cobb responded genially; "it's more'n two hours."

scholars were hateful and laughed. Hannah is the oldest, I come next, then John, then Jenny, then Mark, then Fanny, then Mira."

"Well, that is a big family!"

"Far too big, everybody says," replied Rebecca, with an unexpected and thoroughly grown-up candor that induced Mr. Cobb to murmur, "I swan!" and insert more tobacco in his left cheek.

"They're dear, but such a bother, and cost so much to feed, you see," she rippled on. "Hannah and I haven't done anything but put babies to bed at night and take them up in the morning for years and years. But it's finished, that's one comfort, and we'll have a lovely time when we're all grown up and the mortgage is paid off."

"All finished? Oh, you mean you've come away?"

"No, I mean they're all over and done with; our family's finished. Mother says so, and she always keeps her promises. There hasn't been any since Mira, and she's three. She was born the day father died. Aunt Miranda wanted Hannah to come to Riverboro instead of me, but mother couldn't spare her; she takes hold of housework better than I do, Hannah does. I told mother last night if there was likely to be any more children while I was away I'd have to be sent for, for when there's a baby it always takes Hannah and me both, for mother has the cooking and the farm."

"Oh, you live on a farm, do ye? Where is it?—near to where you got on?"

"Near? Why, it must be thousands of miles! We came from Temperance in the cars. Then we drove a long way to cousin Ann's and went to bed. Then we got up and drove ever so far to Maplewood, where the stage was. Our farm is away off from everywhere, but our school and meeting-house is at Temperance, and that's only two miles. Sitting up here with you is most as good as climbing the meeting-house steeple. I know a boy who's been up on our steeple. He said the people and cows looked like flies. We haven't met any people yet, but I'm kind of disappointed in the cows;—they don't look so little as I hoped they would; still (brightening) they don't look quite as big as if we were down side of them, do they? Boys always do the nice splendid things, and girls can only do the nasty dull ones that get left over. They can't climb so high, or go so far, or stay out so late, or run so fast, or anything."

Mr. Cobb wiped his mouth on the back of his hand and gasped. He had a feeling that he was being hurried from peak to peak of a mountain range without time to take a good breath in between.

"I can't seem to locate your farm," he said, "though I've been to Temperance and used to live up that way. What's your folks' name?"

"Randall. My mother's name is Aurelia Randall; our names are Hannah Lucy Randall, Rebecca Rowena Randall, John Halifax Randall, Jenny Lind Randall, Marquis Randall, Fanny Ellsler Randall, and Miranda Randall. Mother named half of us and father the other half, but we didn't come out even, so they both thought it would be nice to name Mira after aunt Miranda in Riverboro; they hoped it might do some good, but it didn't, and now we call her Mira. We are all named after somebody in particular. Hannah is Hannah at the Window Binding Shoes, and I am taken out of Ivanhoe; John Halifax was a gentleman in a book; Mark is after his uncle Marquis de Lafayette that died a twin. (Twins very often don't live to grow up, and triplets almost never—did you know that, Mr. Cobb?) We don't call him Marquis, only Mark. Jenny is named for a singer and Fanny for a beautiful dancer, but mother says they're both misfits, for Jenny can't carry a tune and Fanny's kind of stiff-legged. Mother would like to call them Jane and Frances and give up their middle names, but she says it wouldn't be fair to father. She says we must always stand up for father, because everything was against him, and he wouldn't have died if he hadn't had such bad luck. I think that's all there is to tell about us," she finished, seriously.

"Land o' Liberty! I should think it was enough," ejaculated Mr. Cobb. "There wasn't many names left when your mother got through choosin'! You've got a powerful good memory! I

guess it ain't no trouble for you to learn your lessons, is it?"

"Not much; the trouble is to get the shoes to go and learn 'em. These are spandy new I've got on, and they have to last six months. Mother always says to save my shoes. There don't seem to be any way of saving shoes but taking 'em off and going barefoot; but I can't do that in Riverboro without shaming aunt Mirandy. I'm going to school right along now when I'm living with aunt Mirandy, and in two years I'm going to the seminary at Wareham; mother says it ought to be the making of me! I'm going to be a painter like Miss Ross when I get through school. At any rate, that's what I think I'm going to be. Mother thinks I'd better teach."

"Your farm ain't the old Hobbs place, is it?"

"No, it's just Randall's Farm. At least that's what mother calls it. I call it Sunnybrook Farm."

"I guess it don't make no difference what you call it so long as you know where it is," remarked Mr. Cobb sententiously.

Rebecca turned the full light of her eyes upon him reproachfully, almost severely, as she answered:—

"Oh! don't say that, and be like all the rest! It does make a difference what you call things. When I say Randall's Farm, do you see how it looks?"

"No, I can't say I do," responded Mr. Cobb uneasily.

"Now, when I say Sunnybrook Farm, what does it make you think of?"

Mr. Cobb felt like a fish removed from his native element and left panting on the sand; there was no evading the awful responsibility of a reply, for Rebecca's eyes were searchlights, that pierced the fiction of his brain and perceived the bald spot on the back of his head.

"I s'pose there's a brook somewhere near it," he said timorously.

Rebecca looked disappointed but not quite disheartened. "That's pretty good," she said encouragingly. "You're warm but not hot; there's a brook, but not a common brook. It has young trees and baby bushes on each side of it, and it's a shallow chattering little brook with a white sandy bottom and lots of little shiny pebbles. Whenever there's a bit of sunshine the brook catches it, and it's always full of sparkles the livelong day. Don't your stomach feel hollow? Mine

(Continued on page 1819.)

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.]

Wool Slippers.

For size 5 or 6, get 1 skein Fleisher's 4-fold white Germantown zephyr and 2 of blue. Use a heavy steel or bone hook.

Crochet ch. of 17, turn and s. c. into 4th st. of ch. and s. c. into next 7 of ch., 3 s. c. into next st. of ch., and 1

s. c. into each of next 8 st. of ch., making 8 each side of 3 s. c., ch. 1; turn.

2nd row.—1 s. c. into each st., taking up back loop of st. This makes the rib. Ch. 1; turn.

3rd row.—1 s. c. into each back of first 9, 3 s. c. into 10th st., 1 s. c. into each back of last 9, ch. 1; turn.

4th row.—Repeat 2nd and 3rd rows, alternately, until there are 17 ribs having 24 st. on each side of center st., ch. 1, turn, and s. c. into 17 st.,

and work back and forth until strip goes around half of sole; take up 17 st. on other side of vamp, and work back and forth until both sides go around sole.

Sew to sole. Sew knitted white top on, and double yarn and crochet long chain of black and blue each and twist around edge.

For the Knitted Top.—Cast on knitting needles 20 st.

1st row.—K across plain.

2nd row.—K. 4 plain, purl (seam) 6, k. 10 plain.

3rd row.—Repeat 1st row.

4th row.—Repeat 2nd row.

5th row.—Repeat 1st row.

6th row.—Repeat 2nd row.

7th row.—Repeat 1st row.

8th row.—Repeat 2nd row.

9th row.—Repeat 1st row.

10th row.—Repeat 2nd row.

11th row.—K. 10 plain, take next 3 off on safety-pin or wire hairpin, k. next 3 and slip first 3 back on needle, k. them. This makes the twist. K. next 4 plain.

12th row.—Repeat 2nd row and k. 1st and 2nd row, alternately, until you have 15 rows more; then repeat from 11th row until you have a strip long enough to go around top of slipper. Sew to top on wrong side.

Of Gardens.

(Concluded.)

Dear Ingle Nook Friends,—I expected to finish my garden chat last time, but found it necessary to step out to make room for something else. However, "better late than never," is it not?

We were discussing, were we not, when we were interrupted, the necessity for starting the garden in the fall, and I had been telling you something about that delightful book of Mrs. Wright's, "The Garden, You and I"?

Between you and me, I am not sorry to meander along on the subject a little longer. I don't think there is any more delightful topic for conversation in the world than gardens,—just gardens.

On the way down to the office this afternoon (I am writing this on September 23rd, a delightful, "golden" autumn day), I could not but notice the difference which gardens, their planning and care, make in a place. One could tell at a glance, almost, just by their surroundings, the houses that were inhabited by tenants and those which were owned by those who occupied them.

The former were just houses, set on patches of ground. Probably the grass was clipped—for respectable folk must be tidy—probably there were a few pots of geraniums on the steps, and a hanging-basket or two,—but the love-touches were so sadly lacking. These places were just stopping-places. Everything looked as though there was a feeling of having to be ready at any time to pull up stakes and away, flower-pots, hanging-baskets, and all.

But the permanent houses! Ah, there was where you could see the love-touches; the clematis stealing along the front of the veranda, the climbing rose at the end of it where the sun could strike; the shrubbery along walk or border; the tall masses of perennials, phlox, and day lilies, and golden glow, and what not, massed here and there. . . . Of course, one place looked vastly more

homelike and attractive than another, but that was wholly because of a difference in taste; always some attempt had been made.

The most beautiful garden of all, perhaps, was one belonging to an old man who is close upon his eightieth year,—an old man with a still robust frame, and a clear, blue eye, and a long white beard that makes him look like a venerable patriarch as he digs and works among his flowers. What a gentle hand is his! How the flowers seem to know

his love and respond to it! And yet, if you asked him the cause of his success, he would probably tell you, "Plenty of fertilizer, plenty of water, and plenty of cultivation."

The loveliest thing of all in his garden, as I write, is, I think, a splendid clump of fall anemones, waxy white, and tall as the fence. Nearby are a few zinnias, just about as tall; beyond are masses of single dahlias, deep crimson in color; while over in another part of the garden is a perfect blaze of color,—"sunrise" amaranth, with every leaf glowing like fire, deep crimson at the base of the plant, but shading off through all the tones of red to a vivid rose at the top. Surely this plant is wonderful, and just now, wonderfully harmonious with the warm colorings of the autumn.

To return to "The Garden, You and I," here are a few hints given therein, which may appeal to you for your own garden:

Says Mrs. Wright, an attractive "fence" may be made of white birches, set ten feet apart, with a hedge of barberry between. One more quickly managed, one that goes right to the heart of anyone who likes "wild" effects, is, simply a well-built stone wall covered with vines,—clematis, wild grapes, Virginia creeper,—what you will.

If you wish to have ferns, she says, be sure to transplant their "haunt" with them. Put the royal fern in wet places; the cinnamon fern, the "interrupted" fern and the common brake in moist, deep soil; the lady-fern, the hay-scented fern, the maiden-hair, and rock polypody, in situations similar to that in which you found them growing. "We do not treat our native ferns with sufficient respect," says our author; "they are very effective in home grounds when well placed."

Ferns may be transplanted at any time now, if carefully handled.

August, Mrs. Wright found to be the best time for transplanting evergreens; our native evergreens, by the way, appeal to her much more strongly than imported or "freak" specimens.

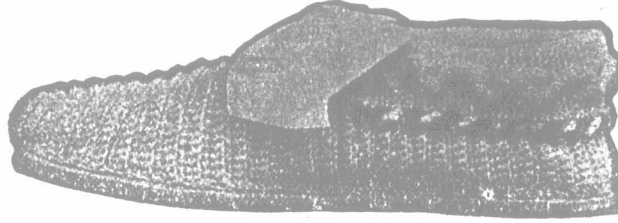
The shrubs she recommends—these may be set out either in fall or spring, but preferably in spring—are daphne (pink and white), Japanese quince (red and pink), double-flowering almond and plum, white spiraea, syringa, Japanese barberry, snowball, weigelia, and summer-flowering hydrangea. I have not mentioned lilacs in my notes jotted down from the book, but surely she did not forget them,—lilacs, indispensable to every "homey" old garden.

Someone scolded me a bit once, jokingly, for not liking rockeries. Now, I don't object to rockeries in some situations, and when accomplished with a nicety of skill. To form a connecting link, for instance, with a rocky ledge, if one chances to be near one's garden, a well-made rockery would be delightful; or to give a "touch" to a stream or pond, if one were near enough; or to fill a corner leading to a stone wall. But I must confess that I cannot grow enthusiastic over a little round heap of stones planted with flowers foreign to stony places, and set in a closely-trimmed lawn, especially if the flowers are scrawny and half-starved looking as they so often are in rockeries.

Of course, it is all a matter of taste. Here, however, is what Mrs. Wright says about them: "I always tremble for the lowlander who, down in the depth of his nature, has a prenatal hankering for rocks, because he is apt to build an undigested rockery! . . . The awful rockery of the flat garden is like unto a nest of prehistoric eggs that have been turned to stone, from the interstices of which a few wan vines and ferns protrude somewhat, suggesting the garnishing for an omelet."

Another delightful, delightful, delightful book, that touches a great deal upon gardens, is "My Solitary Summer," written by the Countess von Arnim, whom most of you already know as the author (why be silly about gender in such things, and say "authoress"!) of the charming "Elizabeth and Her German Garden."

Elizabeth loves books and flowers and



(By courtesy of the Corticelli Silk Co.)

children, and she tells about them all in this little book which I have just finished reading. In her library she has, she says, a round pillar encircled by shelves which contain her best-loved books, and among them are many on gardening and garden lore.

It is a happy, loving practice, this grouping together of one's best-loved books. When my little collection has completely materialized—it is just in state of up-building now—very surely it will contain every one of "Elizabeth's" books, every one of Mabel Osgood Wright's, and—oh, yes, to finish the garden group, Charles Dudley Warner's, "My Summer in a Garden." One needs to laugh sometimes, even over one's mistakes and one's hardships.

"Elizabeth," by the way, loves roses best of all the flowers, and sweet-peas next, and she has great plots planted with both.

Next day, I will try to tell you a little of what she says about her babies.

JUNIA.

DYEING.

Dear Junia,—Like so many others, I am coming for help. I have a piece of heavy, red silk, which I should like to dye a dark green before making up.

Could you tell me what dye I had better use, and whether the dye would injure the silk?

Would I have to use another color, or would dark-green dye color it all right?

SUBSCRIBER'S DAUGHTER.

Grattan, Renfrew Co., Ont.

If the piece is pure silk, any of the popular dyes, Diamond, Dyola, or Maypole Soap, should do the work, if directions are carefully followed. Shantung or pongee had better be sent to a professional dyer. The red should "take" a very dark green color. Sometimes dyeing seems to make the silk "rotten," but possibly because the washing, required immediately after the dyeing, has not been thorough enough.

REMOVING STAINS.

Dear Junia,—Although I have been reading this paper for some time, and have received many useful and helpful hints from it, I have never written before, but I read with much pleasure the letters others have written.

I have always lived on a farm, and enjoy being out among the flowers and fields very much. Many kinds of fruit and berries grow on our farm. The cherries have been very thick this year, and I would be very grateful if you could tell me of a way in which to remove cherry stains from light clothes.

With best wishes to the Ingle Nook friends, I am yours sincerely.

N. B. GOLDEN LOCKS.

If the stained material is white, a cupful of Javelle water put into the boiler in which the article is boiled will probably remove the stain. If not white, better dye the material to a deeper shade.

CLEANING VELVET—STUFFING FOR FOWL.

Dear Junia,—May I, too, come with my troubles, or, at least, with one or two of them? I am afraid if I were to bring them all to you, sympathetic and resourceful as you are, I would overwhelm you; for I am a transplanted town-girl, an ex-school teacher, and with a fairly-good education as far as mathematics, history, and the languages go, but very ignorant of the ways and means of the home-maker. But I am not discouraged, and if I continue to improve as much in the next six years as I have in the six years that have passed since I was married, I shall yet win that noble title (humble as it may seem to some), "A good farmer's wife." That really, though, should be "A farmer's good wife," for I think I can claim the other already.

Here is the first of my worries: I have a blue-velvet dress on which I spilt tea with cream in it last winter. It left a nasty, greasy spot, which sponging with ammonia has not removed.

I have never had good success with dressing for fowls. Have used a couple of recipes, but always with the same results,—a heavy, soggy mixture, disagreeing to both eye and palate.

Can you give me a recipe for drop

cookies, with fruit and nuts, but no molasses.

I think your "Mending Basket" is a good institution. Perhaps I will lend a hand this winter when the rush of work is over. At present I am busy doing up tomatoes, making chili sauce, pickles, and jelly. Next week will bring the threshers, and after that it will be sewing and house-cleaning. We have quite a large orchard, and I like to arrange my work so that I can get out to help pick apples for a few days. Last fall I took my baby, then only a year old, back in his go-cart, and spent an afternoon in the orchard. How I enjoyed it, and how hungry I was for my supper!

I must close, and will take as signature those letters with which we name our public buildings and all our doings here. With thanks for your help.

U. E. L.

Adolphustown, Ont.

Delighted to meet you, "U. E. L.," and hope you will come again. Try taking out the greasy spot with benzine or gasoline—using all precautions to keep the fluid and its vapors away from fires, or lights. It is probably the cream that is causing the difficulty, and gasoline or benzine will always remove grease. Put blotting paper under the spot, and work the liquid towards the center with a rag to prevent the formation of a "ring." If one appears when the operation is finished, hold the part, with the nap of the velvet upward, over the steam of a "madly"-boiling tea-kettle.

Try this stuffing for chicken or turkey: Three cups grated stale bread, 2 table-spoons butter, 1 tablespoon chopped parsley, 2 level teaspoons salt, 1/2 teaspoon pepper, 1 teaspoon chopped onion. Rub the butter into the crumbs and let them stand an hour, then add the rest of the seasoning. For turkey, some would omit the onion.

TO REMOVE MILDEW.

For Mrs. W. M., Huron Co., Ont.:—If the goods are colored, soak for 24 hours or more in sour milk or buttermilk, then rinse and wash in strong soap-suds. If the goods are white, moisten the spots repeatedly with Javelle water, well diluted, rinse, then wash in strong soap-suds, not too hot. Another method is to apply the following: Mix 1 spoon salt, 2 spoons soft soap, 2 of powdered starch, and the juice of a lemon. Put on both sides of the stain, then lay the article on the grass, day and night, until the mildew disappears.

PREPARING FOR WINTER.

"Subscriber," who asked for points on this subject, will find several in the "Scrap Bag" of this and of recent issues. The recipes that have been given for pickling, canning, etc., also come under this head.

HALLOWE'EN PARTY.

Dear Editor,—Can you give me some suggestions, through your columns, for a hallowe'en party? The "kiddies," aged fourteen and fifteen, respectively, have been promised a party for that evening, and are anxious to make it as unique as possible. Can you give me a few hints as to decorating the house suitably, also some entertaining games for them to play? The hallowe'en spirit of fun and mischief should pervade the whole affair, and I was wondering whether it would be a good idea to ask the youngsters to come in different disguises to represent some historical character, or the title of a book, or something of the sort. The Jack-o'-lantern will, of course, be conspicuous, and can be used as effectively in the drawing-room as anywhere.

Apologizing for troubling you, and awaiting your reply through the Department you represent.

M. T. Lambton Co., Ont.

Write the invitations on yellow paper, and seal each with a cat or an owl cut out of black paper. Decorate the house with pumpkin lanterns, corn stalks, and strings of red apples. If you choose to go to the expense, you can buy all sorts of hallowe'en decorations all ready for the putting up,—witches, black cats, and all,—but if you are very clever, you can cut these out of black paper and use them for decorating both walls and

tables. If you paste green tissue paper over the eyes of the Jack-o'-lanterns you will find that they will shed a more ghostly light.

Now for the entertainment: How would it do for you to have a ghost party? Have the guests arrive swathed in sheets and pillow-cases, and have them shake hands with one-another as they enter the drawing-room, each trying to guess who the others are. If you don't object to dancing, let them have a square dance before taking off the sheets, but any moving-about game will do instead.

Of course, you will have all the old hallowe'en games, such as biting apples from the ends of strings, bobbing for them as they float in a tub of water, etc. As the children are so young, it may not be well to encourage "fate" games, but here is one that will cause plenty of fun. Fill a huge pumpkin rind with tiny parcels tied with loops, and let the children fish for them in turn with a little rod and hook on a line. The parcels may contain "fortunes" written in booklets, or sealed inside of walnut shells,—fortunes of the funny, not of the sentimental order. A few prize souvenirs may be included if you like, and some packages of candies which are to be "shared up."

A peanut hunt, and a merry game of blind-man's buff in which the catcher must wear a witch's peaked cap, should end a lively evening. "Kiddies" of fourteen and fifteen usually like to be on the move; quiet games have few attractions for them.

Having the guests come disguised to represent some "character" would be delightful, if your young folk are of a studious turn; but it would not be an especially "hallowe'ny" idea, would it? Why not keep it for another time?

The Scrap Bag.

TENDER ROSES AND VINES.

Wrap straw or matting about half-hard roses, tying it well with ropes, before hard frosts come. Tender vines may be protected in this way, but a still better plan is to cut them from their supports, lay them down, and cover them with loose straw or earth.

PROTECTING FLOWER BEDS.

Beds in which bulbs have been planted should be covered with clean straw, leaves, or evergreen branches, for winter protection. To "turn" the rain, some cover the rows, after placing the straw over them, with inverted troughs made of boards. Loose leaves or straw may be held down by branches pruned from trees. Most of the hardy perennials, if in a sheltered place, need no covering, but if exposed so that the snow will blow off, or in a position which submits them to frequent thawings and freezings, they are the safer if a protecting cover be given. Never put manure, or even straw manure, on bulb beds. The latter may, however, be used with safety, and even with benefit, along the borders where "perennials" have been growing, i. e., perennial plants with fibrous roots.

TOMATOES.

Most people know that green tomatoes, if of considerable size, will ripen indoors, provided the plants have been pulled before frost, and hung on nails. If the green fruit is carefully picked off, and each tomato wrapped in paper and packed in baskets stored in a dry, cool place, it will ripen more slowly, and so a succession of ripe tomatoes may be kept for several weeks.

CLEANING NICKEL.

Rub nickel tea-kettles, tea-pots, etc., with a soft cloth dipped in kerosene.

The college instructor should take due pains to practice what he preaches.

One member of a class in English composition brought his theme to the professor after recitation hour, in order that the professor might read a marginal correction which he had written, and which the pupil had been entirely unable to make out.

"Why," explained the professor, "that says, 'Write more plainly.'"—St. Paul Despatch.

News of the Week.

CANADIAN.

Sir Charles Moss, Chief Justice of the Ontario Court of Appeal, died in Toronto on October 11th. He was in his 73rd year.

Seven hundred farmers of Yarmouth Township, Elgin Co., Ont., have petitioned the Hydro-Electric Commission for Niagara power.

The city of Ottawa is beset with actions for recovery of damages instituted by recent typhoid-fever patients, whose illness was due to carelessness of inspection of the water system. Gas bills for boiling of the water to make it harmless, are also being presented.

The West China Educational Union, made up of the Methodists of Canada and the United States, the Baptists of the United States, and the Friends of England, are uniting to establish a University at Cheng-tu, China.

BRITISH AND FOREIGN.

The Nobel Prize for Medicine for this year (\$39,000) has been awarded to Dr. Alexis Carrel, of the Rockefeller Institute, New York. He was born in France in 1873.

Montenegro, the smallest of the Balkan States, last week formally declared war against Turkey, and advanced on the road to Scutari, dislodging the Turks from two positions. Skirmishes also took place along the Servian and Bulgarian frontiers. On October 10th, the Austro-Hungarian Foreign Minister, Count Von Berchtold, declared, in the Hungarian Diet, that Austria is prepared to diet her interests in the Balkans at all hazards. The announcement caused a sensation in Europe, where some fear is expressed that the Balkan conflagration may involve the Powers. Upon the same day the Powers presented a collective note inviting Turkey to discuss schemes for reform in Macedonia, and it was given to be understood that no change of territory, whichever party shall succeed in being victorious, will be tolerated. On October 14th, the Balkan States replied rejecting intervention. Developments are anxiously awaited.

A Song of the Scottish Border.

This is the land of clean winds blown From the white-capped Solway sea; Of wide hill-pastures fenced with stone, Of fields of fallow and lea; Of curlews crying above the moss Where the wild blackfaced roam; Of rivers leaping the cauld's across, In cloaks of a snow-white foam.

This is the realm of Border raids, And hoof-tracks over the hill; The rusted helms, the broken blades, You may dig from the peat-moss still. You may find the trace of a South-bound road In the dip of a drowsy glen; And the fire in their grandsires' veins that flowed, You will find in our Border men.

This is the land where sweet notes throng Like seagulls over the sea; The sovereign land of ancient song, And age-old balladry; The home of Hogg, and the home of Scott, And of many a minstrel king; Of names that are dear in every cot, And in every palace ring.

There may be a region fairer yet, With hills and vales more fine, But never a spot in this Empire set, So girded with song as mine. True is the tribute of praise one brings, But—the songs of the Past still stand, And still ye may wake on their worn old strings The harps of the Borderland! —Will Ogilvie, in T. P.'s Weekly.

"My Winter Suit and My Daughter's Best Dress Cost Me \$2.20"

"I have used Diamond Dyes for years, but I do think I ought to tell you of what I did this fall.

"My daughter is 9 years old and has begun to go to children's parties. I do so want her to be smartly dressed, and she takes a pride in herself.

"I saw such a pretty effective child's dress in the Magazine, sent for the pattern and then looked over my own clothes. I found a cream voile dress that was getting out of style. I ripped this up, dyed it dark blue, bought a yard of white French flannel for 50 cents, for the collar, yoke, cuffs, and trimming, and had no trouble in making it exactly like the illustration, and it's the smartest little dress she has ever had.

"For my own extra suit I made over a white serge, dyed a deep brown, using a pattern, and it certainly is a clever suit. The lining, buttons, and belt and buckle cost me \$1.50, so you see my winter suit and my daughter's dress cost me just \$2.20. The Diamond Dyes cost me 20 cents, and I have half of one package left."

Mrs. L. B. Stone.

Diamond Dyes

There are two classes of Diamond Dyes—one for wool or silk, the other for Cotton, Linen, or Mixed Goods. Diamond Dyes for Wool or Silk now come in Blue envelopes. And, as heretofore, those for Cotton, Linen, or Mixed Goods are in White envelopes.

Here's the Truth About Dyes for Home Use

Our experience of over 30 years has proven that no one dye will successfully color every fabric.

There are two classes of fabrics—animal fibre fabrics and vegetable fibre fabrics:

Wool and Silk are animal fibre fabrics. Cotton and Linen are vegetable fibre fabrics. "Union" or "Mixed" goods are 60% to 80% Cotton—so must be treated as vegetable fibre fabrics.

Vegetable fibres require one class of dye, and animal fibres another and radically different class of dye. As proof—we call attention to the fact that manufacturers of woolen goods use one class of dye, while manufacturers of cotton goods use an entirely different class of dye.



Made over from a cream voile, dyed dark blue.

DO NOT BE DECEIVED

For these reasons we manufacture one class of Diamond Dyes for coloring Cotton, Linen, or Mixed Goods, and another class of Diamond Dyes for coloring Wool or Silk, so that you may obtain the very best results on EVERY fabric.

REMEMBER: To get the best possible results in coloring Cotton, Linen, or Mixed Goods, use the Diamond Dyes manufactured especially for Cotton, Linen, or Mixed Goods.

AND REMEMBER: To get the best possible results in coloring Wool or Silk, use the Diamond Dyes manufactured especially for Wool or Silk.

Diamond Dyes are sold at the uniform price of 10c. per package.

Just Out—Sent Free—New Edition, 1912-1913 DIAMOND DYE ANNUAL

This book is full of dress secrets, how to do almost magical things about the home, etc., etc.

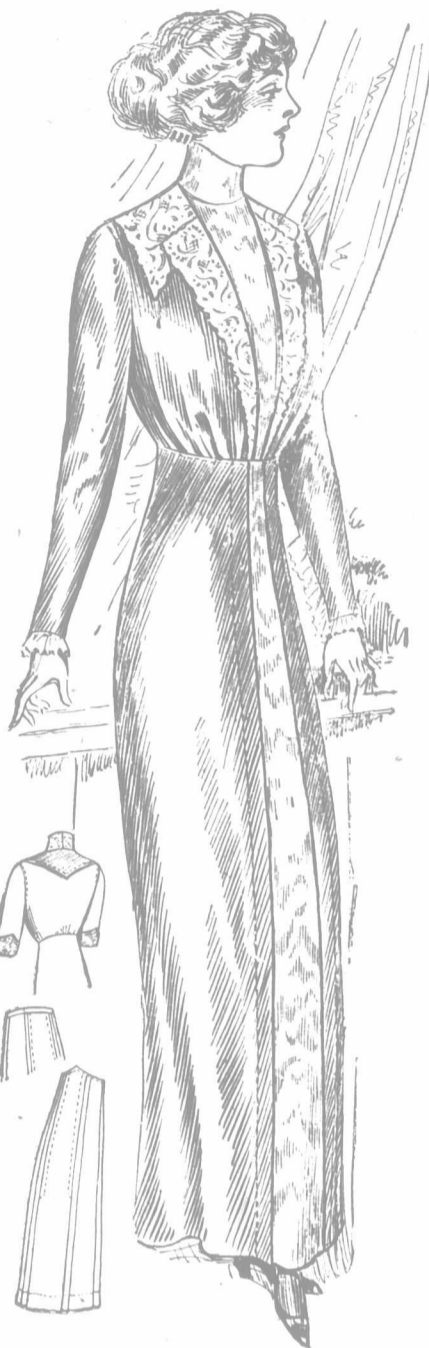
Send us your dealer's name and address—tell us whether or not he sells Diamond Dyes. We will then send you this famous book of helps, the Diamond Dye Annual, a copy of the Direction Book, and 36 samples of Dyed Cloth—Free.

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200 MOUNTAIN ST., MONTREAL, QUEBEC



DESIGN BY MAY MANTON.

7405 Cutaway Coat for Misses and Small Women, 16 and 18 years.
7504 Five Gored Skirt for Misses and Small Women, 14, 16 and 18 years.



DESIGN BY MAY MANTON.

7578 Fancy Waist, 36 to 46 bust.
7572 Six Gored Skirt, 26 to 36 waist.



7600 Girl's Norfolk Coat 8 to 14 years



7595 Pointed Yoke Dress, 1, 2 and 4 years.

"The Farmer's Advocate" Fashions.

Nos. 7578, 7572.—Material that helps to carry out the lines necessary to a slender effect should be chosen for this gown,—for instance, charmeuse satin, voile, with panels of silk, or crepe de chine.

Nos. 7405, 7504.—This suit may be made of serge, cheviot, whipcord, velours suiting, homespun, etc., trimmed with braid of the same color, or of black. If preferred, broadcloth or ratine may be used for revers and cuffs.

No. 7464.—This gown would make up charmingly in striped woollen, with collar and girdle of charmeuse satin. For a lighter dress, the satin might be used for the entire costume, with collar and girdle of velvet.

Nos. 7574, 7559.—This dress is made of striped silk, with cuffs and Directoire collar of velvet. Charmeuse satin would also make up nicely, but for a warm dress, French serge or cheviot would be a good choice.

HOW TO ORDER PATTERNS.

Order by number, giving age or measurement as required, and allowing at least ten days to receive pattern. Price ten cents PER NUMBER. If two numbers appear for the one suit, one for coat, the other for skirt, twenty cents must be sent. Address Fashion Department, "The Farmer's Advocate and Home Magazine," London, Ont.

J. Ogden Armour, apropos of leap year, said at a luncheon at the Auditorium in Chicago:

"A girl can take advantage of leap year without being at all unmaidenly. There are subtle and delicate ways of doing things, and such ways are just as efficacious as brutal, knock-me-down ones.

"There's a girl named Jones, who, having been engaged altogether too long, took advantage of leap year to hurry on her wedding. But she accomplished this delicately. She just signed a letter to her fiancée, 'As always, Edith Jones,' and she underscored 'always' and 'Jones' very heavily.

"The marriage in consequence was celebrated the next month."—Washington Star.

"I see society people at Newport had a baby show." "Where did they get the babies?" "It was a loan exhibition, I believe."—Washington Herald.



DESIGN BY MAY MANTON.

7574 Plain Blouse, 34 to 42 bust.
7559 Two-Piece Skirt, 22 to 30 waist.



DESIGN BY MAY MANTON.

7464 Semi-Princesse Dress for Misses and Small Women, 16 and 18 years.

The Beaver Circle.

Dear Beavers,—Garden-competition letters, "work" letters, and dolls' dresses galore, have been coming in during the past few weeks. Please have patience for a little longer. We shall be able to make announcement in regard to some of the prizewinners soon. In the meantime, here are some more of the stories sent in the story competition.

A DOG.

The dog I am going to write about was part wolf and part collie.

This dog's home was in a rocky country where the people kept a lot of sheep and cattle. His owner was a mean man, and often treated him very roughly.

One day while the man was acting cruelly with him, the dog bit at him.

A large bull, with long, sharp horns, tried to guard a few cows.

About six wolves, with the leader, had entered and were attacking the cows when a door in the other side of the shed opened and a gun was discharged. The three wolves which escaped from the gun, leaped at the man and threw him down.

When the leader saw this, his wild nature changed, and he ran to the rescue of the man. The leader was badly bitten by the three wolves, but he succeeded in driving them off.

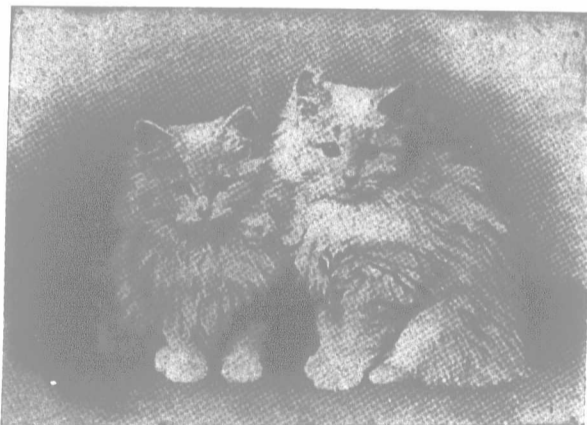
When the man was found, the leader was licking his hands.

The story was traced back to his young days, and from that time he was taken good care of, and he led a civilized life for the rest of his days.

(This is a true story.)
BYRON J. CLARK (age 14).
Smithville, Ont.



"You Can't Have My Cake."
Try drawing this on your slate.



Tom and Tiny.

This made the man very angry, and he seized his gun and shot at the dog. He was wounded, but escaped death.

The night was cold and wet, but he found shelter under an old sheep-pen. That night he killed a young lamb. This made him have a desire for more prey, and from that time he ran wild with a pack of wolves.

Because of his size and strength, he soon won the leadership of the pack, and for a number of years he and his followers invaded many sheep and cattle pens.

One night of a very cold winter day, the pack was very hungry, and invaded a cattle-pen. The leader lead the way up to an old shed where they could enter by a small window.

A NARROW ESCAPE.

One day two girls were playing near a bush where their father was making maple syrup. They came to a hollow log, and then they said, "Let's go in here until we bump heads, and then we will back out." But when they looked into it, they could not see through it, and, wanting to have some fun, cried, "Oh, there's a bear in there!" but little thinking that there was anything at all in there.

When they got back to the camp, the little dog that had followed them, began to bark and bark.

Their father then told the girls' brother that he had better go and see what the dog had.

He ran back into the bush, and soon

500 MEN WANTED

Each man to introduce **BASIC SLAG** to at least twenty farmers in his locality this fall. To good reliable men we have a paying proposition to lay before you.

Basic Slag

Is the Great Phosphoric Acid Fertilizer

When applied to fall wheat, sugar beets, beans, alfalfa, old pastures and orchards the results are marvellous. Lay the foundation for better crops next year by applying Sydney **BASIC SLAG** this fall. Write at once for our **BASIC SLAG** literature, which gives a lot of valuable information.

THE CROSS FERTILIZER CO., LTD., SYDNEY, N. S.
Alex. E. Wark, Wanstead, Ont., Sales Manager for Ontario

LAKEVIEW HOLSTEINS!

Offer bull born February, 1912, sired by our son, Colantha Johanna Lad, and out of a heifer that made over 13 lbs. butter at two years old. She is a daughter of Count Hengerveld Jayne De Kol, and out of a 23.51-lb. cow with a 23-lb. dam. The seven nearest dams of this young bull average 23.32 lbs. of butter in seven days. Write at once for extended pedigree and price.

E. F. OSLER,

Bronte, Ontario

This Splendid
Columbia
Disc-Record

(Value 85c.)

Free to
Music Lovers



If you own a Disc Talking Machine, this gift record should certainly be in your collection.

We are giving away this regular 10-inch Disc-Record, as a Demonstration Sample, for 10c., to cover cost of handling. It fits any Disc Machine. On one side is a splendid selection by the Columbia Male Quartet—"Kentucky Babe." If sold as a single disc-record it would cost you 75 cents, and it's worth it.

On the other side is a story every taking machine owner should know—proof of the superior tone, surface, and wearing qualities of Columbia Records—told in your own home on your own instrument. This side is worth money to every owner of a disc machine who does not own an assortment of Columbia Records. It means new value to every disc machine—new pleasure to every owner—and some people think it's more fun than any record they own.

Ask for the Columbia Demonstration Record at any Music Dealers, and phone Adelaide 394 if you don't get one (or write **The Music Supply Company, 88 Wellington Street West, Toronto**).

If you don't own an instrument, be sure to hear the Columbia Demonstration Disc on one of the new Grafonolas before purchasing.

We will arrange, through our local dealer, for an instrument to be sent to your home on **Free Trial. Price \$17.50 to \$650.00.**

Present this coupon to any Music or Piano Dealer and he will hand you a Demonstration Record for 10c. to cover the cost of handling.
Name
Address
If you have any difficulty in obtaining the Record, write or phone to **The Music Supply Co., 88 Wellington St. W., Toronto**

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



Try this Thirsty Flour

A very thirsty flour. Absorbs a lot of water. Because it contains so much *gluten*.

Manitoba wheat is wonderfully rich in *sturdy gluten*.

And, think of it, FIVE ROSES is milled *exclusively* from the very *cream* of the Manitoba wheat berries.

So FIVE ROSES must be awfully thirsty, don't you see.

In your mixing bowl it greedily absorbs *more water*.

So you get *more loaves* than usual without using more flour. You use *less*.

Your flour lasts *longer*, doesn't it?

Less trips to your dealer.

That's how FIVE ROSES saves money.

Actually saves YOU money.

Use this *economical* flour.

Five Roses Flour

Not Bleached



Not Blended

LAKE OF THE WOODS MILLING COMPANY, LIMITED, MONTREAL

came running out, saying, "Oh, father, come quickly! My dog has got the biggest coon I ever saw." So they both ran, and just as they got back, the bear, for that's what it was, stuck its head out of the log.

The father, seeing what it was, broke off an end of an old log, and stuffed up one end of the log. He then stood near the other end; and soon the bear stuck its head out that end, and he hit it with the axe and killed it.

I have received no help, and will now close.

Wishing the Circle every success, I remain,
IRENE E. GETTY
Oakdale, Ont. (Age 13, Sr. IV.)

"A DISASTROUS PICNIC."

It was a very pleasant morning in September. Six merry little boys, and six merry little girls, had planned to have a picnic in the woods, so they started, all light-hearted and happy. Frank Eaton had taken his little terrier dog, "Tip," with him, and some of the others had taken cameras.

When they reached the woods, the girls deposited their baskets under a spreading maple tree, then all took a run around to see where the different kinds of nut trees grew, and if they were "loaded."

They found the trees "pretty well loaded," and their joy knew no bounds, and they at once set about to pick the nuts.

After picking several bags they began to feel hungry, and the girls set about to prepare the dinner.

I think one of the most joyous things of a picnic is the lunch served out of doors. Some mothers have the children sit up straight and prim at regular meals, with a knife and fork and spoon, and a great variety of food before them. Don't you think a table set on the

veranda, or under the trees, or let the little folk sit on the grass without a table, and serving sandwiches, cake, fruit, and lemonade, milk, or water, would be nice?

We tried that way this summer, for small people, and it proved an excellent way. It is also a splendid way for grown-ups, too.

Now to the story. The girls, aided by the boys, soon had a very appetizing lunch ready, and all did equal justice to it.

In the afternoon it was very hot, but still the nut-pickers picked away, as it was much cooler in the bush. There arose a dispute between Wilfred Munroe and Frank Eaton as to who had picked the more butternuts. Frank was much bigger than Wilfred, and he finished by saying to Wilfred, "Your father is only a hired man, anyway."

Frank could not have said anything more mean, and Wilfred burst into tears.

As the party of picnickers were returning to their homes they were chased by a cross bull. All reached a wire fence, but being stronger, they all got over but Wilfred; the bull charged for him, and in a moment Wilfred was lying helpless. The children succeeded in getting Wilfred over the fence before the bull charged the second time.

It was many weeks before Wilfred was well again, but the one who stayed with him most and brought things was Frank Eaton.

Ever afterward Frank was Wilfred's dearest friend.

MARGERY FRASER
(Form I., High School, age 13).
Williamstown P. O., Ont.

Dear Puck and Little Beavers,—I want to tell all little Beavers to be kind to one-another. I went to public school with a little girl, and love her very much. Only once I remember of being

mean to her. Now they have sold their farm, and likely will move away from here, and I shall not be able to see her at all. So, Little Beavers and Big Beavers, be kind to one-another.

MARGERY FRASER
(Form I., High School, age 13).
Williamstown P. O., Ont.

Success.

By Irma True Soper.

And what is success? do you say?
You workers who toil and who plod—
Whose muscles have often grown weary
In plowing and tilling the sod.

You look at the "great men" around you,
And envy them too, you confess:
Dame Fortune has never yet found you,
Yet money has brought them "success."

But look at the workers around you—
The bees that store sweets in the hive;
The blessings of nature surround you—
Breathe deep, and be glad you're alive.

Your smile is so cheery! you're healthy—
You vote with the heart of a man;
And, better than being so wealthy,
You're doing the best that you can.

So, say not that Fortune has missed you,
You men who are honest and poor;
With all of her best gifts she's blest you—
Her treasures she lays at your door.

Success is not hoarding of money,
You workers who toil and who plod;
'Tis being so helpful and sunny,
Content in the love of your God.
—In Gleamings in Bee Culture, Jackson, Michigan.

The Call of the Home.

By Gertrude Mercia Wheelock.

The city charms with its pulse and throb,
Its surging and seething crowds;
And the heart is stirred by the measured beat
Of its turmoil long and loud;
The charm is there of a life that thrills,
With its throngs of young and old,
With its strife and stress for a higher place
In the markets of shimmering gold.

But the wind sings low at eventide
When the fret of the day is still,
And calls me away to the old farm home
Whose light shines over the hill.
In fancy's dream I am lulled to rest
By the sounds of the woodland night;
And I catch a glimpse of the dear old rooms
With their halo of welcome light.

Oh, I weary much of the busy mart,
Of the quenchless thirst for gain,
Of looking on at the toil and tears
That are spent in the field of fame;
For its winding ways are fraught with woe,
And I shrink from the ceaseless glare,
From the crude, harsh notes of its ruling tone
That bids for the chaff and tare.

And the wind sings low at eventide
When the fret of the day is still,
And calls me away to the old farm home
Whose light shines over the hill.
Like music sweet to my weary heart,
Come the tones I have loved the best;
And I follow fast where the fancy leads
To its haven of perfect rest.
—Farm and Fireside, Springfield, Ohio.

When You Are Married.

By Marjorie Stewart.

Wedding-day superstitions are about as hard to uproot as any others—which is perhaps the reason that they have persisted so long. No matter how rational we are, all of us hate to defy tradition. Even if we do not exactly believe in wedding omens, we always hesitate to openly disregard them, fearing that the threatened something might happen to make us wish afterward that we had been a little more believing.

Somehow, rich as wedding tradition is, it has failed to taboo certain years as unlucky for marriage. To make up for this lack, however, the distinctions in regard to months are quite definite. How many of you, we wonder, have joined or will join fortunes under the influence of the rhymes, which predict that:

Married when the year is new,
He'll be loving, kind and true.

When February birds do mate,
You may wed, nor dread your fate.

If you wed when March winds blow,
Joy and sorrow both you'll know.

Marry in April when you can,
Joy for maiden and for man.

Marry in the month of May,
And you'll surely rue the day.

Marry when June roses blow,
Over land and sea you'll go.

They who in July do wed
Must always labor for their bread.

Whoever wed in August be
Many a change is sure to see.

Marry in September's shine,
Your living will be rich and fine.

If in October you do marry,
Love will come, but riches tarry.

If you wed in bleak November,
Only joy will come, remember.

When December's snows fall fast,
Marry, and true love will last.

As for the days of the week, because our mothers and our grandmothers and our great-grandmothers believed it, we hate to reject the old verse which warns us that we marry on

Monday for health, Tuesday for wealth,
Wednesday the best day of all;
Thursday for losses, Friday for crosses,
And Saturday for no luck at all.

Custom has also set aside thirty-two days of the year as unlucky for marriage, though according to masculine testimony there are 365 of them in each year, except in leap year, when there is one more. But the days of which tradition bids you beware are: January 1, 2, 4, 5, 7, 10 and 15; February 6, 7 and 8; March 1, 6 and 8; April 6 and 11; May 5, 6 and 7; June 7 and 15; July 5 and 19; August 11 and 19; September 6 and 7; October 6; November 15 and 16, and December 15, 16 and 17.

Aside from the time of the year and the day of the week and month, it seems that your wedding garments influence your future career in some mysterious way, for does not the old rhyme tell us that:

Married in gray, you will go far away.
Married in black, you will wish yourself back.

Married in brown, you will live out of town.

Married in red, you will wish yourself dead.

Married in pearl, you will live in a whirl.

Married in green, ashamed to be seen.

Married in yellow, ashamed of your fellow.

Married in blue, he will always be true.

Married in pink, your spirits will sink.

Married in white, you have chosen aright.

—Pictorial Review.

Winter on the Farm.

When the butcherin' time is over and the corn is gathered in,

When the apple's in the cellar and the tater's in the bin,

When the day is cool and cheery and the snow is on the ground,

And a fellow is so happy that his pulses fairly bound,

If there's a time that is inspirin' and a time that has a charm—

Then it's when the crops are gathered and it's winter on the farm.

It's early in the mornin' on a cold and wintry day,

You kin hear the "Halleluyer" of the rooster in the hay;

You kin hear the pigs a squealin' and the calves a bawlin', too;

You kin hear the turkey gobble, "Howdy, howdy, howdy-doo!"

If there's times a feller's merry and he suffers no alarm,

Then it's when the stock is happy and it's winter on the farm.

On a cold and frosty mornin' you kin drive out in a sled,

With the snow a crunchin' under, sun a shinin' overhead;

And the ground is covered over with a million fleecy flakes,

And the flakes are sparklin' glory, peace, goodwill, for our dear sakes;

If there's a time that is inspirin' and a time that has a charm,

It's when the snow is sparklin' glory and it's winter on the farm.

When the cows are in their stalls and the horses in the stable,

When the milk is in the bowls and the pone is on the table,

When you set down to the table and the blessing has been asked,

Kin Heaven beat my heaven, when the corn pone is passed?

If there's a time that seems like Heaven and that has a hallowed charm,

It's when the pone is on the table and it's winter on the farm.

So when butcherin' time is over and the corn is gathered in,

When the apple's in the cellar and the tater's in the bin,

When the rooster is a crowin' and the horse is in the stable,

When the snow is sparklin' glory and the pone is on the table,

If there's a time we should be thankful and life for us should be a charm,

Then it's when the crops are gathered and it's winter on the farm.

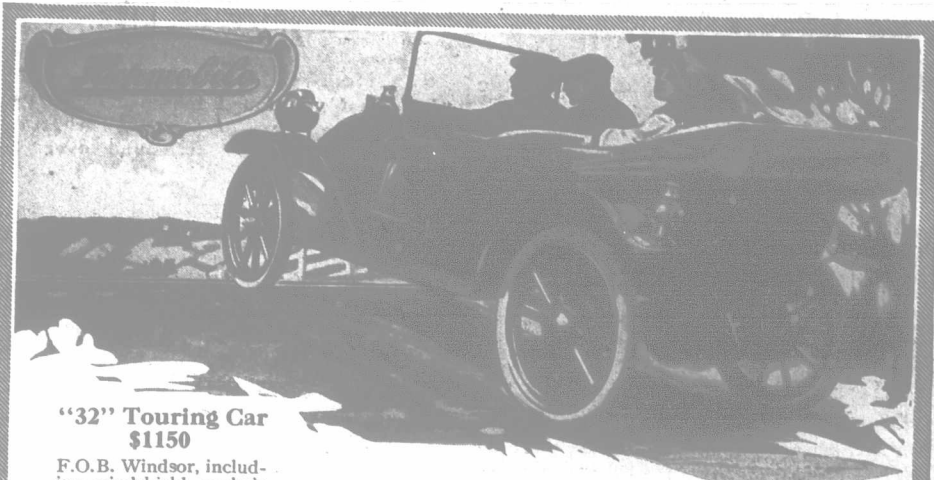
—E. D. Bates.

A Colt that Changed Ownership.

There was a big row on the farm last week, and as a result, Jimmy, the adopted boy who had been with the family for over twelve years, and was the mainstay of the place (though it was not recognized until too late), is off working for another man. The difficulty was one that is liable to occur any time on a farm, and is therefore worth explaining a little:

One day the farmer and Jimmy were talking about the colt that was expected soon, and in a fit of generosity the man said: "Jimmy, that colt will be yours to do with as you like." This was good news to Jimmy, and it put him in an exceptionally pleasant frame of mind, but as the colt developed in size and beauty, and offers in hard cash for his purchase began to come in, the farmer decided that he had been rather hasty. So he told Jimmy it was just a joke offering the colt for keeps. Jimmy did not believe this, but claimed that a promise was a promise, and should be kept. But one day the colt was sold sure enough, and Jimmy did not see a dollar of the money. He complained bitterly of the fraud that had been practiced on him, and that night packed up his belongings and left for good. And he was right. The man who made the bargain and backed out of it was in fault, and no doubt bitterly regrets, not only his failure to keep his promise, but his loss of Jimmy, the best young helper he ever had.

J. J. KELSO.



"32" Touring Car \$1150

F.O.B. Windsor, including windshield, mohair top with envelope, jiffy curtains, quick detachable rims, gas headlights, Prest-o-lite tank, oil lamps, tools and horn. Standard color, black. Trimings, black and nickel. Roadster, fully equipped, \$1150.

"32" Delivery, fully equipped, \$1125

"20" H. P. Runabout, fully equipped, \$850

F. O. B. Windsor.

An Axle that Is An Axle

The Hupmobile rear axle is of the full-floating type, a type almost wholly restricted to cars of the highest price.

The chief advantage of this type is that no load whatever is carried on the axle shafts. They do nothing but drive the wheels.

The Hupmobile housing is built up of the two tapered steel tubes, 1, 1, the malleable iron central housings, 2 and 3; and the propeller shaft housing tube, 4—five pieces which form a case so strong and rigid that it does not require the support of truss rods.

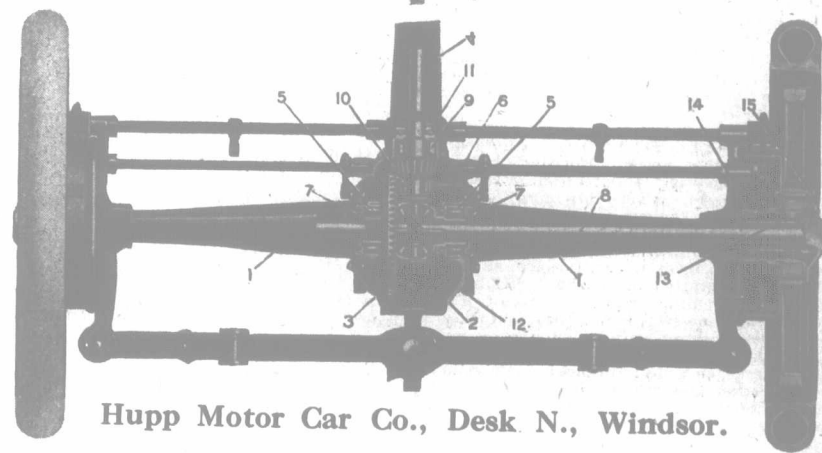
The tubes 1, 1, carry the weight of the car. Each wheel runs on two sets of roller bearings, 13 and 14—13 takes the load—14 takes care of the side strains.

Thus, the axle shafts, 8, are freed to do the driving, with flanges bolted to the wheels at 15.

The large roller bearings, 5, 5, take only the up and down loads from the differential, the end thrust bearing being taken by two ball bearings just outside the rollers. One of these is shown at 6.

In mounting the bevel driving pinion, we use two roller bearings, 9 and 10, instead of one, placing one on each side of the gear. They hold it in perfect and permanent alignment, while the ball bearings, 11, take the end thrust.

Two threaded adjusters, 7, 7, are used in our axle to set the bevel gear so that the proper mesh with the driving pinion is secured and retained.



Hupp Motor Car Co., Desk N., Windsor.

HARAB DIGESTIVE TANKAGE

THE PROTEIN HOG FOOD

MAKES HOG RAISING PAY

Fed along with your other hog foods, it supplies what is lacking—protein, the flesh and strength developer.

Endorsed by experimental farms, and used by the largest hog feeders. Made in Canada by

THE HARRIS ABATTOIR CO., LIMITED
Toronto, Ontario

Ask your dealer, or write us for prices, etc.

THE CANADIAN APPLE-GROWERS' GUIDE

By LINUS WOOLVERTON, M.A.

This book is invaluable to Apple Growers, as it deals thoroughly with the work—Planting, Culture, Harvesting and Marketing, etc. The price of the book is \$2.25, post paid, but for a short time we are making a special rate with renewal subscriptions to THE FARMER'S ADVOCATE.

The offer is a year's renewal of your subscription and a copy of The Canadian Apple-Growers' Guide for \$2.75. The regular price of the two is \$3.75.

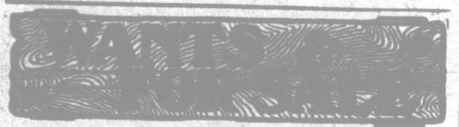
If you send in two new names with a remittance of \$3.00 covering the same, the book will be sent as a premium. ORDER AT ONCE.

The WILLIAM WELD CO., Limited, London, Ontario.

25 Years' Experience

White Swan Yeast Cakes are made by the most successful dry yeast expert in Canada, with an experience of 25 years in this difficult art

FREE SAMPLE FROM
White Swan Spices & Cereals
LIMITED
Toronto. Ontario.



Advertisements will be inserted under this heading, such as Farm Properties, Help and Situations Wanted, and Pet Stock.

TERMS—Three cents per word each insertion. Each initial counts for one word and figures for two words. Names and addresses are counted. Cash must always accompany the order. No advertisement inserted for less than 50 cents.

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

BRITISH Columbia Ranches, Vancouver Island. Ideal climate, no cold weather; no hail, frost or bad storms; abundant crops assured; richest of soil, unsurpassed for growing grain, fruit and vegetables. The poultryman's paradise. Best market in the world. Improved and partly improved ranches, 5 acres and upwards. Easy terms of purchase. Come to the Pacific where life is worth living. Abundant sport, finest of hunting, fishing and boating. For further information and full particulars write Dept. F., Stuart, Campbell, Craddock & Co., 821 Fort Street, Victoria, or 425 Pender Street West, Vancouver, B.C.

CREAM WANTED—We guarantee highest prices, correct weights, accurate tests, prompt returns. Write for free cans and try a few shipments. Toronto Creamery Co., Limited, Toronto.

FIFTEEN DOLLARS AND EXPENSES WEEKLY—For Trustworthy man or woman to act as Traveling Representative. Previous experience not required. Traveling expenses advanced. Commence in home territory. Winston Limited, 104 Spadina Ave., Toronto, Ont.

FARMS FOR SALE—Improved Wellington County farms. Now is the time to inspect. No obligation or expense. Jones & Johnston, Guelph.

FARM FOR SALE—212 acres rich clay loam, 200 acres under good cultivation, balance bush and pasture, no waste land, no stone or stumps, straight fences; barn, 80x90, hip roof, cement foundation and floors; cement pigsty and henry; stabling for 60 head cattle, 14 horses; root houses; lightning rods on barn, orchard; plenty hard and soft water; 11-room brick house, furnace; situated alongside the corporation of Bradford; High and Public Schools and churches; one mile from G.T.R. station. Apply: Drawer 276, Bradford, Ontario.

INSURE against poverty—A British Columbia Fruit Farm, purchased on small instalments, provides protection against hard times, and is a safe investment. Fertile land on main line of C.P.R. and other railways, near busy town. Write to or call on International Securities Company, Ltd., Somerset Bldg., Winnipeg, Man.

MARRIED man wanted—Small or no family; good milker and plowman, abstainer and non-smoker preferred. Permanent position with good wages; labor-saving conveniences, house, garden, milk, apples and summer firewood. Send references. Open Nov. fifteenth. W. T. Davidson, Meadowvale Peel Co.

ON SHARES—Good Dairy Farm, 100 acres. All stock and implements supplied. State experience, age, and number of family. Address Allan Stewart, London, Ont., General Delivery.

WANTED—Cash paid for Military Land Grants in Northern Ontario. Please state price and location. Box 88, Brantford.

WANTED—Reliable woman to assist in general house-work. Plain cook; good home, all modern conveniences, healthy locality; good wages. Apply to Mrs. MacBeth, the Manse, Paris, Ont.

WANTED—A good young man wishing to improve himself, to work with pure-bred stock, chiefly cattle. Robt. McEwen, Byron, Ont.

WANTED—Reliable young man to help milk and drive milk wagon. Must be strictly temperate. Yearly engagement, good wages, references required. Thorn, Hill Dairy Farm, North Bay, Ontario.

WANTED—Good, careful and experienced married man to manage and work stock farm; must be strictly temperate. Address inquiries, Box 70, Farmer's Advocate, London.

WANTED—A man by the year that understands feeding and care of live stock; good habits; permanent position to the right man. W. B. Roberts, Sparta, Ont.

WAPPELLA, SASK.—An ideal district for grain growing and mixed farming. Soil, rich loam on clay subsoil. Improved and unimproved farm lands selling from \$15.00 to \$30.00 per acre. Write for full description and lists to D. P. Miller, Sect. Wapella Board of Trade, Wapella, Sask.

Cream for Churning—Wanted by the factory. Butter and Ice Cream Mfg. Co., 15 Elizabeth St., Toronto, Ontario.

For Sale Choice Seed Potatoes—At reasonable prices. Apply to L. M. Anderson, Sackville, N. B.

SHROPSHIRE For Sale—Registered ram lambs, shearing rams and ewe lambs from imported and home-bred ewes. Also ewes from one to six years old. Prices very moderate. Write for particulars. JOHN HAYWARD, EASTWOOD, ONT.

Shires and Shorthorns

In Shire stallions and fillies, from the best studs in England, we are offering some rare animals at rare prices. Scotch Shorthorns of either sex or age of highest breeding and quality. JOHN GARDHOUSE & Son, Highfield Ont. L.-D. phone.

THE SPICE OF LIFE.

"What did you do with your book whose leaf you found loosened?" "Put it through a legal process." "What do you mean?" "Had it bound over to keep the piece."

The venerable farmer with the tobacco-stained whiskers and furrowed brow climbed aboard the limited and shambled into the smoker.

"Mister," he drawled, when the conductor halted before him, "is that thar two-cents-a-mile rate good on this train?"

"It is," replied the conductor brusquely. "Where is your ticket?"

The old man fumbled in the depths of an ancient shot-bag.

"Ain't got no ticket, mister," he said slowly, "but here be two cents. I never rode on one of these pesky flyers, and I just want to feel the sensation. Put me off after I've made one mile."

Ian Maclaren was once the guest of the Whitefriars Club, and delivered a most brilliant speech on Scottish humor. One of his stories I will tell in my own imperfect way, because it seemed to have a real touch of Shakespearean humor. In a dull Scotch village on a dull morning, one neighbor called upon another. He was met at the door by his friend's wife, and the conversation went thus:

"Cauld?"

"Ay."

"Gae to be wøetty (rainy), I think."

"Ay."

"Is John in?"

"Oh, ay, he's in."

"Can I see him?"

"No."

"But A wantit to see him."

"Ay, but you canna see him. John's deid."

"Deid?"

"Ay."

"Sudden?"

"Ay."

"Very sudden?"

"Very sudden."

"Did he say anything about a pot o' green paint before he deed?"

THE CHEAPER CUTS OF MEAT.

I con with care the magazines, The household columns meet my eyes All filled with helpful "ways" and "means"

How best we may economize. Since food has soared to heights sublime How apropos is each receipt

Which teaches in this parlous time The use of cheaper cuts of meat.

For sirloin steak I need not sigh, From costly chops I must desist, The choice rib-roast forbear to buy, And on the chuck and shin subsist.

I thus may save my household hoard These days when dollars' wings are fleet, And live as well as any lord Upon the cheaper cuts of meat.

Alas, I found this all too true, When I to purchase did essay; The butchers read those pages, too— They've raised the price without delay!

No fruit the frugal counsels yield, My disappointment is complete, The bitter truth is now revealed, There are no "cheaper cuts" of meat!

—Elsie Duncan Yale, in the Commoner.

A PUNSTER BOARDS A BUGGY
(Eugene Field.)

"Suppose," he said, in accents soft, "A fellow just like me,

Should axle little girl to wed, What would her answer be?"

The maiden drops her liquid eyes, Her smiles with blushes mingle, "Why seek the bride, halter when You may love one, sir, single?"

And then he spoke, "Oh, be my bride, I ask you once again;

You are the empress of my heart, And there shall ever rein!

"I'll never tire of kindly deeds Your slave I'll fondly be,

And saddle he the pairs around, Who our bliss daily see."

The while he spoke the maiden felt Her mantling blushes glow,

She took him for her faithful hub, To share his wheel or whoa!"

In this old world the time to strike Is when the iron's hot, And you will find there's nothing like Being Johnnie-on-the-Spot.

—Judge.

"Come up and jine de army of de Lord, sister!"

"Ah done jine."

"Where you jine?"

"I jine de Baptist Church."

"Lawdie, sister, dat ain' de army! Dat's de navy!"—Judge.

"What are those notches on your pistol handle?" inquired the girl who was spending the summer in the far west.

"Fair game," answered the cowboy.

"But what are them notches on your parasol handle?"

"Fair game," answered the girl.

And then he changed his mind about proposing and strolled thoughtfully away.—Washington Herald.

BOOK REVIEW.

A BOOK FOR PLANT-BREEDERS.

"Plant Breeding in Scandinavia" is the title of a valuable bound volume that will appeal especially to the increasing number of persons in Canada and elsewhere who are engaged in the work of improved seed-growing.

It is issued under the auspices of the Canadian Seed-growers' Association, whose capable Secretary, L. H. Newman, is the author of the present work.

He spent a lengthy period investigating the status of plant-breeding in Sweden, Norway, and Denmark, but most of the inquiry related to the Swedish Seed Association, and the famous institution at Svalof, under the direction of Prof. Hjalmar Nilsson, aided by a capable staff of experts.

As it is designed to be a serious and trustworthy contribution to knowledge of two logical problems, it is scientific rather than popular, though the general public is not overlooked.

Numerous illustrations add to the appearance and usefulness of the book, copies of which will be available for public libraries, agricultural colleges, and other institutions, and persons specially interested in plant-breeding, the balance being available for distribution to applicants.

Inquiries should go to the Secretary, Mr. Newman, Canadian Building, Ottawa.

GOSSIP.

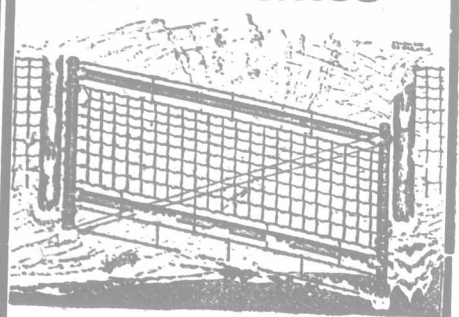
THE KING'S NEW FARM.

His Majesty has purchased for £12,000 (\$60,000), Shernborne Hall Farm, which is situated to the north of Sandringham. The farm was bequeathed to Emmanuel College, Cambridge, many years ago. An interesting clause in the agreement between the college and the tenant which has existed for a long period, is that the tenant should supply six fat turkeys yearly to the college. This farm consists of between 600 and 700 acres of land, much of which is used for barley-growing, and a castellated house surrounded by a moat. Some eight years ago the late King Edward purchased the whole of the parish of Shernborne, with the exception of Shernborne Hall Farm. Sandringham is now practically ringed round by the King's property.—Agricultural Gazette.

HOLSTEINS KEEP ON THE MOVE.

D. C. Flatt & Son, R. F. D. No. 2, Hamilton, Ont., have lately shipped a valuable lot of Holsteins to the order of W. MacMillan, Vancouver, B. C., and several other orders are to follow, which were received by Mr. Flatt when out in that Province on a judging tour of the Provincial fairs. They have also sold to E. Archibald, for the Dominion Experimental Farm, at Ottawa, the grandly-bred young bull, King of the Ormsbys, a son of Canada's greatest proven sire, Sir Admiral Ormsby, and full brother to the world's champion two-year-old for yearly production, Jennie Bonerces Ormsby. At the head of the splendid Holstein herd now at the Experimental Farm, this young bull should be a vast amount of good by perpetuating his own great producing blood.

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FOR SALE.—S. C. White Leghorn and Silver Dorking Cockerels from extra good laying strains, \$2.00 each. E. M. Crone, Mandaamin, Ont.

MONEY in Poultry—Our bred-to-lay strains are hundreds of farmers. Write for illustrated catalogue and Summer Sales List. They are free. L. R. Guild, box 16, Rockwood, Ont.

At a joint sale of young Clydesdales, held under adverse weather conditions, October 2nd, at Seaham Harbour, consigned by Robert Brydon and others, 44 head sold for an average of \$180. A colt foal, by Mr. Brydon's young horse, brought \$325, and two filly foals, by the same sire, sold for \$275 and \$280, respectively. The four-year-old mare, Cedilla, by Silver Cup, consigned by Mr. Brydon, brought \$475.

At an auction sale of Shire fillies the last week in September, the property of Mrs. Sauter, Aylsford, Kent, England, twenty-one sold for an average of \$615.

Rebecca of Sunnybrook Farm.

(Continued from page 1812.)

does! I was so 'fraid I'd miss the stage I couldn't eat any breakfast."

"You'd better have your lunch, then. I don't eat nothin' till I get to Milltown; then I get a piece o' pie and cup o' coffee."

"I wish I could see Milltown. I suppose it's bigger and grander even than Wareham; more like Paris? Miss Ross told me about Paris; she bought my pink sunshade there and my bead purse. You see how it opens with a snap? I've twenty cents in it, and it's got to last three months, for stamps and paper and ink. Mother says aunt Mirandy won't want to buy things like those when she's feeding and clothing me and paying for my school-books."

"Paris ain't no great," said Mr. Cobb disparagingly. "It's the dullest place in the State o' Maine. I've druv there many a time."

Again Rebecca was obliged to reprove Mr. Cobb, tacitly and quietly, but none the less surely, though the reproof was dealt with one glance, quickly sent and, as quickly withdrawn.

"Paris is the capital of France, and you have to go to it on a boat," she said instructively. "It's in my geography, and it says: 'The French are a gay and polite people, fond of dancing and light wines.' I asked the teacher what light wines were, and he thought it was something like new cider, or maybe ginger pop. I can see Paris as plain as day by just shutting my eyes. The beautiful ladies are always gayly dancing around with pink sunshades and bead purses, and the grand gentlemen are politely dancing and drinking ginger pop. But you can see Milltown most every day with your eyes wide open," Rebecca said wistfully.

"Milltown ain't no great, neither," replied Mr. Cobb, with the air of having visited all the cities of the earth and found them as naught. "Now you watch me heave this newspaper right onto Mis' Brown's doorstep."

Piff! and the packet landed exactly as it was intended, on the corn husk mat in front of the screen door.

"Oh, how splendid that was!" cried Rebecca with enthusiasm. "Just like the knife thrower Mark saw at the circus. I wish there was a long, long row of houses each with a corn husk mat and a screen door in the middle, and a newspaper to throw on every one!"

"I might fail on some of 'em, you know," said Mr. Cobb, beaming with modest pride. "If your aunt Mirandy 'll let you, I'll take you down to Milltown some day this summer when the stage ain't full."

A thrill of delicious excitement ran through Rebecca's frame, from her new shoes up, up to the leghorn cap and down the black braid. She pressed Mr. Cobb's knee ardently, and said in a voice choking with tears of joy and astonishment, "Oh, it can't be true, it can't; to think I should see Milltown. It's like having a fairy godmother who asks you your wish and then gives it to you! Did you ever read Cinderella, or The Yellow Dwarf, or The Enchanted Frog, or The Fair One with Golden Locks?"

"No," said Mr. Cobb cautiously, after a moment's reflection. "I don't seem to think I ever did read jest those particular ones. Where'd you get a chance at so much readin'?"

"Oh, I've read lots of books," answered Rebecca casually. "Father's and Miss Ross' and all the dif'rent school teachers', and all in the Sunday-school library. I've read The Lamplighter, and Scottish Chiefs, and Ivanhoe, and The Heir of Redclyffe, and Cora, the Doctor's Wife, and David Copperfield, and The Gold of Chickaree, and Plutarch's Lives, and Plaudens of Warsaw, and Pilgrim's Progress, and lots more.—What have you read?"

"I've never happened to read those particular books; but land! I've read a sight in my time! Nowadays I'm so drowsy I get along with the Almanac, the Weekly Argus, and the Maine State Agriculturalist.—There's the river again; this is the last long hill, and when we get to the top of it we'll see the chimbleys of Milltown in the distance. Tain't fur. I live 'bout half a mile beyond the brick house myself."

Rebecca's hand stirred nervously in her

lap and she moved in her seat. "I didn't think I was going to be afraid," she said almost under her breath; "but I guess I am, just a little mite—when you say it's coming so near."

"Would you go back?" asked Mr. Cobb curiously.

She flashed him an intrepid look, and then said proudly, "I'd never go back—I might be frightened, but I'd be ashamed to run. Going to aunt Mirandy's is like going down cellar in the dark. There might be ogres and giants under the stairs,—but, as I tell Hannah, there might be elves and fairies and enchanted frogs!—Is there a main street to the village, like that in Wareham?"

"I s'pose you might call it a main street, an' your aunt Sawyer lives on it, but there ain't no stores nor mills, an' it's an awful one-horse village! You have to go 'cross the river an' get on to our side if you want to see anything goin' on."

"I'm almost sorry," she sighed, "because it would be so grand to drive down a real main street, sitting high up like this behind two splendid horses, with my pink sunshade up, and everybody in town wondering who the bunch of lilacs and the hair trunk belongs to. It would be just like the beautiful lady in the parade. Last summer the circus came to Temperance, and they had a procession in the morning. Mother let us all walk in and wheel Mira in the baby carriage, because we couldn't afford to go to the circus in the afternoon. And there were lovely horses and animals in cages, and clowns on horseback; and at the very end came a little red and gold chariot drawn by two ponies, and in it, sitting on a velvet cushion, was the snake charmer, all dressed in satin and spangles. She was so beautiful beyond compare, Mr. Cobb, that you had to swallow lumps in your throat when you looked at her, and little cold feelings crept up and down your back. Don't you know how I mean? Didn't you ever see anybody that made you feel like that?"

Mr. Cobb was more distinctly uncomfortable at this moment than he had been at any one time during the eventful morning, but he evaded the point dexterously by saying, "There ain't no harm, as I can see, in our makin' the grand entry in the biggest 'style we can. I'll take the whip out, set up straight, an' drive fast; you hold your bo'quet in your lap, an' open your little red parasol, an' we'll jest make the natives stare!"

The child's face was radiant for a moment, but the glow faded just as quickly as she said, "I forgot—mother put me inside, and maybe she'd want me to be there when I got to aunt Mirandy's. Maybe I'd be more genteel inside, and then I wouldn't have to be jumped down and my clothes fly up, but could open the door and step down like a lady passenger. Would you please stop a minute, Mr. Cobb, and let me change?"

The stage driver good-naturedly pulled up his horses, lifted the excited little creature down, opened the door, and helped her in, putting the lilacs and the pink sunshade beside her.

"We've had a great trip," he said, "and we've got real well acquainted, haven't we?—You won't forget about Milltown?"

"Never!" she exclaimed fervently; "and you're sure you won't, either?"

"Never!" Cross my heart!" vowed Mr. Cobb solemnly, as he remounted his perch; and as the stage rumbled down the village street between the green maples, those who looked from their windows saw a little brown elf in buff calico sitting primly on the back seat holding a great boquet tightly in one hand and a pink parasol in the other. Had they been far-sighted enough they might have seen, when the stage turned into the side dooryard of the old brick house, a calico yoke rising and falling tempestuously over the beating heart beneath, the red color coming and going in two pale cheeks, and a mist of tears swimming in two brilliant dark eyes.

Rebecca's journey had ended. "There's the stage turnin' into the Sawyer girls' dooryard," said Mrs. Perkins to her husband. "That must be the niece from up Temperance way. It seems they wrote to Aurelia and invited Hannah, the oldest, but Aurelia said she could spare Rebecca better, if it was all the same to Mirandy 'n' Jane; so it's Rebecca that's come. She'll be good company for our Emma Jane, but I don't believe they'll keep her three months!"

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65A

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She looks black as an Injun, what I can see of her; black and kind of up-an-comin'. They used to say that one o' the Handalls married a Spanish woman, somebody that was teachin' music and languages at a boardin' school. Lorenzo was dark complected, you remember, and this child is, too. Well, I don't know as Spanish blood is any real disgrace, not if it's a good ways back and the woman was respectable." (To be continued.)

How to Make Better Cough Syrup than You Can Buy

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Sixteen ounces of cough syrup—as much as you could buy for \$2.50—can easily be made at home. You will find nothing that takes hold of an obstinate cough more quickly, usually ending it inside of 24 hours. Excellent, too, for croup, whooping cough, sore lungs, asthma, hoarseness and other throat troubles.

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The Pinex and Sugar Syrup recipe is now used by thousands of housewives throughout the United States and Canada. The plan has been imitated, but the old successful formula has never been equalled.

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The Mending Basket

Reply from "Scottie."

Editor "The Farmer's Advocate" and "Home Magazine":

I really feel after reading the articles published by "A Farmer's Daughter," "Peggy," "A Subscriber," and "Mrs. B.," something like Rudyard Kipling when he says:

"The female of the species
Is more vicious than the male."

It is certainly remarkable with what inclemency some of my fair opponents renew the attack on my recent comment on Mrs. B.'s article entitled "Man's Duty Around the House."

I think it is one of the old poets who says: "A little nonsense now and then is relished by the best of men," but as he doesn't say anything about women I suppose in his day as now they were not very receptive to fun, especially if that fun or nonsense was directed against themselves or their sex.

Now the first lady who took up the cudgels in defence of "Poor unfortunate woman" as she terms her,—begs to differ from me on three main points. First with regard to straw-ticks as compared with springs and mattresses, which are used by the gentry of Prince Edward Co. Now, if the lady will look back at my article she will find this straw-tick business simply a quotation from Mrs. B.'s original article, though I might say there is no disgrace nor displeasure to sleep on a good straw bed-tick, that is if there happens to be no thistles in it, but they are rather scarce in Glen-gary. We have the straw here in abundance, but the ticks are absent. They come from further west, for we don't keep sheep down here; "our land flows with milk and honey."

Next we have a graphic description of man's home life, which I think is the exception rather than the rule, and last of all we have a chapter taken from the writer's own personal experience. I must not venture to comment on these private matters, but some fathers have to use different ways of correcting their children. It is better to be a little on the strict side than to "spare the rod and spoil the child." Now, as the old darkey preacher said when he was baptizing some new converts. The weather happened to be very cold, so that to immerse the candidates they were obliged to cut away the ice. It befell, when one of the female converts was dipped into the water that she slipped from the old preacher's hands, and went down stream under the ice. The preacher looked up at the crowd on the bank with perfect calmness and said: "Brethren, the sister hath departed—hand me down another." So we come next to Miss Peggy.

Now Miss Peggy's criticisms are very fair, although there are some assumptions which she makes, which I am not very sure are well founded, especially that first. But the one outstanding and redeeming feature about Miss Peggy is that she has "no use for women who are causing a disturbance," and those "who are crying for votes." She and I certainly agree on these very points, and that is what I said in my first article—"that the cause of many of those unhappy homes in our land was mainly on the part of the wife"—because she "was causing a disturbance"—in the home by grumbling, nagging or bad temper; but I was careful to add, though my lady critics didn't happen to notice, that "there were exceptions."

Next we come to the lady who calls herself "A Subscriber." She gives us an excellent description of how the poor women have to work in Perth Co. If this is a real picture of the poor wife's lot up there, I am very sorry that her lot has fallen in such unpleasant places. I suppose those who have promised "for better or for worse," there's no redress, but to the young who stand—

"With reluctant feet
Where the brook and river meet."

I would say, "Come East, young lady, there are lots of old bachelors down here."

Last we come to Mrs. B.'s defence. Now sister writer I must ask your pardon if I have criticised, too severely, your original article. Your paper appealed to me when I read it as something

which afforded a good opportunity for poking a little fun at you women, which I am glad to see most of you took as well as I could expect, but though admitting this much, I will still stick to what I said in saying that a great deal of the unhappiness in the homes of our land is caused chiefly by the wife; but I think this bad nature or fretfulness, or call it what you will, is caused by her environment. The average farm woman is asked to do indeed too much. Most wives act the role of housekeeper, gardener, calf-feeder and several other things around the farm, and this strain of work is too much for them to endure. They become worn out, and broken down. They cannot attend to their home duties, the least little thing annoys them, and that is the way their good nature becomes spoiled. Now it is not altogether the men's fault that their wives have to work so hard. Most men are sorry seeing their wives doing so much outside work, but the trouble is scarcity of help.

Now, Mrs. B., I agree with the greater part of your article, only that portion near the last where you are all wound up. And you feel like Tennyson's Brook, you could go on forever. You, then, I think, in the moment of excitement, utter a rash statement when you say—"If either sex was taken out of the world, God help the men." I will not argue the statement because I am sure when you return to your calm judgment again, you will think differently on this one matter anyway. Now if any of you women are dissatisfied with what I have said, my only comment is that which a little girl made to her mother who chided her because God would not be pleased with her sleepy prayer, and said, "Well, it is the best he will get out of me tonight, anyway." SCOTTIE.

Scottie sends us the following. A somewhat similar version has also been sent by Mrs. B., who received the poem recently from Scotland.

A MAN'S REPLY.

I stand at the bar of your woman's soul,
Condemned in the cause that you plead.
My only defence is the simple request,
That you'll judge me by motive, not deed.

For remember, that man's but a child
In the dark,
Though formed by the hand above;
He will fall many times, but will walk forth at last,
In the sunshine of infinite love.

So I venture to answer your question so fair,
And give you "A Man's Reply,"
That for the prize of a true woman's love,
I am ready to live or die.

You say that the man who gains your love
Must be brave and true and good;
I answer that she who wins my heart,
Must be true to her womanhood.

You say you look for "a man and a king,"
A very prince of the race;
I look for a kind and generous heart,
And not for a queenly face.

You require all things that are good and true,
All things that a man should be;
I ask for a woman, with all that implies,
And that is sufficient for me.

You ask for a man without a fault,
To live with him on earth;
I ask for a woman, faults and all,
For by faults I may judge of worth.

I ask for a woman made as of old,
A higher form of man,
His comforter, helper, adviser and friend,
As in the original plan.

A woman who has an aim in life,
Who finds life worth the living,
Who makes the world better for being here,

And for others her life is giving.
I will not require all I have asked,
In these lines so poor and few;
I only pray that you may be all,
That God can make of you.

For your heart and soul, and life and love,
Are sacred things to me,
And "I'll stake my life" that I'll be to you
Whatever I ought to be.

THIS WASHER MUST PAY FOR ITSELF.

A MAN tried to sell me a horse once. He said it was a fine horse and had nothing the matter with it. I wanted a fine horse, but, I didn't know anything about horses much. And I didn't know the man very well either.

So I told him I wanted to try the horse for a month. He said "All right," but pay me first, and I'll give you back your money if the horse isn't all right."

Well, I didn't like that. I was afraid the horse wasn't "all right" and that I might have to whistle for my money if I once parted with it. So I didn't buy the horse, although I wanted it badly. Now, this set me thinking.

You see I make Washing Machines—the "1900 Gravity" Washer.

And I said to myself, lots of people may think about my Washing Machine as I thought about the horse, and about the man who owned it.

But I'd never know, because they wouldn't write and tell me. You see I sell my Washing Machines by mail. I have sold over half a million that way. So, thought I, it is only fair enough to let people try my Washing Machines for a month, before they pay for them, just as I wanted to try the horse.

Now, I know what our "1900 Gravity" Washer will do. I know it will wash the clothes, without wearing or tearing them, in less than half the time they can be washed by hand or by any other machine.

I know it will wash a tub full of very dirty clothes in Six Minutes. I know no other machine ever invented can do that, without wearing the clothes. Our "1900 Gravity" Washer does the work so easy that a child can run it almost as well as a strong woman, and it doesn't wear the clothes, fray the edges, nor break buttons, the way all other machines do.

It just drives soapy water clear through the fibres of the clothes like a force pump might.

So, said I to myself, I will do with my "1900 Gravity" Washer what I wanted the man to do with the horse. Only I won't wait for people to ask me. I'll offer first, and I'll make good the offer every time.

Let me send you a "1900 Gravity" Washer on a month's free trial. I'll pay the freight out of my own pocket, and if you don't want the machine after you've used it a month, I'll take it back and pay the freight too. Surely that is fair enough, isn't it?

Doesn't it prove that the "1900 Gravity" Washer must be all that I say it is?

And you can pay me out of what it saves for you. It will save its whole cost in a few months in wear and tear on the clothes alone. And then it will save 50 to 75 cents a week over that in washwoman's wages. If you keep the machine after the month's trial, I'll let you pay for it out of what it saves you. If it saves you 60 cents a week, send me 50 cents a week 'till paid for. I'll take that cheerfully, and I'll wait for my money until the machine itself earns the balance.

Drop me a line to-day, and let me send you a book about the "1900 Gravity" Washer that washes clothes in six minutes.

Address me personally.
I. I. MORRIS, Manager 1900 Washer Co.,
357 Yonge St., Toronto, Can.

FACIAL BLEMISHES

The successful home treatment of Skin Scalp, Hair and Complexional troubles has been a specialty with us for over 20 years. We treat Pimples, Blisters, Blackheads, Eczema, Freckles, Mothpatches, Discolorations, Ivy Poisoning, Ringworm, Rashes, Red Nose, Wrinkles, Dandruff, Gray, Falling or Lifeless Hair, Alopecia, Goitre, Moles, Warts, Red Veins, Superfluous Hair, or any other non-contagious skin trouble. For Hairs on Face and Red Veins there is no reliable home remedy. Our method is assured satisfactory. Consultation free and confidential at office or by mail. Our booklet "I" and sample of Toilet Cream mailed free if this paper is named. Hiscott Dermatological Institute, 61 College St., Toronto. Est. 1892

This season I am offering for sale Shropshire lambs of both sexes; also breeding ewes. Prices consistent with quality.
E. E. LUTON, R. R. 1, St. Thomas, Ont.
Phone 704 R4

THE WRONG WAY.
A man went into a drug store and bought a bottle of some patent stuff, which was advertised thus:

NO MORE COUGHS.
NO MORE COLDS.
\$1 THE BOTTLE.

Three days later he went to the druggist, complaining that his throat was stopped up, and that he could scarcely breathe. "I've drunk all that patent cough mixture," he said.
"Drunk it?" yelled the druggist. "Why, that's an India-rubber solution to put on the soles of your boots!"

"King Edward" Vacuum Cleaner

Keep your Home Scrupulously Clean all the Year Round



You can do it with ease if you have this wonderful little machine in your home, and there is no reason why you cannot have it. Use it in place of your broom. Go over your carpets, hangings, mattresses, upholstered furniture, with it every sweeping day--it is a mistake to think the use of a vacuum cleaner twice a year will keep a house clean permanently--dirt and dust are constantly accumulating, and nothing but a good vacuum cleaner used often will remove them.

The "King Edward" is the only Vacuum Cleaner working on the correct and most effective system--double pneumatics. It requires a shorter stroke than any other hand machine, and is, therefore, extremely easy to operate--a child can use it and do more work with it than with any electric machine selling at \$100. The only reason for the low price of the "King Edward" is the fact that we sell direct to you--no middleman's profits, no store expenses--just actual manufacturer's cost and a small profit.

10 DAYS' FREE TRIAL.

You take no risk if you send for the "King Edward" Vacuum Cleaner. Fill in and mail the coupon to-day. Use the Vacuum Cleaner for 10 days. If it doesn't satisfy you, return it at our expense. If you decide to keep it, the price to you is only - - - **\$16.00**

The GEO. H. KING CO. LTD. WOODSTOCK, ONT.

Gentlemen--Please send me a King Edward Vacuum Cleaner on ten days' free trial, without obligation to me.

Name..... Address.....

OUR GUARANTEE

WE HEREBY GUARANTEE this Vacuum Cleaner, bearing our name, and manufactured by us, to be perfectly constructed, of good material, and perfect in workmanship. We fully warrant it, under fair usage, against any defects of workmanship or material for the term of FIVE YEARS from date.

Should any defect occur, not the result of neglect or improper use, we agree to satisfactorily repair the same at our factory, or replace with a new one. We furthermore guarantee that it will do satisfactorily the work for which it has been sold, and in the event of failure to do as represented, said machine is returnable at our expense.

The Geo. H. King Co., Limited Woodstock, Ont.

Manufacturers of Hand, Electric, Water Motor and Gasoline Power Vacuum Cleaners

Monarch Light Touch



The farmer, or any other business man for that matter, who does not keep an accurate and comparative yearly account of every department of his farm or business is soon "out of the running" with the man who does. The greatest aid to record work is the typewriter. The

MONARCH TYPEWRITER

is a splendid machine for billing, card indexing, loose-leaf work or correspondence, for the following reasons:

- Construction Simple, Parts Accessible, Visibility Complete, Non-shifting Carriage, Light Touch, Easy to Operate, Easy to Learn, Long Wearing

Let us give you a demonstration of the Monarch machine in your home. A post card will place literature and full information in your hands immediately. Easy payments. Write now for full particulars.

MONARCH DEPARTMENT

Remington Typewriter Co., Ltd. 144 Bay St., TORONTO, ONT.

THIRD ANNUAL Toronto Fat Stock Show

AND SECOND ANNUAL EXHIBIT Union Stock Yards Poultry Breeders' Association Union Stock Yards, TORONTO

TUESDAY and WEDNESDAY, December 10th and 11th, 1912

GRADE PURE-BRED CATTLE, HOGS, SHEEP, POULTRY Entries close November 30th, 1912

Executive Committee: ROBERT MILLER, President. MASHING J. GARDHOUSE, PROF. GEO. E. DAY, J. H. ASHCRAFT, Jr., Gen. Mgr

For Premium List and Entry Blanks, address: C. F. TOPPING, Secretary, Union Stock Yards, Toronto.

TRADE TOPICS.

"PROFITS" are what most people are looking for nowadays on the farm, and after they are earned, the new point is where to keep them with safety for a "rainy day." On this point The Federal Life Assurance Co. make an announcement elsewhere that readers will look carefully into by consulting representatives of the company or writing to the head offices. Look up the advertisement.

There is no better or more economical food for live stock than oil cake, and no more reliable dealers in this commodity than the Dominion Lined Oil Company, at Baden, Ontario, a station on the G. T. R., about half-way between Guelph and Stratford. This firm has had a long experience in the manufacture and sale of oil cake, and supply it fine-ground, coarse-ground, pea-size, or nutted. See their advertisement on another page, and if your dealer cannot supply you, write to headquarters.

LOW RATES FOR HUNTERS VIA GRAND TRUNK RAILWAY.

Fares.--Single first-class fare for the round trip from all stations in Ontario (except north of Gravenhurst and west of Pembroke), also from Detroit and Port Huron, Mich., Buffalo, Black Rock, and Suspension Bridge, N. Y.

Going Dates.--October 7th to November 9th, inclusive, to all points on Temiskaming and Northern Ontario Railway, Temagami, etc., and to certain points in Provinces of Quebec, Nova Scotia, and New Brunswick, also State of Maine.

October 17th to November 9th, inclusive, to Muskoka Lakes, Lake of Bays, Georgian Bay, Maganetawan and French Rivers, Kawartha Lakes, and points on Grand Trunk Railway, Severn to North Bay, inclusive, Madawaska to Parry Sound, Lindsay to Haliburton, Argyle to Cobocok, Penetang, Midland and Lakefield.

Return Limit.--All tickets valid for return until Thursday, December 12th, except to points reached by steamer lines, Tuesday, November 12th, 1912.

Write to A. E. Duff, District Passenger Agent, Union Station, Toronto, Ontario, for free illustrated booklet, entitled "Haunts of Fish and Game," containing Game Laws, Maps, Rates, etc.

GOSSIP.

In the advertisement of Holstein cattle and Tamworth swine, by A. C. Hallman, Breslau, Ont., in our October 10th issue, the price stated for pigs ready to wean read \$8 a pair, which should be \$8 apiece. Correction is made in the advertisement in this issue. The pigs are bred from imported stock, and are of desirable type and quality.

QUESTIONS AND ANSWERS.

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

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

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

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

Miscellaneous.

INJURED TEAT.

I have a valuable Jersey cow that got one teat torn in wire fence some time ago, so that the milk runs out the side of teat. Cut is healed up except where the milk runs out. Is there any way to heal it up so the milk won't leak out of teat? S. A. S.

Ans.--Holes in teats are not always easy to treat. A correspondent recommended through these columns some time ago the use of ordinary shoemaker's or harnessmaker's wax. Warm the wax just enough that it is quite soft, press the hole full of this material and allow to cool. The wax hardens, and closes the opening, and according to our correspondent the cow may be milked without further trouble. Care must be taken that the wax is not so hot as to burn the cow, and also to get it sufficiently warm and pliable. This is a simple remedy, and is worth trying.

KNITTING MACHINES HOME MONEY MAKERS

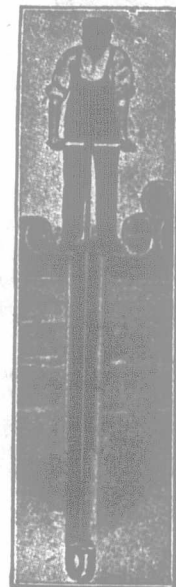


Home knitting is quick and easy with any one of our 6 Family Knitting Machines. Socks and Stockings, Underwear, Caps, Gloves, Mittens, etc.--Plain or Ribbed--can be knitted ten times as fast as by hand, and for far less than they cost ready-made.

A child can work our machines. Besides your own family work, you can make good money knitting for others. FREE--6 illustrated Catalogues--No. 623. Agents wanted in every locality for Typewriters and Home-money-maker knitting machines. Address

CREELMAN BROS. 3 GEORGETOWN, ONT. Box 623.

You can dig 40-foot Wells Quickly through any soil with our Outfit at \$12.00 delivered



Write us to-day, and learn how you can start a profitable business digging wells for others on an investment of but \$12.00.

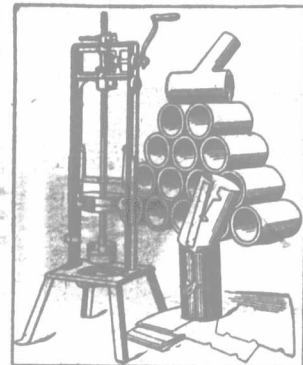
100-ft. outfits, \$25.00.

Works faster and simpler than any other method.

WRITE TO-DAY

Canadian Logging Tool Co., Ltd. Sault Ste Marie, Ontario.

MAKE YOUR OWN TILE



Cost \$4.00 to \$6.00 per 1,000

Hand or Power Send for Catalog

Farmers' Cement Tile Machine Co. Walkerville, Ont.

BUSINESS AND SHORTHAND

Subjects taught by expert instructors at the

Westervelt School Y. M. C. A. BLDG., LONDON, ONT.

Students assisted to positions. College in session from Sept. 3rd. Catalogue free. Enter any time.

J. W. Westervelt Principal J. W. Westervelt, Jr. Chartered Accountant Vice-Principal

THE COST OF A RANGE

This book will be sent free to those interested. It will show just how the cost of a range ought to be estimated.

THE cost of a range is not the price of a range.

Many a range cheap in price becomes expensive in cost as the years go by.

Heavy drain on the coal cellar, and repairs every now and then, make an originally cheap stove a very dear one indeed.

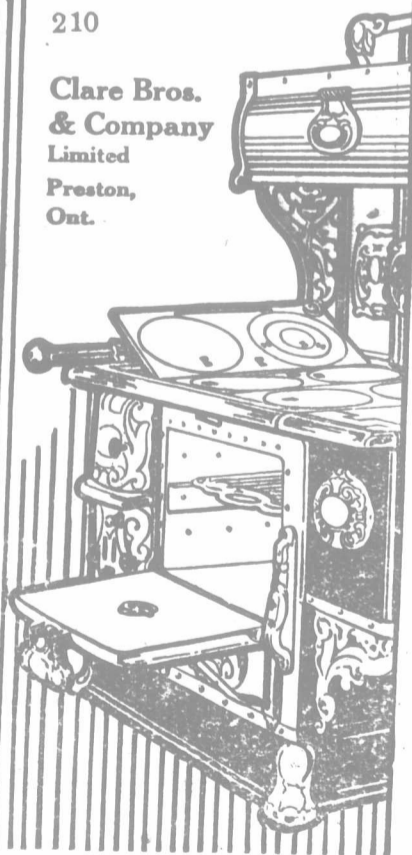
Before laying in your coal for the winter—Before patching up the old range—Before buying a new one—**INVEST A CENT** and get our new booklet, "THE COST OF A RANGE."

A post-card brings it to you. Send one to-day.

MONARCH
PENINSULAR
RANGE
"Ask your neighbor"

210

Clare Bros.
& Company
Limited
Preston,
Ont.



QUESTIONS AND ANSWERS.
Miscellaneous.

TOAD FLAX—TREFOIL—SWEET CLOVER.

1. Please find weed specimen for identification, and, if troublesome, give instructions for killing it.
2. Is trefoil a good pasture plant? If so, do seedsmen keep seed for sale?
3. Would sweet clover be a good forage plant to sow on bare clay hillsides, which are rough to plow?
4. Could you recommend anything else to sow on such land, where the seed might be harrowed in? R. C. A.

Ans.—1. The weed is toad flax, or butter-and-eggs (*Linaria vulgaris*). This is a deep-rooted perennial, a persistent weed in waste places, meadows, and crops. It requires a short rotation of crops, accompanied by deep cultivation, to rid the soil of this pest. Hand-pull in wet weather on land which cannot be cultivated. Plowing meadows in the summer, and cultivating frequently until fall, is effective.

2. Trefoil has some value for pasture, especially where sheep are kept, but in this country it is recognized as a weed, and should not be grown, as it is a common impurity in alsike and red-clover seed, lowering the price, and working against the production of these seeds. Do not sow it. White clover would take its place, and is not harmful. If permanent pasture is desired, sow a mixture of grasses, Prof. C. A. Zavitz's permanent-pasture mixture, for example.

3. It might be worth while to try the sweet clover on a very small area. It would not be advisable to try it on a large scale at first. It is not considered to be a very valuable pasture grass.

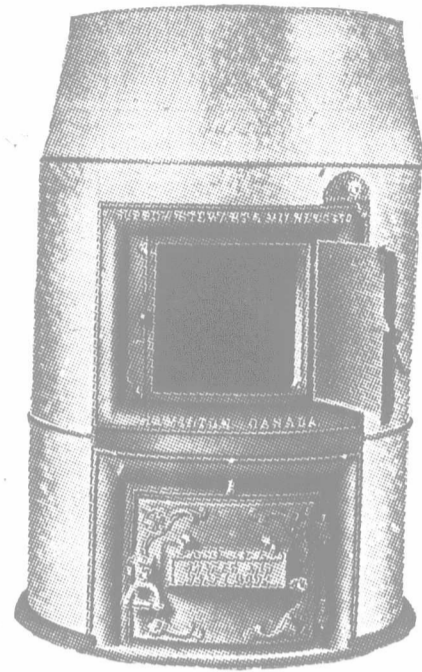
4. White Dutch clover, Kentucky blue grass, orchard grass, a little timothy, and meadow fescue, might be sown in a mixture, provided seed-bed sufficient to cover them could be obtained.

HORSE EATS CONTINUOUSLY.

I have a horse seven years old which seems to have a voracious appetite. He never seems to have enough, and will eat hay all the time if he can get it. I keep him in a box stall, and he has very little work, and only a small amount of driving, not more than three or four miles per day on an average. He had a bad attack of distemper this spring, and seems to have fully recovered, with the exception of a slight discharge from the nose, sometimes hardly noticeable, other times watery, and sometimes phlegm; otherwise he appears to be perfectly healthy. I feed him two quarts of oats and two quarts of bran three times a day, and hay four times a day. He is in good condition. At times he has a slight cough. I have been told that a horse which is always hungry will have the heaves inside of a year. Let me know if this horse has symptoms of heaves. Can anything be done to alleviate symptoms to prevent heaves from developing? G. H. B.

Ans.—Heaves sometimes develop as a sequel to distemper, especially when the animal is left with a chronic cough. We never heard of a good appetite being an indication of heaves. Large quantities of musty, dusty, or inferior feed may cause the trouble, as will also very heavy or fast work while the horse is gorged from over-eating, or drinking too much water. The cough and discharge are the only indications of trouble in this case. Feed only on food of first-class quality. Avoid musty hay or grain. Dampen all he eats with lime-water, and to relieve the cough, if it is at all troublesome, give once daily a ball composed of powdered opium 1½ drams, solid extract of belladonna, 2 drams; camphor, 1 dram, and digitalis, 20 grains. Add sufficient oil of tar to make plastic, roll in tissue paper, and administer, or dissolve in warm water and give as a drench. Do not allow him so much hay that his stomach becomes over-distended.

THE JEWEL WARM AIR FURNACE



NEW PATTERN TWO SIZES

A special Low Set Furnace with every desirable feature.

Ample Fire Chamber with large feed door.

Radiator of heavy steel plate of best construction to retain heat.

Flanged Fire Pot heavy and durable, with large radiating surface.

All joints absolutely gas tight.

Revolving Bar Grate, best yet devised. Heavy, substantial, simple and easily operated. Removes clinkers.

Water Pan conveniently situated.

Dust Flue carries off all dust, etc.

Large Ash Pit and ash pan. Splendid system of dampers

SEE THE JEWEL FURNACE

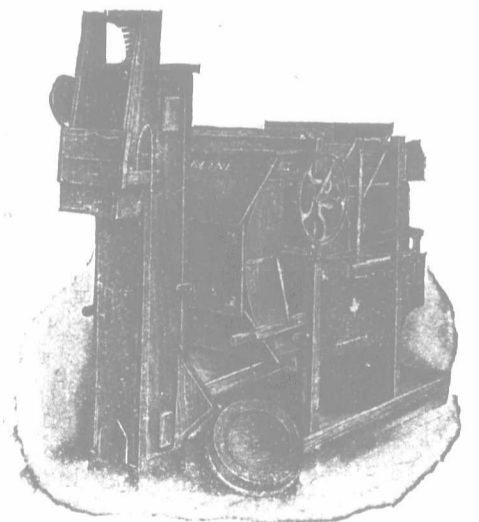
MADE BY
THE BURROW, STEWART & MILNE CO., LIMITED
AT HAMILTON, ONT., AND FOR SALE BY

The leading Stove and Furnace dealers everywhere.

If your dealers cannot supply, write direct to the manufacturers.

A Great Record

"Kline" Fanning Mills have earned a great reputation among Canadian farmers. Lately we have run across "Kline" Mills that have been in use from 20 to 35 years and are still giving efficient service. It's really surprising what lasting satisfaction these machines will give and how much money they will save for farmers even in a year.



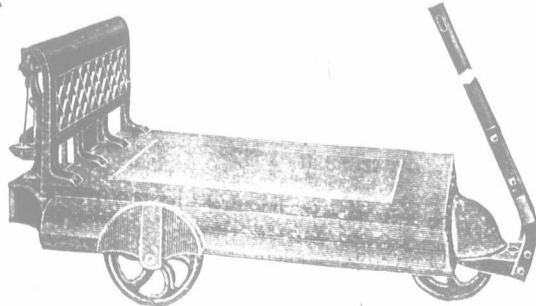
"Kline" Fanning Mills

are built on correct principles and have several features not found in other fanning mills. They are suited for either hand or power. The prices and terms are such that you will be eager to own a "Kline."

Further particulars will be supplied as soon as we learn your name and address. Agents wanted in unrepresented territory.

Kline Manufacturing Co., Ltd.
BEETON, ONTARIO.

WAGON AND STOCK SCALE a Money-saver to You Mr. Farmer



So often you lose money because you are not quite sure of the weight of the article that is changing hands, and by just putting it on the scales your eyes are opened, and you are in a position to judge very accurately as to what this or that particular thing is worth.

Write to-day for our illustrated catalogue, telling you about the Three-wheeled Wagon and Stock Scale. Capacity, 2,000 lbs. All material and workmanship first-class and guaranteed.

ADDRESS

The Aylmer Pump and Scale Co. Limited, AYLMER, ONT.

NEW CENTURY LEADERSHIP



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

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

The "plus" means patented and exclusive features found only in the New Century.

It represents experience and brains applied to washing machine problems, and assures convenience and economy to New Century owners.

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

Cummer-Dowdell Ltd., Hamilton, Ontario 1912



Disease Cannot Spread IF YOU INSTALL Woodward Water Basins

They do away entirely with all the evils of the common trough or tank and provide plenty of water at a proper temperature, in automatically regulated quantities.

Save yourself an enormous amount of winter's labor, trouble and expense by installing the Woodward Water Basin System now.

Get estimates and full particulars, free for the asking, from our office nearest to you.

THE ONTARIO WIND ENGINE and PUMP CO. Winnipeg Toronto Calgary

PROFITS

Some of the profits of the Farm cannot be better invested than in a short-term

Life or Endowment Policy

The Federal Life Assurance Co. issues most desirable forms of contract.

Consult any agent of the Company or write to the Home Office at Hamilton.

The Federal Life Assurance Co. HAMILTON ONTARIO

AUTOMOBILE WORK

Learn how to run and repair automobiles. Our course by mail will teach you. Working models of parts supplied. Good openings for all who complete the course. Write for circular.

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

Morrison Tamworths and SHORTHORNS

—Present offering: Four dandy bull calves that will make show winners, from six to ten months old. Choice Tamworths, both sexes.

CHAS. CURRIE, Morrison, Ontario

INVENTIONS

Thoroughly protected in all countries. E.G. ERTON R. CASE, Registered Patent Attorney, DEPT. E, TEMPLE BUILDING, TORONTO. Booklet on Patents and Drawing Sheet on request.

For Sale: An Imported Thoroughbred Percheron Mare, "Admirable" 64407.

Three years; black, with star. Also her stud colt, by imported Percheron, "Infini" [1340] 67916 (82719). "Admirable" now in foal to same sire. COLIN MCGREGOR, DUTTON, ONTARIO

MENTION "FARMER'S ADVOCATE."

THE SPICE OF LIFE.

STRONG LOVE.

George had been away on business for a whole long week; and during that time he had sent Clara ten letters, six letter-cards, and forty-two picture post-cards.

Why, then, was there a touch of coldness in her greeting when he flew to her arms on his return?

"Dearest," he whispered, "what is the matter?"

"Oh, George, she said, "you didn't send a kiss in your ninth letter."

"My precious," he replied, "that night I had steak and onions for dinner, and you wouldn't have liked a kiss after onions, would you?"

And such is the unfathomable power of love, she was satisfied and nestled to him.

A BOX FOR TWO.

Telephone girls sometimes glory in their mistakes if there is a joke in consequence. The story is told by a telephone operator in one of the Boston exchanges about a man who asked her for the number of a local theater.

He got the wrong number, and without asking to whom he was talking, he said: "Can I get a box for two to-night?"

A startled voice answered him at the other end of the line: "We don't have boxes for two."

"Isn't this the ——— theater?" he called crossly.

"Why, no," was the answer, "this is an undertaking shop."

He cancelled his order for a "box for two."

THE HARVEST.

"The kirk wiz awfu' thin the day."

"Ay! Wiz't no? Bit kintry folk wad be a' that wearit. Ah niver miss the kirk, or ah could ha' gane tae ma bed fine, so ah could."

"Are ye by wi' yer cuttin'?"

"No' yet. We're etlin' tae hae feenish't the morn. Siccan a guddle in that laigh park. A' lynn' every airt."

"Ah h'ard 'a Staneyett wiz gaun on wi' the binder. But it lea'se owre muckle strae on the grun' for me."

"Ay, but his corn's a' lynn' ae w'y, an' mebbe the binder can man't. It tak's three horse, ye ken, but than, they'll hae nae bother wi' lifters."

"Ay, an' the lifters is that fashious. Five shillin' a day an' thir meat. An' no' workin' owre sair at that. Twa-three days an' some o' them's awa'."

"Twa-three hoors wiz lang enuech at oor beans yesterday. Ae man tied three shafts, an' than said it was owre sair wark, an' gaed awa'."

"Ay, but the beans is awfu' heavy the year. It's lang sin' ah hae had as sair a back lootin' an' tyin' thae beans."

"Is yours growin' agayne?"

"Ay! growin' oot at the tap, an' floor't. They're no' sae weel fill't as ah hae seen them, but better when ye're in amang them than ah thoct."

"Ye'll be innin' the morn?"

"Ay! yon heigh park has been cut mair nor twa weeks, an' we maun hae a stack or twa up the morn."

"Oor teemothy's tae in an' thrash yet. Ah think we'll hiv tae tak' hit afore the corn—if the wather'll haud."

"Weel, it s'ould haud wi' this mune. Siccan a rid, rid sun gaed doon owre Arran last nicht, an' a great braid mune wiz in the South. Whaither it's heat, ore whaither it's chinge, ah'll no' tell ye, but it's an awfu' braid mune."—Scottish Farmer.

TRADE TOPIC.

The Canadian Correspondence College, Ltd., of Toronto, Canada, whose advertisement appears in another column, have issued a general calendar containing full information regarding their methods of teaching, giving the advantages of the course which may be studied at home in spare time, and a commencement made at any time, covering all subjects, and giving ample opportunity for specialization in any one particular branch. The course covers agriculture, as well as industrial arts, and an academic department. Write for the calendar and full information.

HAPPY THOUGHT



Do You Want Real Stove Satisfaction?

Do you want a stove that will bake, broil, fry and do every cooking operation equally well?

Do you want a stove that will give you the last unit of heat value from every ounce of fuel—right where you want it, at the lid openings or in the oven—a stove that will pay you dollars every month by the fuel saving it effects.

If you do, the HAPPY THOUGHT is the stove you will eventually choose.

Do not be deceived by the so-called "special features" of other stoves. Every detail of HAPPY THOUGHT construction represents that last word in stove making. If anything better could be devised, it would be already incorporated in the HAPPY THOUGHT.

The HAPPY THOUGHT has no special "selling" points. Its record of success for twenty-five years proves its all-round value as the most serviceable stove that you can buy.

HAPPY THOUGHT RANGES

Are sold in your locality. Ask your hardwareman.

THE WILLIAM BUCK STOVE CO., LIMITED, BRANTFORD, ONT.

Let us help you to GET MORE MONEY out of your Sugar Bush

Do you know about the "CHAMPION" Evaporator, and what it can do for you, by saving time, labor and money, and producing better sugar and syrup than you have ever had before?

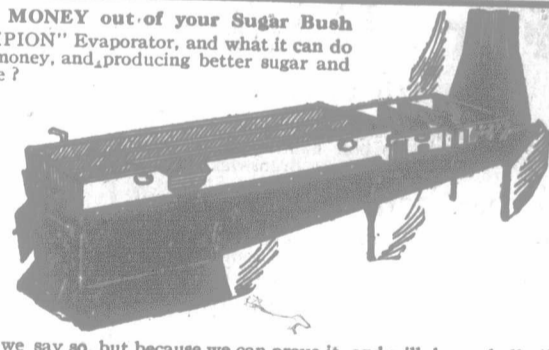
Do you know that nine-tenths of the prizes for maple products at the Fall Fairs go to users of the "Champion" Evaporators?

Do you know that no matter what size your maple grove may be, there is a "Champion" made specially for it?

Do you know that the "Champion" is the best Evaporator on the market, and that you can get one on such easy terms of payment that you won't miss the money?

This is all true. Not because we say so, but because we can prove it, and will do so gladly if you'll give us the chance. Write us now for copy of our new illustrated catalogue, free.

The GRIMM MFG. CO., Limited, 58 Wellington St., Montreal, Que.



GET THE DOLLARS NOW

Push the extra cockerels to market condition and turn them into cash. Bring the pullets to maturity, busy shelling out high-priced eggs. That means profit for you!

Pratts Poultry Regulator

is just what is needed now. It assists digestion and upon this growth and heavy egg production depend. 25c, 50c, \$1; 25-lb. pail, \$3.50 Get the houses in shape for winter. Spray them with

Pratts Disinfectant

the great destroyer of disease germs and vermin. "Your money back if it fails" Pratts 160-page poultry book, 4c by mail.

Get Pratts Profit-sharing Booklet Our products are sold by dealers everywhere, or

PRATT FOOD CO. OF CANADA, Ltd., Toronto.



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

Hunters and Trappers



Save your fine Specimens! Every trophy you kill is worth money to you. You will be astonished at the prices you will get for your specimens. We can teach you, by mail in your own home, how to

Mount Birds and Animals also heads, fish, and to tan hides, make rugs, robes, etc.

Yes, you can learn easily—quickly—perfectly in your own home by mail. Success guaranteed. Fascinating work. We have 35,000 sportsmen students, and every one is an enthusiastic taxidermist. Big profits to all who know taxidermy. Write today.

Special for Canadian Students

For a short time we are making a special reduced price to Canadian students. Act promptly. Write today. We will send you, absolutely free and prepaid, our handsome new book on taxidermy and the Taxidermy Magazine. Hundreds of letters from enthusiastic Canadian students sent on request. We want every sportsman and nature lover in Canada to write for these free books today. No obligations whatsoever. Fill in a postal card, a letter will do, but write today—now—while this special offer lasts.

NORTHWESTERN SCHOOL OF TAXIDERMISTRY
507 Elwood Building, Omaha, Neb.

The Deaf Can HEAR

distinctly every sound—even whispers do not escape them when they are properly assisted. Deafness is due to the ear drums from some cause becoming defective. I offer you the same hope of hearing as you have of seeing from the oculist who supplies glasses to help your eyesight—for I apply the same common sense principle in my method of restoring hearing. The weakened or impaired parts must be reinforced by suitable devices to supply what is lacking and necessary to hear. Among the 390,000 people who have been restored to perfect hearing there has been every condition of deafness or defective hearing. No matter what the cause or how long standing the case the testimonials sent me show marvelous results.

Common-Sense Ear Drums

have restored to me my own hearing—that's how I happened to discover the secret of their success in my own desperate endeavors to be relieved of my deafness after physicians had repeatedly failed.

Common-Sense Ear Drums are made of a soft, sensitized material, comfortable and safe to wear. They are out of sight when worn, and easily adjusted by the wearer.

It is certainly worth your while to investigate. Before you send any money just drop me a line. I want to send you free of charge my book on deafness and plenty of evidence to prove to you that I am entirely worthy of your confidence. Why not write me today?

GEORGE H. WILSON, President
Wilson Ear Drum Co., Incorporated,
420 Todd Bldg., Louisville, Ky.

CANADIAN PACIFIC SINGLE FARE For Hunters

Oct. 7th to Nov. 9th
to all stations Chalk River to Schreiber inclusive, and to best hunting points in Quebec and New Brunswick.

Oct. 17th to Nov. 9th
to all stations Sudbury to the Soo, Havelock to Sharbot Lake, Coldwater to Sudbury, and on the Lindsay & Bobcaygeon Branch.

Return Limit December 12th, 1912
Ask for free copies of "Sportsman's Map" and "Open Seasons for Game and Fish."

STUMP EXTRACTOR

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

WRITE US FOR DETAILS.
The Canadian Boving Co., Ltd.
164 Bay Street, TORONTO

Maplewood Oxfords Shearlings and lambs from Hamptonian 96 (imp.). All good typical Oxfords, and prices reasonable. A. STEVENSON, ATWOOD, ONT.

QUESTIONS AND ANSWERS. Miscellaneous.

WANTS TO STUDY POULTRY.

Where can I learn the poultry business? Could you give a few particulars about Guelph College? When is the best time to attend, and what would be the cost?
B. P. D. L.

Ans.—After reading all you can on the subject from bulletins, farm journals, and practical treatises, get a small flock and care for them yourself. There is no better method of learning anything than to engage therein. After becoming accustomed to caring for the poultry, a course at the Ontario Agricultural College will be found helpful. The regular four-years' course for the B. S. A. degree commences each year in September, and continues to the middle of April. Two years of this course leads to a diploma. Special short courses are given, and poultry is included in these. Write President G. C. Creelman, O. A. C., Guelph, for college calendar.

PASTURING AND FEEDING PIGS

1. In "The Farmer's Advocate" of August 29th, you had an article entitled, "Pigstye vs. Pasture." In it was advocated pasturing pigs in paddocks of rye, rape, clover, and peas and oats, respectively. How many pigs do you allow to the acre?

2. Could any of the proprietary calf foods be used in place of milk for the young pigs just after weaning?
A. S. W.

Ans.—1. The number of pigs which may be pastured on an acre divided into paddocks, depends largely on the size of the pigs and the crops grown. The crops depend on soil conditions and the season. Then, again, if any concentrate feeding is practiced, less forage is needed. The acre, divided into four paddocks of one-quarter acre each, to be pastured in turn, would leave only one-quarter acre in use at a time. From ten to twelve good-sized shoats would likely be found enough in this. It is impossible to state definitely. You can only be governed by the way they keep the feed grazed off, moving them from one paddock to another as this takes place.

2. If these were any particular benefit to young pigs, the manufacturers would surely make it a strong point of their advertising.

HEAL-ALL-ENSILING ALFALFA.

1. Kindly tell what the enclosed plant is. You will readily see it is a running vine, taking root about every half-inch. It is very closely matted, choking everything else out, and seems to be in patches that keep gradually widening. I first saw it two years ago in my alfalfa field, and now there is a patch on my lawn. It has a pale-blue blossom. Is it considered a very bad weed? What is the best way to eradicate it?

2. I have a field of alfalfa which is ready to cut now, but will be difficult to cure for hay with the present kind of weather. Would you recommend mixing it with corn and putting into silo?
W. M.

Ans.—1. The weed is heal-all, or self-heal, a perennial, which often gives trouble in lawns. The seed is quite a common impurity in timothy and other grass seeds. It yields to thorough cultivation and rotation of crops. On the lawn, it should be carefully spudded out.

2. In a season like the present, ensiling the third cutting of alfalfa seems to be about the only method to get it harvested in good condition. It is being practiced on many farms this year, among them being the farms run in connection with Government Institutions. Would try at about one of alfalfa to eight of corn, cut and tramped well.

Senator Vardaman, of Mississippi, was making his maiden speech in the Senate. "My brain reels at the ideal!" he shrieked. "My soul is consumed within me! My speech fails! I am at a loss for words! I am burning with indignation!"

"You are out of order," announced Presiding Officer "Sunny Jim" calmly. "I guess that is what's the matter with me," said the Mississippian disgustedly, as he sank into his seat.

Morning, Evening, Noon or Night,
'Camp's' the Coffee that puts you right

'Camp' Coffee

takes half-a-minute to make—could not be better if it took half-an-hour

No messy 'stewing' coffee pots, no straining, no waste of any kind, no risk of failure—a child can make 'Camp' as well as a chef.

Try 'Camp' to-day.
Your Grocer sells it.

Sole Proprietors—
R. Paterson & Sons, Ltd.,
Coffee Specialists, Glasgow.

FARMERS

Nowadays are looking for a feed for their cattle, which gives the best results and at a reasonable price. This is just what they find in

Sugar Beet Meal

In tests at a number of our best dairies, it has been proven that cattle fed on SUGAR BEET MEAL gave more milk and at a less cost than those fed on other meals. This means increased profits.

It is recommended by the best known dairymen.

This meal is ready for shipment now. As our supply is always exhausted early in the year, ask for prices and particulars at once, and send in your order early.

DOMINION SUGAR CO., LIMITED,
WALLACEBURG, ONTARIO.

Pump Water, Saw Wood, Grind Grain, Churn

and do many other labor-saving tasks with the Barrie Engine. Will pay for itself quickly by saving valuable time for you. Strong, rugged construction. So simple a lad can run it. Sure in action. Economical in operation. Every farmer needs one.

Write for booklet.

AGENTS WANTED

THE CANADA PRODUCER & GAS ENGINE CO., LTD.
Barrie, Ontario, Canada

Distributors: James Rae, Medicine Hat; Canada Machinery Agency, Montreal; McCusker Imp. Co., Regina; The Tudhope Anderson Co., Ltd., Winnipeg, Calgary, Edmonton, Lethbridge, Saskatoon and Regina

The National Stock Food Company

GENTLEMEN:—I am so pleased to write you, with reference to a very bad colic case I had. Although the horse was almost dead and hopeless I drenched him with two bottles of your "ANTI-COLIC"; he made a fine and quick recovery. I obtained as good results as this one with any of your other preparations I used. Yours truly, O. Yelle.

The National Stock Food Co., whose products are famed all over the Dominion, always carry a stock of pure Veterinaries' medicines. Our expert Veterinarians are at your disposal for free consultation. Just write and give all details possible on the disease your animal is affected with, when you will receive the answer strictly free of charge. Write at once.

The National Stock Food Company, Ottawa, Ont.
NOTE.—For shanty horses, special medicines. Write before you go.

TRADEMARK

TRADE TOPIC.

BEATTY BROS. BUY WORTMAN & WARD.—Almost every farmer in Canada has some goods on his farm manufactured by the Wortman & Ward Co. Its line of churns, pumps, washing machines, grain grinders, pea harvesters, etc., is favorably known from one end of the country to the other. In these lines, the Wortman & Ward Co. is one of the largest manufacturers in Canada. The Wortman & Ward plant is one of the largest industries in London, Ont. The industry was started here by Mr. Wortman in 1879, in which year he came to London with a capital of only \$350. To-day they employ over one hundred hands, and their factory has some 60,000 feet of floor space. The growth of this industry shows very clearly how a business can be built up when the aim is to turn out the very best possible goods, and to always deal fairly with the customers. Mr. Wortman was an inventor rather more than a salesman, and the extended sale of his goods was owing rather more to the quality he put into them than to any forceful selling system. For many years the business has been steadily increasing, while no advertising whatever has been done, and very few representatives kept on the road. Any farmer who has used the Daisy churn, or the Daisy grain grinder, or Wortman & Ward pumps, is well aware of the quality of the goods. The firm of Beatty Bros. who have purchased the business is well known to every reader of this paper. Beatty Bros. is one of the most progressive manufacturing firms in Canada. They fully appreciate the opportunity that a firm has manufacturing for the wonderfully-growing market of this country. Perhaps no other firm in Canada, making farm tools, has grown as rapidly in recent years. The BT. Hay Tools, BT. Litter-carrier, and BT. Sanitary Stalls, are the standard for this country. In manufacturing this line of barn-equipment, they employ over one hundred men, and have branches at St. John, Montreal, Brandon, and Vancouver. It is their intention to continue to manufacture the Wortman & Ward lines in the London factory, and it will be their aim to keep up the high standard of quality which Wortman & Ward Co. has always been noted for. The head office of the company will be at Fergus, Ont.

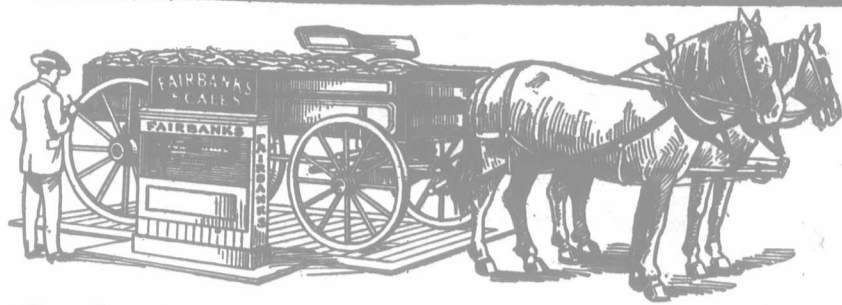
GOSSIP.

Oxford Down sheep, shearing and ram lambs, sired by Imp. Hamptonian 96, champion ram of the breed at Toronto and London, when a shearing, are advertised for sale in this issue by A. Stevenson, Maplewood Stock Farm, Atwood, Perth County, Ont. They are described as all good, typical Oxfords, and will be sold at reasonable prices. This excellent breed is fast gaining in popularity, both in Britain and America, as profitable stock, strong in constitution, and large producers of both mutton and wool.

The Ayrshire bull calves advertised for sale by Alex. Hume & Co., Menie, Ont., were born in July, 1912, and not 1911, as stated in last week's issue. Owing to an unusually large crop of male calves this year, they are offered at sacrificing prices, and the present is a favorable time to buy, for if these calves are well fed, they will be fit for service by June 1st, 1913. They are of first-class breeding, dams and grandams having all qualified for Record of Performance, and all are sired by the imported champion bull at London both 1911 and 1912.

The following letter, with no signature attached, was received by a country editor recently:

"Mister editor—I want to noe why hit is that you use so infarnal much parshality in your little ole paper. Me and My folks have bin visitin half dusin time lately and you never sed one word about hit. You run after the big bugs and let the little ones goe. I have ben thinkin of subscribin fer your ole paper but i won do hit now. You no ho this is. One Ho' Has Bin Ronged."



Fairbanks Scales for Accurate Weighing

WHEN you weigh on a Fairbanks Scale you have that sense of security which comes from knowing that the weight is absolutely correct. Perfect material and simple construction make them last a lifetime. We can cite many instances where Fairbanks Scales installed sixty years ago are still weighing with accuracy. Our Catalog No. ZX 2524 fully describing these scales is yours for the asking.

The Canadian Fairbanks-Morse Co., Limited.
444 ST. JAMES STREET :: MONTREAL

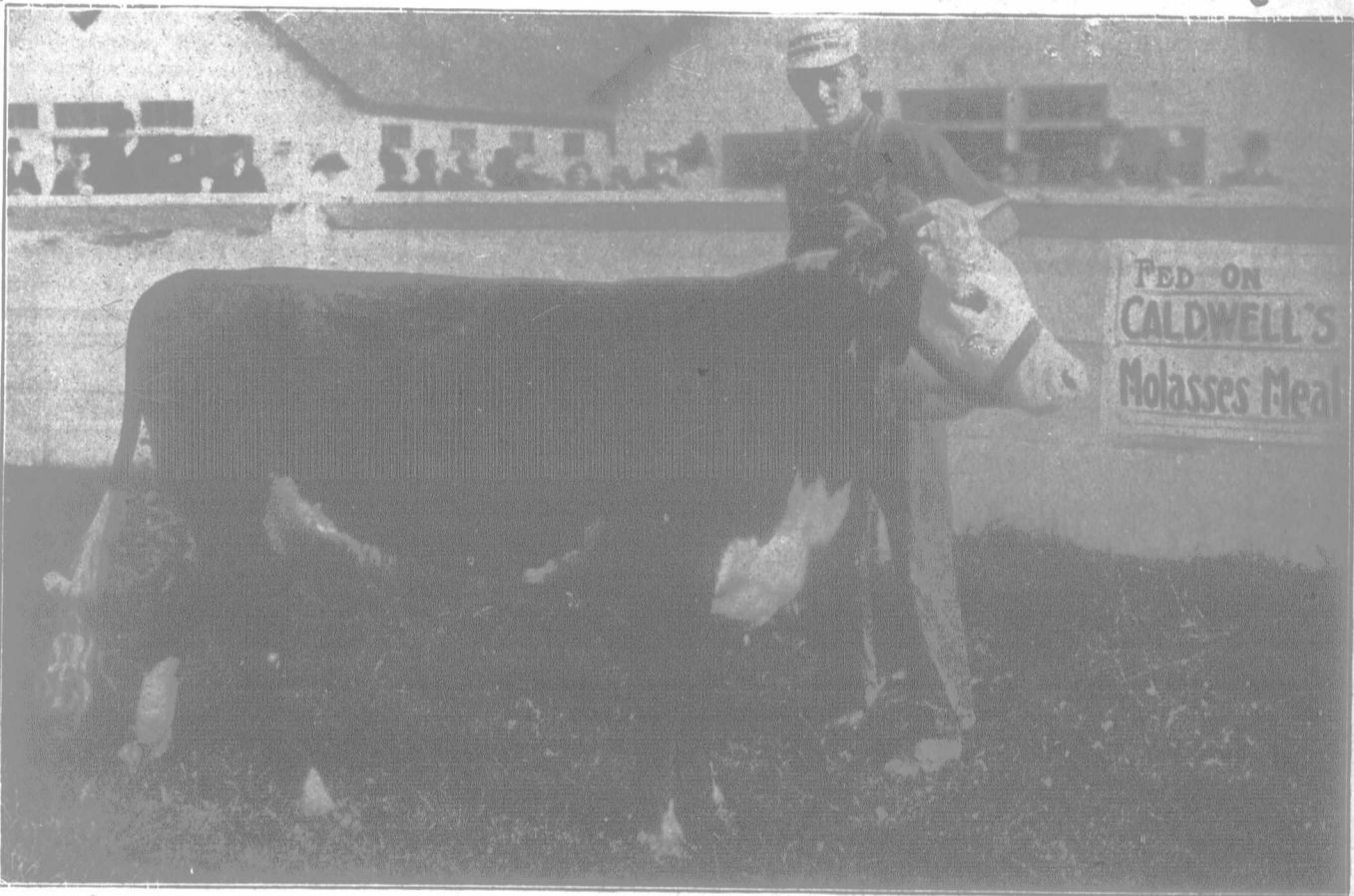
15⁹⁵ AND UPWARD
AMERICAN SEPARATOR

THIS OFFER IS NO CATCH. It is a solid proposition to send, on trial, fully guaranteed, a new, well made, easy running separator for \$15.95. Skims hot or cold milk; making heavy or light cream. Designed especially for small dairies, hotels and private families. Different from this picture, which illustrates our large capacity machines. The bowl is a sanitary marvel, easily cleaned. Shipments made promptly from WINNIPEG, MANITOBA, TORONTO, ONT., and ST. JOHN, N. B. Whether your dairy is large or small, write us and obtain our handsome free catalog. Address: AMERICAN SEPARATOR CO. Box 1200 BAINBRIDGE, N.Y.



MENTION "FARMER'S ADVOCATE."

Caldwell's Molasses Meal helps to make another Champion



Hereford Heifer first in Toronto as a calf in 1911, second at Toronto as yearling, 1912. First prize and champion female at Ottawa. Property of W. H. Hunter & Sons, Orangeville; fitted on Caldwell's Molasses Meal.

The systematic use of

CALDWELL'S MOLASSES MEAL

means prime conditioned stock at less cost than your present feeding.

Get that fact, Caldwell's Molasses Meal does not add to your feeding costs. It's a distinct economy. Use it according to directions. Your horses will look better, work better and live longer. Cows will keep up in flesh and give more milk. Sheep will thrive, lambs come earlier to maturity, and your hogs show you an increased profit.

N.B.—You can buy Caldwell's Molasses Meal either direct from the Factory or from your Feed Store. Clip out coupon—mail to us, and we will send you full particulars.

London Farmer's Advocate

Please send me booklet and full particulars as to cost, etc., of Molasses Meal.

Name

Post Office

Province

The Caldwell Feed Co., Ltd.

DUNDAS - ONTARIO

CUT ALONG THIS LINE

HORSE OWNERS! USE

CAUSTIC BALSAM.
 A safe, speedy and positive cure. The safest, best BLISTER ever used. Removes all blemishes from horses. Impossible to produce scar or bluish. Send for circular. *Special advice free.*
 THE LAWRENCE-WILLIAMS CO., Toronto, Canada



THE ONE BEST FOOD
MOLASSINE MEAL

When fed regularly to horses enables them to do better work — also prevents colic and worms. Mix with oats and feed three times a day — reducing the cost by the amount of MOLASSINE used. Get the genuine made in England.

THE MOLASSINE CO., LTD.
 London, Eng.
 Distributors for Canada
The L. C. Prime Co., Limited
 St. John, N.B.
 221 Board of Trade Bldg., Montreal
 Pacific Bldg., Toronto



INSURE YOUR HORSES

Your Stallion is Worth Insuring Against Death

For an equal premium we grant a more liberal Policy than any other Company. We issue Policies covering all risks on animals. Horse shipments insured for 5, 10, 15, 20 or 30 days at very low premiums. Prospectus Free on Demand

General Animals Insurance Co. of Canada
 Head Office, 71A St. James St., Montreal
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DR. PAGE'S ENGLISH SPAVIN CURE

For the cure of Spavins, Ringbones, Curbs, Splints, Windgalls, Capped Hocks, 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 blistering. 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,
 71 King St., E. TORONTO, ONT.



Seldom See
 a big knee like this, but your horse may have a bunch or bruise on his Ankle, Hock, Stifle, Knee or Throat.

ABSORBINE

will clean them off without laying the horse up. No blister, no hair gone. \$2.00 per bottle delivered. Describe your case for special instructions and Book R. F. Free.

ABSORBINE, J.R. Rubment for mankind. Removes Painful Swellings, Enlarged Glands, Gout, Wens, Bruises, Varicose Veins, Varicocoele, Old Sores, Ailments, Pain. Price \$1 and \$2 a bottle at druggists or delivered. Manufactured only by **W. F. YOUNG, P.D.F., 258 Lyman Bldg., Montreal, Ca.**



Root Culture.

In a paper read before the Senate Committee on Agriculture and Forestry, John Fixter, Farm Superintendent at Macdonald College, Quebec, takes the ground that dairymen and beef-producers find that when roots are fed animals keep in better condition, and the flow of milk and the production of flesh increase with lessened cost. Poultry-keepers and hog-raisers find that when there is no grass, roots form the best and cheapest substitute. There is nothing fed to animals that is more relished. Roots appear to act as a tonic, and help to make all dry feed palatable. Mr. Fixter points out that the average yield of roots over Canada is 402.36 bushels per acre, and that the yield secured at the Macdonald College Farm was more than 1,000 bushels per acre. He goes on to describe how large yields may be secured in every Province of the Dominion, and then tells how to successfully harvest and store the crop. This paper, which is issued in pamphlet form for free distribution by the Publications Branch of the Department of Agriculture, Ottawa, concludes by saying that the greatest success in growing roots will be obtained when the following are observed: A systematic rotation of crops; roots to follow a fresh clover sod; manure once in the rotation; thorough cultivation in preparation for the crop, and after the roots are sown.

HILLS NO DRAWBACK.

In giving a few notes on a Western Virginia race meeting, a writer in The Horse World struck a humorous vein: "Yaas, it's a trifle rough down heah in Wes' Virginny," said an old resident to me the other day when I observed that if the wrinkles were ironed out of this State I'd like it better; "but it's allus been that-a-away. Reckon the Lord knowed best. Anyway, he suttently was good to us. Jest give us so much land down heah he had to stack it up for us; didn't have room to lay it down flat. And I tell ye, Colonel, it's a restful country to look at, and in other ways. Any time one o' us gets a little weary, we uns jest take a little nip and go out in the back yard and lean up against our doggoned old jaam an' take a rest."

In many of the mountain towns I passed through between here and Wheeling, I noticed that all vehicles, no matter how light, had brakes attached to them. There were no exceptions, and a glance at the roads that wound off into the hills explained why they were in use. Doctor Mortimer Price, a well-known veterinarian of Flemingsburg, Ky., and a native of this State, is here attending the races. "Doc," as everyone calls him, was raised near Clarksburg, and tells me that it was no uncommon thing in his section of the State to see the pigs that fed in the forests on top of some of the mountains, coming down to their pens at dusk with their hind toes stuck in their ears, and using their hocks for brakes. Doc didn't explain how they got up on the mountain.

An old neighbor of the family tells me that when Doc was a boy—only a few years ago—his father gave him a plot of meadow-land to look after on top of a high hill. Being of an inventive turn of mind, "Mortie" stacked his hay around a pole about 20 feet high, with a few boards nailed on the bottom for a platform. When winter came, and the ground was frozen and covered with a light fall of snow, Mortie took his "mewels" to his meadow-plot on the mountains, and hitching them to the top of the pole, pulled the stack of hay over and proceeded to "snake" it down the mountain-side to the barn. Everything worked lovely until the stack of hay got going faster than the mules, and as there was no brake on the outfit, the whole avalanche plummeted down the mountain-side, tearing out several valuable fruit trees. The haystack crashed through the barn doors and rolled over into the bay, where it belonged. The mules in the meantime had become detached from the pole in the mad whirl down the hillside; one of them caromed off from a big oak tree and landed in the corn-crib, while the other skidded along into the mill-collar. Just where Pa Price landed on his progressive young son is an easy guess.—James Clark.

For Your Wife's Sake Get an Easy-Running, Easily-Cleaned Separator

A BUSY FARMER cannot always be on hand to turn the cream separator for his wife. But if the cream separator is a

Standard



his wife will not require the services of a strong, husky man. The makers of the STANDARD have built a separator that any woman can easily turn. A strong arm and a strong back are not necessary to make the STANDARD go. A little energy goes a long way with this machine. The low supply can of the STANDARD also makes it essentially a woman's separator. If given her choice, no woman would prefer to pour a pail of milk into a supply can at least one foot higher than the STANDARD'S. Your wife will prefer this machine, too, on account of its sanitary features. Milk from any source cannot reach the neck-bearing. The gearing, too, is enclosed, and is therefore dust-proof. The discs can be cleaned in a minute's time without the use of a brush.

The "Standard"
 But get the STANDARD Cream Separator Catalogue and learn all about the world's greatest separator.

The Renfrew Machinery Company, Limited
 Head Office and Works: RENFREW, ONT.
 Sales Branches at Winnipeg, Man., and Sussex, N.B.

Union Stock Yards of Toronto, Ltd.

HORSE DEPARTMENT
 Auction Sale Every Wednesday Private Sales Every Day
 Railroad Loading Facilities at Barn Doors

W. W. SUTHERLAND, In Office. **J. H. ASHCRAFT, JR., Manager.**

Just Arrived—Clydesdale Stallions and Fillies
 Bigger and better than ever before is our 1912 importation just arrived. Stallions of high size, character, quality and breeding. Fillies of high-class breeding and quality for show or breeding purposes. Come and see them. Terms and prices right. **JOHN A. BOAG & SON, Queensville P.O. and Sta.** on Toronto to Sutton Electric Line L.-D. Phone.

PERCHERON STALLIONS—Our 1912 importation of Percheron stallions supply the trade for ideal draft character flashy quality of underpinning, stylish tops and faultless moving. Let us know your wants. Any terms arranged.

EAD & PORTER, Simcoe, Ontario
IMPORTED CLYDESDALES
 A few choice young stallions always on hand and for sale. Frequent importations maintain a high standard. Prices and terms to suit.

BARBER BROS., Gatineau Pt., Que., near Ottawa.
ORMSBY GRANGE STOCK FARM, Ormstown, P. Que.
 My fall importation, which will be the largest yet made by me, will be personally selected, will arrive last week in September. Good colors, heavy-bone, best of pedigrees and reasonable prices. Wait for them if you want good ones

QUALITY AND SIZE IN CLYDESDALES
 For the best breed produced in the combination of size, character, quality, breeding and action, see my 1912 importation of Clyde Stallions and Fillies. Prices and terms unequalled.

JAMES TORRANCE, MARKHAM, Locust Hill, C. P. R. **P. O. and Sta., G. T. R. L. D. 'Phone**

MT. VICTORIA STOCK FARM, Hudson Heights, P. Q.
 We have some very choice young stock for sale, both sexes. Clydesdales and Hackneys from champion sires and well bred dams, at reasonable prices.

T. B. MACAULAY, Prop. **E. WATSON, Mgr**

Clydesdales and Percherons
 Stallions and fillies of either breed. Over forty head to select from. Draft horses in reality as well as in name. Highest types of the breeds. Come and see them. Terms to suit.

T. D. ELLIOTT & SON, BOLTON, ONTARIO

A Few Choice Glyde Fillies—I am offering several choice and particularly well-bred Clydesdale fillies from foals of 1911 up to 3 years of age, imp. sires and dams. These are the kind that make the money.

HARRY SMITH; Hay P.O., Ont. Exeter Sta L-D 'Phone.

CLYDESDALES OF CANADA'S STANDARD
 My second importation for 1912 has arrived, my third will be here in six weeks. In stallions or fillies I have the farmers' kind at farmers' prices. Come and see me.

GEO. A. BRODIE, Newmarket P. O.
 Newmarket or Stouffville Stns., G. T. R.; Gormley, C. N. R. L.-D. 'phone from either

Shire Stallions and Mares, Shorthorn Cattle (both sexes); also Hampshire Swine. Prices reasonable.

PORTER BROS., APPLEBY, ONT., Burlington Station. 'Phone.

Stallions — CLYDESDALES — Fillies
 I have a big importation of Clyde stallions and fillies just landed; a lot that cannot be duplicated to-day in Scotland, and never was in Canada. Let me know your wants.

ROBT. BEITH, Bowmanville, Ont.



Good-Bye to Hand Milking

Put an end to the long hours of drudgery and the continual worrying over the hired help problem. Let the wonderful

SHARPLES Mechanical Milker

do for you what it is already doing for hundreds of other dairymen. With this marvelous machine one man and a boy can easily milk 100 cows in two hours. It enables you to cut down your labor cost more than half. You can milk any cow in your dairy for less than 1c. You can make a clear extra profit of \$15 more per year from every cow you own. You can, if you wish, double your herd and much more than double your profits. It accomplishes all these things without the slightest possibility of injury to your animals.

"The Teat Cup With the Upward Squeeze" is a Sharples patent that removes the last possible objection to the Mechanical Milker. Write for Catalog No. today.

THE SHARPLES SEPARATOR CO.
TORONTO, CANADA. WINNIPEG, CANADA.

NOTICE TO HORSE IMPORTERS

GERALD POWELL

Commission Agent and Interpreter
Nogent Le Rotrou, France

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

Messrs. Hickman & Scruby
COURT LODGE, EGERTON, KENT, ENG.

EXPORTERS OF Live Stock of all Descriptions
Draft horses of all breeds a specialty. Intending buyers should write us for particulars, as we can place before them the most attractive proposition they have yet experienced. We can send highest references from satisfied buyers of nearly all breeds.

Aberdeen-Angus—A few bulls to sell yet; also females. Come and see them before buying. Drumbo Station.
Walter Hall, Washington, Ont.

HER PLEASURE.

"Here's a dime, my poor man. It gives me great pleasure to help the needy."

"Thankee, mum, thankee, but couldn't you make it a quarter and enjoy yourself thoroughly, mum?"

Had Indigestion, Sour Stomach and Severe Headaches FOR OVER A YEAR

Mr. W. Moore, 132 Lisgar St., Toronto, Ont., writes:—"After having been troubled with indigestion, sour stomach, and severe headaches for over a year, I was induced to try Milburn's Laxa-Liver Pills. One vial greatly benefitted my case, and three vials completely cured me. I can heartily recommend them to any one suffering from stomach or liver trouble."

Milburn's Laxa-Liver Pills stimulate the sluggish liver, clean the coated tongue, and remove all waste and poisonous matter from the system.

Price, 25 cents per vial, or 5 vials for \$1.00, at all dealers, or mailed direct on receipt of price by The T. Milburn Co., Limited, Toronto, Ont.

QUESTIONS AND ANSWERS. Miscellaneous.

HAIRY VETCH.

I want to ask you if hairy vetch will grow the second year? G. P.

Ans.—Yes.

THREE-HORSE LINES.

I noticed in your issue of September 26th a cut of a four-horse-plow hitch. Would you kindly put in your issue of next week, a cut of the lines for a three-horse team? W. B. E.

Ans.—Cuts of lines adjusted for driving either three or four horses abreast, appeared in "The Farmer's Advocate" of April 18th, 1912.

THIN HORSE.

Horse is thin, but seems well otherwise. Would oil be good for him? W. C. B.

Ans.—Make sure whether his teeth require dressing. If this is needed, have it attended to at once. If he does not then improve, take six ounces each sulphate of iron, gentian, ginger, nuxvomica, and bicarbonate of soda; mix, and make into 48 powders. Give him a purgative of 8 drams aloes and 2 drams ginger. Feed bran only until purgation commences. After the bowels regain their normal condition, give him a powder every night and morning.

Veterinary.

MAMMITIS.

1. Cow's teats swelled and the udder hardened, and she gave stringy, bloody milk. Now she is almost dry, and has lost flesh.

2. One quarter of another cow's udder is acting the same way. H. S. E.

Ans.—1. This was inflammation of the udder. All that can be done now is massage the udder frequently, milk three times daily, and feed well. It is possible she will go dry, and be of no use until after next calving.

2. Purge her with 1½ lbs. Epsom salts and 1 ounce ginger. Apply hot poultices to the udder. Milk four times daily, and after milking, rub the udder well with camphorated oil before applying a fresh poultice. V.

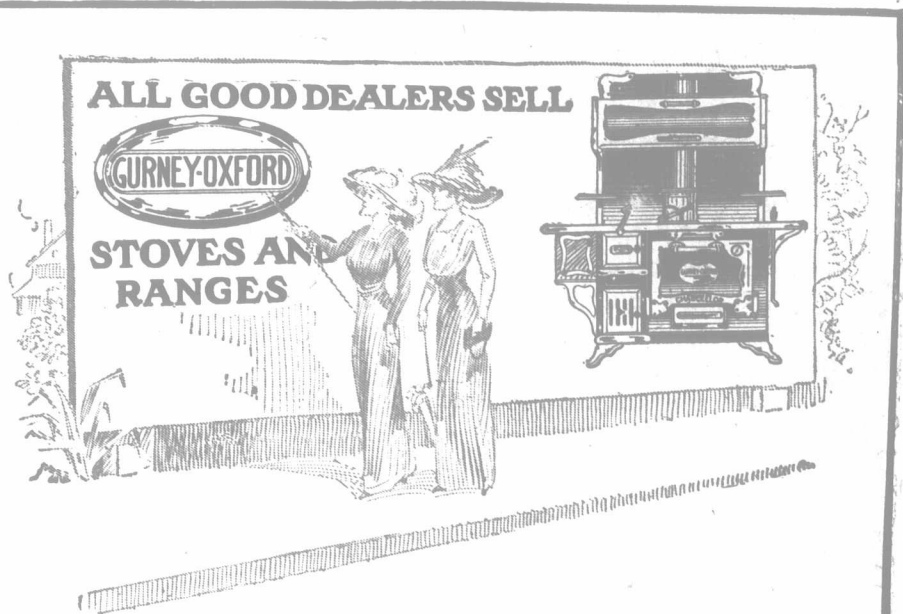
SICK EWE.

One of my ewes is ailing and failing rapidly. Her appetite is fairly good, but she goes around with her head down and one ear flopping. I have lost two with similar symptoms since last fall. I think the trouble is grub in the head. She chews her cud, and then quids it, and it has an offensive odor. C. F.

Ans.—We are of the opinion that this is not grub in the head, which causes a cough and nasal discharge. Furthermore, this is not the season for symptoms of this disease to appear. The symptoms indicate some brain trouble. It may be a growth upon the brain, or the pressure of the hydatid or larval form of tapeworm. In either case, nothing can be done. If you lose any more sheep, it would be wise to get a veterinarian to hold a careful post-mortem in order to determine definitely what causes the trouble. V.

TRADE TOPIC.

EDUCATION IN DAIRYING.—This is the last call to visit the National Dairy Show at Chicago, October 24th to November 2nd next, which will give everyone a short course in dairying that cannot be excelled anywhere in the world. Experts in every branch of the dairy industry will be present. Opportunities to view the best representatives on American soil of the leading dairy cattle, and meet the men who are devoting their lives to the advancement of the dairy industry, are here afforded. Everything will be shown in a big, broad, educational way that all may be enabled to keep abreast of the most modern methods and appliances, and the best results in breeding and feeding dairy cattle, and preparing for market, and the marketing of all dairy products.



The Gurney-Oxford Enthusiast

The housewife who owns a Gurney-Oxford—who has daily experience with it—who knows the way it works—the economy and efficiency of it—is a Gurney-Oxford Enthusiast.

The Gurney-Oxford Range is the sum total of 70 years experience in stove construction. It is a big, up-standing, handsome stove, that works constantly and unfailingly for its owner's satisfaction. It stands guard over her interests, conserving her time and energy, effecting a daily saving in coal, adding to the household economy and increasing the pleasure which comes from a smooth-running and well-ordered household.

That's why she enthusiastically recommends the Gurney-Oxford whenever the question comes up.

She wants her friends to learn, what she knows to be a fact, that a Gurney-Oxford Range is a good housewife's most valuable and cherished possession.

The Gurney Foundry Co. Limited
TORONTO - CANADA

MONTREAL HAMILTON WINNIPEG CALGARY VANCOUVER

SALEM SHORTHORNS

Headed by Gainford Marquis, undefeated bull of three countries. See our show herd at the leading fairs, starting at Winnipeg J. A. WATT. SALRM. FLORA STA. G. T. and C. P. R.

Scotch Shorthorns FOR SALE. One promising 12 months imported Bull Calf, a Marr. Flora, recently imported; 12 bull calves from 6 to 11 months old, all by imported Sire—some good ones among these; also 30 choice cows and heifers in calf, at reasonable prices. Farm ¼-mile from Burlington Jct. Station. **MITCHELL BROS., Burlington, Ont.**

Shorthorns of breeding and quality—Our offering this year in young bulls and heifers, out of Scotch cow, and sired by our great Mildreds Royal, are put up on show lines, and strictly first-class.
GEO. GIER & SON, Grand Valley, Ont., P.O. and Sta.

Orchard-Grove Herefords I have lately made a big importation of the leading herds of Illinois. In my herd you now have 25 Bulls to select from; a big range of Heifers and Cows. High-class show and breeding stock a specialty.
L. O. CLIFFORD, Oshawa, Ontario, G.T.R. and C.N.R.

CORRUGATED IRON

"All corrugated looks alike to me," says the novice. "Looks alike, yes," replies the experienced builder, "but what a difference in quality!" . . . The contents of most buildings with corrugated iron roofing or siding are exceptionally valuable—factories, barns, warehouses, elevators, etc. . . . Only the best is good enough for such structures—Metallic Roofing Co.'s Corrugated Iron. . . . Absolutely free from defects—made from very finest sheets. . . . Each sheet is accurately squared, and the corrugations pressed one at a time—not rolled—giving an exact fit without waste. . . . Any desired size or gauge—galvanized or painted—straight or curved. Send us your specifications.



N.B.—Insure the safety of your grain. A **Metallic Portable Corrugated Granary** protects against loss by lightning, fire and vermin—rats, mice, etc. Write us to-day for information. Also ask us to mail you our new illustrated catalogue, No. 70.

MANUFACTURERS



Agents Wanted in Some Sections
Write for Particulars



Lump Rock Salt, \$10.00 for ton lots. f.o.b. Toronto
Toronto Salt Works, 128 Adelaide St. E.
G. J. CLIFF, MANAGER. Toronto, Ont.

WILLOW BANK STOCK FARM Shorthorns and Leicesters

Herd established 1855, flock 1948, have a special good lot of Shorthorns of either sex to offer of various ages; also a grand lot of Leicester sheep of either sex—a few imported ones to offer.
JAMES DOUGLAS
Caledonia, Ontario

"The Manor" Scotch Shorthorns

Present offering: Three choice yearling bulls. Young cows in calf. Yearlings, heifers; Clippers, Minas, Wimple, Julius, etc. Inspection solicited. Prices moderate. Phone connection.

J. T. GIBSON, DENFIELD, ONTARIO

1854 Maple Lodge Stock Farm 1912

Have some SHORTHORN HEIFERS two years old from cows giving 50 pounds milk per day, and in calf to my stock bull, Senator Lavender.
Grand young LEICESTERS from imp. Wooler of Sandy Knowe, champion at Toronto, and imp. Royal Connaught.

A. W. SMITH, MAPLE LODGE, ONTARIO
Lucan Crossing, G. T. Ry., one mile.

OAKLAND 50 SHORTHORNS

Herd header for sale, Scotch Grey = 72092=, still in his prime, a beautiful roan and a grand handler, straight lined, quiet, active and allright, and one of the choice bulls in Ontario; also five other good bulls, one year and over.

JOHN ELDER & SON, HENSALL, ONTARIO

SPRING VALLEY SHORTHORNS

Herd headed by the two imported bulls, Newton Ringleader, =75783=, and Scottish Pride, =36106=. The females are of the best Scottish families. Young stock of both sexes for sale at reasonable prices. Telephone connection.

KYLE BROS. - - - Ayr, Ontario

Fletcher's Shorthorns

Our herd of Pure Scotch Shorthorns (Imp.) or direct from imported stock, is headed by the grandly-bred Bruce Mayflower bull, Royal Bruce (Imp.) = 55038 = (89909) 273853. Choice young stock for sale.

GEO. D. FLETCHER, R.R. No. 2, Erin, Ont.

Shorthorns for Sale

Three strong-boned bulls of serviceable age, two large cows with calves by side; choicest breeding and heavy milking strain.

STEWART M. GRAHAM, Port Perry, Ont.

Shorthorns and Swine

Am now offering a very choice lot of cows and heifers safe in calf, and some choice young bulls for the tall trade; also Berkshire and Yorkshire pigs; showyard material.

ISRAEL GROFF, Elmira, Ont.

ALWAYS HINDERING.

A new-made widow called at the office of an insurance company for the money due on her husband's policy. The manager said, "I am truly sorry, madam, to hear of your loss."

"That's always the way with you men," said she. "You are always sorry when a poor woman gets a chance to make a little money."

QUESTIONS AND ANSWERS. Miscellaneous.

LEAKY TEAT.

Can anything be done to prevent a cow from leaking milk out of one teat? If not, would it do to dry her in that teat, and how?

Ans.—Different practices are recommended, but do not prove satisfactory in all instances. Touching the end of the teat after milking with a drop of colloidion, a five-cent bottle of which may be obtained at any drug store, has been found successful in some cases. The colloidion is supposed to form a scale, which may be easily picked off at milking-time. We tried it, however, on a cow last winter without any success. The only way we could stop the leak was by vealing calves on her. Would not try drying one quarter.

FLEAS—POTATO ROT.

1. Is there any way in which you can get rid of fleas on a dog? I have tried everything, but did not succeed.
2. Can you give me any information as to preventing potatoes from rotting after they are dug, or is it too early to put them in the cellar?

Ans.—1. If you have already tried everything without avail, what is the use of asking us for a successful method? Have you tried shooting the dog?
2. If you have only a few potatoes, perhaps the best plan would be to spread them out thinly on a floor, or benches or racks. With a large quantity this course would be impracticable, and the best plan then would be to pile in the field in lightly-protected heaps until weather necessitates storing in the cellar. Then pick over carefully and throw out all affected with the rot. Those infected with the spores of blight and rot will surely go in spite of everything.

CARPENTRY.

1. Are there any books that can be got which deal with carpentry work? If so, at what price, and where can one get them?
2. How much arithmetic and drawing does one need to know before he can start carpentry work?
3. How many years has one to serve before he becomes a carpenter?
4. What are the wages for the first, second and third years?
5. Is it difficult to obtain a situation now?

6. Do you know whether the carpentry work is overdone?
Ans.—1. We used to keep in stock a book called the Carpenters' and Joiners' Handbook, but it is out of print. There are various good periodicals published in the interest of this trade.

2. Not much, but the more the better.
3. Usually from three to four years.
4. In the neighborhood where this publication is issued, the wages would usually run five, six and seven dollars a week.
5. No.
6. No.

Present Special Offering

20 High-Class Scotch Shorthorn Heifers
10 High-Class Young Shorthorn Cows
5 High-Class Scotch Shorthorn Bulls

At moderate prices, including Mary Missies, Emmas, Cruickshank Nonpareils, Duchess of Glosters, Village Girls, Bridesmaids, Butterflies, Kinellar Claretts, Miss Ramsdens, Crimson Flowers; also a number of the grand old milking tribe, which have been famous in the showing.

ARTHUR J. HOWDEN & CO.
Columbus, Ontario



SHORTHORNS

Have now a choice lot of young bulls to offer; also with something nice in heifers. Catalogue of herd and list of young animals on application.

H. CARGILL & SON, Proprietors, Cargill, Ont., Bruce Co.
JOHN CLANCY, Manager



I Have SHORTHORN Bulls and Heifers, SHROPSHIRE and COTSWOLD Rams and Ewes, CLYDESDALE Fillies and Colts

that are as good as I have ever had, and that I will sell for prices within the reach of all. We have been in the business 75 years, always in the front rank, and propose to keep that position. You cannot afford to buy without writing us for prices.

ROBERT MILLER, STOUFFVILLE, ONTARIO

Scotch Shorthorns

—Present offering: Three young-bulls of serviceable age, from imp. sires and dams. A few very good bull calves. Cows and heifers bred or with calves at foot.

Burlington Jct. Sta., G. T. R. W. G. PETTIT & SONS, Freeman, Ont.

1861 Irvine-Side Shorthorns 1912

Offering for sale young bulls and heifers that are the result of over 50 years successful breeding. Pure Scotch, and carrying the best blood of the breed. Few good Oxford-Down rams.

John Watt & Son, Salem P. O., Ont. Flora Station, G. T. and C. P. R.

Brampton Jerseys

Bulls fit for service are getting scarce. Just a few left. Yearling heifers in calf are in great demand; 6 for sale; 6 now being bred. Brampton Stockwell the sire. A few good cows and some calves for sale. Production and quality.

B. H. BULL & SON, Brampton, Ont.

BALAPHORENE A. J. C. C. JERSEYS

Present offering: Cows from three to seven years old; calves from two to ten months old; either sex.

JOSEPH S'ABROOK, HAVELOCK, ONT.

Stockwood Ayrshires

are coming to the front wherever shows. This herd is now headed by White Hill Free Trader (Imp.) No. 33273, championship bull at Sherbrooke; also headed the 1st-prize aged herd. Stock of all ages for sale. Satisfaction guaranteed.

D. M. WATT, ST. LOUIS STATION, QUE.
Telephone in house.

CHERRYBANK AYRSHIRES I

We are offering 5 young bulls fit for service, from dams of 40 lbs. to 50 lbs. daily of 4% milk. Anything else in the herd priced reasonable. This herd won over \$1,200 prize money in 1911.

P. D. McArthur, North Georgetown, Que.

AYRSHIRES FOR SALE

Seven bulls and a few heifers of different ages, sired by Woodroffe Comrade, whose first heifer in milk, gave 11,392 lbs. milk, 480 lbs. butterfat in one year. Prices right. H. C. HAMILL, BOX GROVE P. O. ONT., Markham, G. T. R.; Locust Hill, C. P. R. Bell phone connection from Markham.

Ayrshires and Yorkshires

—We now offer at bargain bull calves dropped in July, 1912. All bred from (imp.) sire and from either dams with good records, or their daughters either imported or home-bred. Some choice February pigs; also young pigs.

Alex. Hume & Co., Menie, Ont.

City View Ayrshires

—Bonnie's Messenger 32762 at head of herd, both dam and gr. dam R. O. P. cows. One yearling bull and calves of either sex. Will sell a few cows.

JAMES BEGG, R. R. No. 1 St. Thomas
One and a half miles from all stations.

Hillcrest Ayrshires

—At head of herd is Ivanhoe of Tanglewild, a son of the champion Ayrshire cow, Primrose of Tanglewild, R. O. P. test 16,195 lbs. milk and 625.62 lbs. fat; 60 head to select from. Inspection invited.

F. H. HARRIS, Mt. Elgin, Ont.

STONEHOUSE AYRSHIRES

Are coming to the front wherever shown. Look out for this at the leading exhibitions. Some choice young bulls for sale, as well as cows and heifers.

HECTOR GORDON, Howick, Quebec.

GLENHURST AYRSHIRES

Established over 50 years ago, and ever since kept up to a high standard. We can supply females of all ages and young bulls, the result of a lifetime's intelligent breeding; 45 head to select from. Let me know your wants.

JAMES BENNING, Williamstown P. O. Summerstown Sta., Glengarry

QUESTIONS AND ANSWERS. Miscellaneous.

SOWING FERTILIZER—OIL CAKE.

1. Is it necessary to have a seed-drill built on purpose for sowing fertilizer with grain before you can use fertilizer successfully on land?

2. Does oil cake increase the butter-fat in milk, or does it tend to fatten when fed to milking cows?

Ans.—1. A drill is not necessary to apply fertilizer, as you may broadcast successfully by hand. 2. Oil cake does not increase the percentage of butter-fat in milk, except in so far as any change of feed is liable to have this effect for a short period.

ALFALFA IN PARRY SOUND.

Kindly advise me if alfalfa could be grown successfully and profitably in this district of Parry Sound. My farm is a clay loam, with a hard-pan clay sub-soil. How should the land be prepared, and how should the seed be sown—with or without a nurse crop?

Ans.—With all our enthusiasm for alfalfa, we could not go further than advise a cautious trial under Parry Sound conditions. Choose, if you have it, a hard-clay hillside that has been well enriched by previous manuring.

GROUND HOGS.

Have a field badly infested with ground hogs. Would you kindly advise the best method to exterminate them?

Ans.—Poisoning, by placing in the burrows cloths dipped in carbon bisulphide, an inflammable, poisonous liquid, which volatilizes readily, forming a vapor which is heavier than the air, and hence sinks to the bottom of the burrow, killing the ground hogs, is a remedy which has been often recommended in these columns, and is effective.

CALGARY HAMILTON WINNIPEG MONTREAL

McClary's

ST. JOHN, N. B. VANCOUVER TORONTO LONDON

The baking power of an Oven depends largely on Fire-box—it must be built in exact proportion to oven. The Fire-box of the "PANDORA" is deep and wide but not out of proportion—there is a wide surface at top of fire so that it radiates more heat and cooking can be done much quicker over front pot-holes without forcing fire—another apparent reason for our fuel economy claim.

The teeth are shorter—crush clinkers easier and are less liable to break. Anybody can remove the "PANDORA" semi-steel grates—the operation is simplicity itself. A boy can take out coal grates and insert wood by simply sliding them in and out on their independent grate frame.

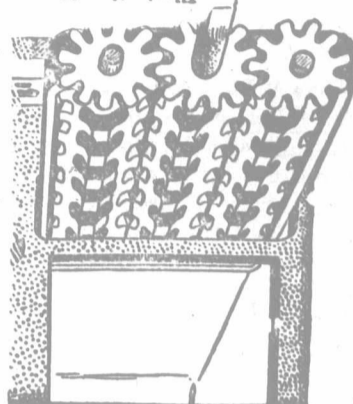


Illustration No. 2 shows the range used in "PANDORA" which they are removed—being made with three bars they are heavier and stronger than the two-bar grate—

Illustration No. 1 shows the semi-steel "PANDORA" Fire-box. These linings are manufactured by a special process. As you see there are five pieces—a front-piece, two ends and two at the back—and fitted into Fire-box without bolts or cement. The surfaces of these linings are smooth—they have great fire-resisting power and are already famous for durability and

simplicity. The superiority of the "PANDORA" Oven to that of any other range you can buy has been convincingly proven in a former advertisement. The swelling tide of orders from our agents testifies to that, yet there are many more features of them exclusively McClary's—

The "PANDORA" Range Solves Cooking and Baking Problems—More Reasons Why

HIGHEST PRICES PAID FOR RAW FURS

Write for our PRICE LISTS. Your Shipments Solicited. Prompt Returns. E. T. CARTER & CO., 84 FRONT ST., E., TORONTO, CAN.

AVONDALE HOLSTEINS

Our herd's records are up to 30 lbs. for mature, 29 lbs. for 3-year-olds, 21 lbs. for 2-year-olds. Our stock bulls are Prince Hengerveld, Pietje and King Pontiac Artis Canada, carrying the richest blood and highest records of the breed. Young stock for sale. LORNE LOGAN, Manager. A. C. HARDY, Brockville, Ont.

FAIRVIEW FARM'S HERD OFFERS sons of Pontiac Korndyke

25983, the greatest sire that ever lived, and the only bull that ever sired 12 daughters that have made 7-day records above 30 pounds each. Do you want your next bull to be a brother to such cows as Pontiac Lady Korndyke (38.02), Pontiac Pet (37.67), Pontiac Clothilde De Kol 2nd (37.21), Sadie Vale Korndyke (36.20), and eight others above 30 pounds? If you do, write me for price on a son of Pontiac Korndyke. I also have sons of Rag Apple Korndyke and Sir Johanna Colantha Gladi. E. H. DOLLAR, HEUVELTON, NEW YORK. Near Prescott.

SUMMER HILL HOLSTEIN CATTLE and YORKSHIRE HOGS

Our senior herd bull, Sir Admiral Ormsby, is the sire of the world's record 2-year-old for yearly butter production. Also sire of the highest record 1 four-year-olds in Canada. The dam of our junior herd bull made 34.6 lbs. butter in 7 days, and gave 111 lbs. milk per day. Come and make your selection from over 70 head. In Improved English Yorkshires we have won 95 per cent of first prizes at Toronto Exhibition for ten years. We are still breeding them bigger and better than ever. Buy Summer Hill Yorkshires, the quick-maturing kind, and double your profits. D. C. FLATT & SON, R. F. D. No 2 Hamilton, Ontario Bell 'phone: 2471, Hamilton.

EVERGREEN STOCK FARM Present offering: Two young bull calves

good individuals; nicely marked and well bred; the dam of one of them being Uniclay Abbecker, the cow that topped the consignment sale of the Oxford District Holstein Breeders' Club. Priced right for immediate sale. A. E. Hulet, Norwich, Ont.

Holsteins, Yorkshires, Hackneys

Our herd of over 30 Holstein females, from calves up, are for sale. Come and make your own selection. In Yorkshires we have a large number of young sows, bred and ready to breed, of the Minnie and Bloom tribes. No fancy prices asked. A. WATSON & SONS, R. R. No 1, St. Thomas, Ont L.-D. 'phone from Fingal.

Silver Creek Holsteins

We are now offering about a dozen yearling heifers and three young bulls. They are all of superior type, and officially backed on both sides. King Fayne Segis Clothilde, whose seven nearest dams have seven-day records that average 27 pounds, is at head of herd. A. H. TEEPLE, CURRIES P. O., ONT., Woodstock Station. 'Phone connection.

HOLSTEINS

We are now offering some young bulls from 4 to 10 months old, got by the great sire, Ida's Paul Veeman, which has daughters with 20 lbs. of butter in 7 days as 2-year-olds; also some cows and heifers freshening in Oct., served by Veeman. Write or come and visit the herd for particulars. H. C. HOLTSBY, Belmont, Ont.

SPRING BROOK HOLSTEINS and TAMWORTH SWINE

Two rich-bred bulls for sale, 15 months old; popular strains; "Record of Merit" ancestry, good individuals; bargain to quick buyers. Thirty Tamworth pigs ready to wean, bred from imported stock. Price, \$5 apiece. Express paid to Ontario points. Order early if you want any. Choice stock. A. C. HALLMAN, Breslau, Ont., Waterloo Co.

PURE-BRED REGISTERED Holstein Cattle

The most profitable dairy breed, greatest in size, milk, butter-fat and in vitality. Send for FREE illustrated descriptive booklets. HOLSTEIN-FRIESIAN ASSOCIATION, F. L. Houghton, Sec., Box 127, Battleboro, Vt.

Holsteins of Quality

Write us to-day for our proposition, telling you how any good dairyman may own a registered Holstein bull from a Record-of-Performance cow without investing a cent for him.

MONRO & LAWLESS, "Elmdale Farm" Thorold, Ontario

The Maples Holstein Herd

offers a splendid lot of bull calves, all sired by Prince Aaggie Mechthilde and all from record of merit dams. For pedigrees and prices write WALBURN RIVERS, Falden, Ontario

Maple Grove Holsteins Herd headed by King Lyons

Hengerveld, whose 17 near female ancestors have butter records from 30.50 to 34.75 lbs. in 7 days, including world's records for 7 and 30 days. H. BOLLERT, R. R. No. 5, Tavistock, Ont. SECURE ONE OF OUR PREMIUMS.

HAD DYSPEPSIA FOR TEN YEARS

COULD NOT KEEP ANYTHING ON HER STOMACH

Dyspepsia is caused by poor digestion, and to get rid of this terrible affliction, it is necessary to place the stomach in a good condition. For this purpose Burdock Blood Bitters has no equal.

Mrs. Norman A. MacLeod, Port Bevis, N.S., writes:—"For the last ten years I suffered dreadfully with dyspepsia, and I could not keep anything on my stomach. I tried several kinds of medicines, but none of them seemed to do me any good. At last a friend advised me to try Burdock Blood Bitters, which I did, and after using five bottles I was completely cured. I would advise any one troubled with stomach trouble to use B.B.B. I cannot recommend it too highly."

Burdock Blood Bitters is manufactured only by The T. Milburn Co., Limited, Toronto, Ont.

Farnham Oxfords and Hampshires

FLOCK ESTABLISHED IN 1881.

Present offering: A lot of first-class ram lambs of both breeds, by imported champion rams. Also a number of yearling and older ewes and ewe lambs of both breeds. Prices reasonable.

Henry Arkell & Son, Arkell, Ontario. Long-distance phone in house.

Southdown Sheep

The market-to-day demands quality. It pays to breed what the market wants. Can you do this more cheaply or quickly than by heading your flock with a right good ram of this most perfect of mutton breeds? Orders taken for a few sturdy young rams for all delivery.

ROBT. McEWEN, Alloway Lodge Stock Farm, Byron, Ontario

Cattle and Sheep Labels

Size	Price doz.	Fifty tags
Cattle	75c.	\$2.00
Light Cattle ..	60c.	1.50
Sheep or Hog ..	40c.	1.00

No postage or duty to pay. Cattle sizes with name and address and numbers; sheep or hog size, same and get better rate. Circular and sample mailed free. F. G. JAMES, Bowmanville, Ont.

Oxford Downs—Choice reg. ram and ewe lambs, \$10 and \$12 each; also a few yearling rams and ewes at close prices.
W. A. BRYANT, Cairngorm, Ont.

BICYCLE NEWS.

A travelling salesman in the employ of a large bicycle manufacturer in Philadelphia was obliged to go on a business trip into the West about the time an interesting domestic event was expected. The salesman desired his sister to wire him results, according to a formula something like this: If a boy, "Man's safety arrived"; if a girl, "Lady's safety arrived."

To the astonishment and chagrin of the father-elect, he had been gone but a few days when he received a telegram containing but one word: "Tandem."

She Had Such Beautiful Hands

that it was perfectly evident that she used SNAP, the original hand cleaner, to remove the grime of housework.

Hand cleaners by any other name do not smell as sweet. Avoid rank imitations, and remember the name



SNAP

Order from your dealer to-day. Save coupons.

GOSSIP.

Remarkable prices for yearling Thoroughbred colts were realized at a four-days' auction sale at Doncaster, England, the last week in September, when 304 colts were sold for an average of \$2,465. Thirteen yearlings from the Sledmere stud of Sir Tatton Sykes, sold the same week at Doncaster, for an average of \$11,300. And in the same week Major Wise obtained the best price of 5,000 guineas (\$25,000) for his colt, by Desmond, out of Sisterlike, by Ladas. It is stated by the Sportsman that the buyer had the chance of buying Sisterlike and her colt, and in foal again, privately, for 1,000 guineas the lot. He then declined the purchase, and has now given five times the price for the colt alone.

James Torrance, of Markham, Ont., the well-known importer of Clydesdale horses, has lately sold to Wm. Foster, of Markdale, Ont., the big, quality stallion, Baron Lionel (imp.) [11525] (13997), the brown six-year-old son of the good breeding horse, Baron Ruby, the renowned Baron's Pride, dam by the equally great Lord Lionel, by Prince Sturdy, and grandam by the unbeaten £3,000 Prince of Albion. This is a particularly well-bred horse, having in his pedigree five numbered dams, and carrying the blood of the famous sires, Baron's Pride and Darnley. He is one of the ton in weight, and immensely flashy in his quality of underpinning. He is an ideal Canadian horse, and his present owner showed right good judgment in making his selection. It is not many sections of country that have the privilege of using so good a horse, and the breeders of that part of Grey County should well appreciate their opportunity.

TOWER FARM OXFORD DOWNS.

About two miles from Erin Station, C. P. R., is the noted Oxford Down sheep-breeding farm, Tower Farm, owned by E. Barbour, whose skill as a breeder and fitter of Oxford Down sheep is a fact well known to many other breeders of this class of sheep whose entries at the big shows have measured their standard with the entries from this renowned flock. Decorating the walls of Mr. Barbour's splendid house are many emblems of victory at such great shows as Toronto, London, Ottawa, and the Guelph Winter Fair, and the standard of excellence necessary to win at those events is the complexion, type, quality, covering, and condition of the Tower Farm flock. The stock rams in service are: Hamtonian 266 (imp.), bred by J. T. Hobbs; Maisey Hampton, Fairford, England, and Adams 77 (imp.), bred by George Adams & Sons, Farrington, Berks, England. The former is a full brother to the Royal champion of 1910, and won first in the aged class at the Dominion Exhibition at Ottawa this year; the second won second prize in the same class at the same show. They are an exceptionally choice pair, covered to the ground, and each weighs very nearly 400 lbs. The last-named is for sale. He is two shears in age, and a most successful sire. The breeding ewes are all either imported or bred from imported stock, are remarkably uniform, of big size, and well covered, and among them are winners at the above shows. For sale, are choice flock-headers in one- and two-shear rams and ram lambs, and flock foundation in the same ages. In ram and ewe lambs, and one- and two-shear ewes, are a number of this year's winners at Ottawa. Early orders get the pick. Mr. Barbour has also a strong, well-barred flock of Barred Plymouth Rocks, of which he has for sale both cockerels and pullets.

TRADE TOPIC.

The National Dairy Show, at Chicago, Oct. 24 to Nov. 2 this year, will be filled with new features for the dairyman and farmer in all of the branches of the dairy industry, and there will be thousands of the best men in the country to talk with and learn something new from. You ought to arrange to be there all the time that you can possibly afford.

DO YOU FEED

OIL CAKE?

The best food known for live stock.

Fine ground, coarse ground, pea size, nitted.

If your dealer cannot supply you, WRITE US.

The DOMINION LINSEED OIL COMPANY, Limited
BADEN, ONTARIO

Shropshires and Cotswolds!

In SHROPSHIRE I have for sale 35 imp. shearing rams and ewes from some of England's best flocks, a lot of fine home-bred rams and ewes bred from Minton and Buttar ewes. In COTSWOLDS a lot of rams and ewes, and an extra good lot of lambs. A few of each breed fitted for showing. Order early and get a good choice. Prices very reasonable.

Claremont Station, C. P. R., three miles.
Pickering Station, G. T. R., seven miles.

John Miller, Brougham, Ont.

Belmont Shropshires and Southdowns

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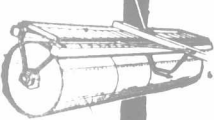
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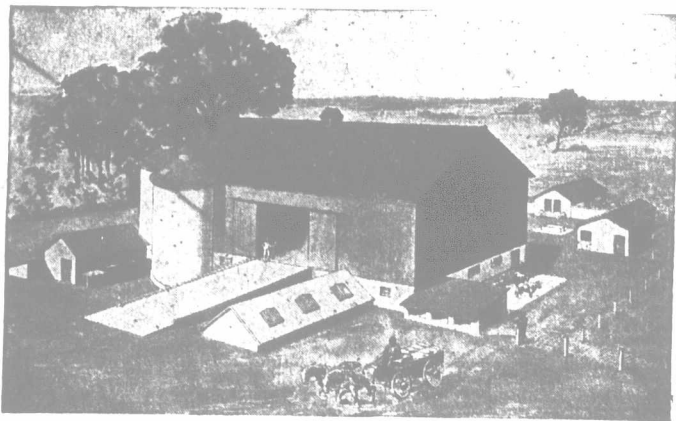
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