

**PAGES
MISSING**

SOMETHING NEW



Bell's Seed & Fertilizer Sower

sows seeds and fertilizer through separate drill spouts at the same time. Both spouts are adjustable and independent. Hoppers are large enough for sugar beet sowing.

Bell's ordinary Root Seed Sower is the most solidly built on the market. Catalogue, describing Bell's Seed Sowers, Scufflers, Rollers, etc., sent free if you mention this paper.

B. BELL & SON, St. George, Ont.

CHEAP HELP



BY GETTING A

Canadian Airmotor

YOU CAN

Cut your straw,
Crush your grain,
Pulp your turnips,
Pump your water.

During cold, stormy weather, without going outside.

NO FUEL TO PAY FOR.

We have Pumps, Tanks, Grinders & Gasoline Engines.

ONTARIO WIND ENGINE & PUMP CO., Ltd.
Toronto, Ont.



LOW RATES

TO
Manitoba, Alberta & Saskatchewan Points

FOR
HOMESEEKERS.

Tickets good to return within Sixty Days. Liberal stop-overs.

Excursions Leave Toronto

ON
Tuesday, July 3 & 17

Free berths in Colonist Cars. Berths in comfortable Tourist Sleepers at moderate rates.

Ask nearest C. P. R. Agent for booklet, rates and full information, or write C. B. FOSTER, D. P. A., Toronto.

ALBERTA FALL WHEAT LANDS

The wheat lands of Southern Alberta are recognized as the best in Western Canada, and the **High River District** is unexcelled. We hold some of the **very best lands** in this vicinity. If you are interested, write us.

THE HIGH RIVER REALTY COMPANY
P.O. Box 230. High River, Alta.

ALBERTA FARM LANDS

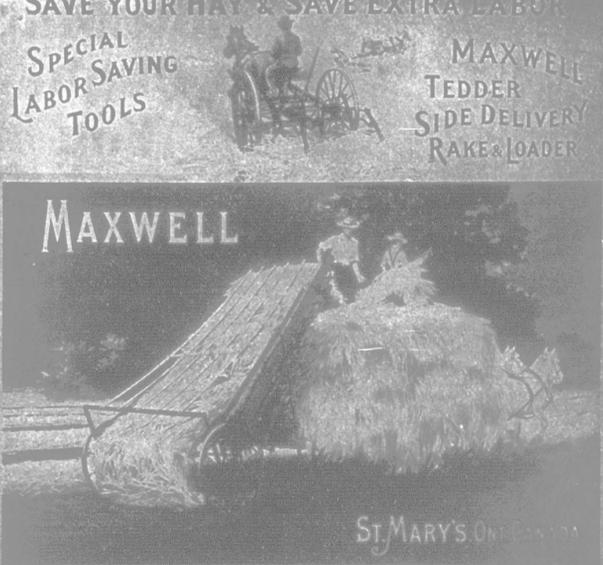
All eyes on the Golden West. 620 acres 1 1/2 miles from Midnapore station, 9 miles from Calgary. Good soil. All arable. Good water. \$16. Easy terms. 320 acres 2 miles from Beddington station, 12 miles from Calgary. Best soil in Alberta. \$13. Easy terms. 960 acres 4 miles from Calgary. Good soil. All arable. Good buildings. Fenced and cross fenced. \$30. Terms. All guaranteed.

D. R. MACLEAN, Alexander Block, CALGARY.
P. O. Box 144.

SAVE YOUR HAY & SAVE EXTRA LABOR

SPECIAL LABOR SAVING TOOLS

MAXWELL TEDDER SIDE DELIVERY RAKE & LOADER

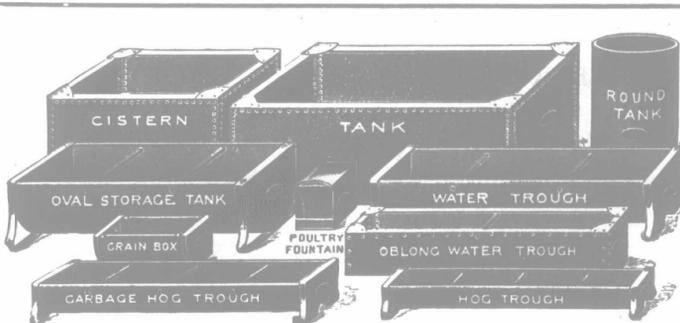


MAXWELL

St. Mary's Ontario

IS THERE AN AGENT IN YOUR DISTRICT? IF NOT ADDRESS THE FIRM DIRECTLY

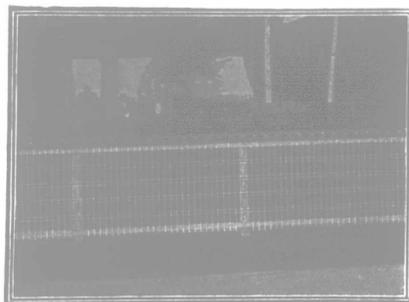
DAVID MAXWELL & SONS, ST. MARY'S-ONTARIO, Canada



What They Say.

Gentlemen,—
Smith's Falls, May 30th, 1906.
About three years ago I bought a Steel Hog Trough from your agent in Smith's Falls. It has proven one of the best investments I ever made. It is just as good to-day as ever. The hogs keep it always clean, and it has never rusted a bit. I have just given your agent an order for two more. Wishing you every success, I am, Yours truly, H. B. SHIELD.

The Steel Trough & Machine Co., Ltd.,
5 JAMES STREET, TWEED, ONTARIO.



PAGE LAWN FENCE

For Lawns, Gardens, Cemeteries, Parks, Etc.

Galvanized and coated with white enamel paint.

Any height up to 8 feet and any length from 10 feet up No waste.

THE PAGE WIRE FENCE CO., Limited
Walkerville Montreal Toronto
Winnipeg St. John 41'

WINNIPEG INDUSTRIAL EXHIBITION
July 23rd to 28th, 1906.

The live-stock show of the West. Excellent sales ground for eastern stock. Liberal prizes and cheap freight rates. Entries close July 7th.

G. H. Greig, Secretary Manitoba Live-stock Associations, President.
Dr. A. W. Bell, General Manager.

When Writing Advertisers Please Mention Advocate

Farm Lands

IN
SASKATCHEWAN

We have a number of well-improved farm lands for sale, at prices ranging from **\$17.00** up to **\$35.00 per acre.**

We have the exclusive agency of over 40,000 acres of land west of Davidson, Goose Lake, Eagle Lake and South Battleford district. Some splendid bargains in city property.

Balfour Broadfoot Land Co.

Box 283. Hamilton Street,
REGINA, SASK.



SYNOPSIS OF CANADIAN NORTH-WEST

HOMESTEAD REGULATIONS.

ANY even numbered section of Dominion Lands in Manitoba, Saskatchewan and Alberta, excepting 8 and 26, not reserved, may be homesteaded by any person who is the sole head of a family, or any male over 18 years of age, to the extent of one-quarter section of 160 acres, more or less.

Entry may be made personally at the local land office for the district in which the land is situated.

The homesteader is required to perform the conditions connected therewith under one of the following plans:

(1) At least six months' residence upon and cultivation of the land in each year for three years.

(2) If the father (or mother, if the father is deceased) of the homesteader resides upon a farm in the vicinity of the land entered for the requirements as to residence may be satisfied by such person residing with the father or mother.

(3) If the settler has his permanent residence upon farming land owned by him in the vicinity of his homestead, the requirements as to residence may be satisfied by residence upon the said land.

Six months' notice in writing should be given to the Commissioner of Dominion Lands at Ottawa of intention to apply for patent.

W. W. CORY,

Deputy of the Minister of the Interior.

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

Grand Trunk Railway System.

SINGLE FARE

For DOMINION DAY, Between All Stations.

GOING

June 29, 30; July 1, 2.

RETURNING

Until July 3.

E. DE LA HOOKE,

City Passenger and Ticket Agent.

E. RUSE, Depot Ticket Agent.
London, Ontario.

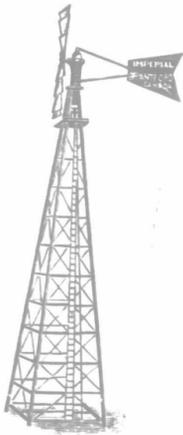
THE Hoover Digger

Clean, fast work. It stands the wear and tear.



Favorite in every great potato growing district. Get free catalog.
The Hoover-Prout Co., Lock Box 23, Avery, O.

WINDMILLS



- Self oiling.
- For power and pumping.
- Our towers are girted every five feet and double braced.
- Grain grinders.
- Tanks.
- Bee supplies.
- Ideal gas and gasoline engines.
- Automatic concrete mixers.

Write for Catalogues.

Goold, Shapley & Muir Co.
LIMITED,
BRANTFORD, ONTARIO.

The Light for Country Homes
THE ANGLE LAMP.



Comfort in Summer Lighting.

As the days grow longer it is more and more important that you use the right illumination. If you have a system that requires endless attention, that smokes and smells and makes a room unbearably hot, you will find it more disagreeable every day that brings you nearer warm weather. This lamp is, therefore, the one kind of illumination that will bring you absolute satisfaction. While more brilliant than gas or electricity, it never smokes, smells or gets out of order; is lighted and extinguished as easily as gas; gives almost no heat and is economical beyond comparison with anything else.

Eighteen Cents

worth of oil will burn for one month, and will show you that it is possible to use oil with comfort and saving. It presents a perfect substitute for gas, electricity and other new systems, and, being absolutely non-explosive, it can be placed in any hands with absolute safety. The unique feature,

No Under Shadow,

insures all the light falling directly downward and outward which makes every occupation of the evening a genuine pleasure. They are handsome, well made, and a distinct decoration wherever used. Thousands are employed in homes, stores, churches, halls, libraries, etc., and give unbounded satisfaction. Our catalogue shows all styles from \$2 up. We will gladly send it to you upon request.

THE BACH SPECIALTY CO.,
355 1/2 Yonge St., Toronto, Ont.

F
A
R
M
S

Send for our list of Alberta farms for sale.

Benson & Houlton, Calgary, Alta.

Advertise in the Advocate

Dairy Talks by the *EMPIRE Dairy Maid*—No. 4.



How Much Ought You Spend

Each Year For Separator Repairs? Well, It All Depends Upon What Separator You Buy.

A complicated separator, with many intricate parts and a lot of do-funny fixin's costs more for repairs than it is worth. A cheap, poorly constructed separator—made for sale rather than service—not only gives a lot of trouble and annoyance, but also is a constant drain upon your profits. Isn't it foolish to buy any separator until you are sure it won't eat up all your profits in repair bills? Of course it is. But if you keep cows, you must have a cream separator—just as you must have a plow on the farm and a cook stove in the house.

The thing to do is to use good business judgment—in other words, plain common sense—in selecting your separator. What is it that makes trouble in machinery of any kind? Why, intricate, complicated parts. It's plain, then, that you want a simple cream separator—one with few parts. But that isn't all. The parts in it must be made right. You want a well constructed separator—one as nearly mechanically perfect as you can get. If you keep these two important considerations in mind, and examine every cream separator on the market, do you know what you'll do? You'll buy an

IMPROVED FRICTIONLESS EMPIRE

There's no doubt about it. If you don't want to buy a cream separator you better keep away from the EMPIRE. It's so simple in construction and so well made that even a casual examination will convince you that it can't get out of order. Thousands of them have been in use for years and years without costing a dollar for repairs.

Well, when you add to this the fact that it turns more easily than any other separator and that it is more quickly and more easily washed than any other separator, you can't help deciding that it's the separator for you.

I wish you'd let the EMPIRE folks tell you more about this great machine. You're just as interested in finding out which separator is the best for you—as they are in selling EMPIRES. Write to them today. Tell how many cows you keep and what you do with the milk and they'll send you their books on Dairying. Just address

EMPIRE CREAM SEPARATOR COMPANY OF CANADA, LIMITED, TORONTO, ONTARIO.

Get the Empire Books. Ask for the one you want—
1. Full catalog and price list. 2. Dairy Results—Dollars. 3. Money and the Way to Make It.

Desires Determine Destiny IN ALBERTA, THE LAND OF OPPORTUNITY

The selection of a location is important. Southern Alberta is the **Homeseekers' Land**, and the center of the fall-wheat belt. High River is the buckle of the belt, the birthplace of "Alberta Red."

Why not own a farm there? You can if you will. Write to:

J. Z. VENNE & CO., HIGH RIVER, ALBERTA

HOMESEEKERS' EXCURSIONS

GOING

JUNE 5 AND 19 06
JULY 3 AND 17 06

Ask for Homeseekers' pamphlet and secure full particulars of return limits, rates, etc., from nearest C.P.R. agent, or G. B. FOSTER, D.P.A., C.P.R., Toronto.

DUNN HOLLOW CONCRETE BLOCK MACHINES

are in use from coast to coast, and every one giving the best of satisfaction. Concrete blocks make the handsomest, most durable and cheapest building material. They are simply and quickly made on the **Dunn Machine**; and the cost of outfit is very moderate. Full directions furnished.

Write for catalogue to Dept. O.

THE JAS. STEWART MFG. CO., LIMITED, Woodstock, Ont.

Every Subscriber

should be a member of our Literary Society and wear one of our handsome Rolled Gold and Enamel Stick Pins. They are beauties. Send us **only one** new subscriber to THE FARMER'S ADVOCATE AND HOME MAGAZINE, at \$1.50, and we will send you a pin, and enter your name on our Society membership roll.

20,000 Acres Wheat Land

In the Famous Goose and Eagle Lake Country, with Homesteads Adjoining.

If you have Western Lands and wish to sell, kindly furnish us with description of it, the price per acre and terms of sale, and we will undertake to find you a purchaser.

C. W. Blackstock & Co.,
BOX 21, REGINA, SASK.

FARM LABORERS

Farmers desiring help for the coming season should apply at once to the Government Free Farm Labor Bureau. Write for application form to

Thos. Southworth
Director of Colonization, Toronto.

Binder Twine.

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

600 feet per lb.,	11 1-2c. per lb.
550 " " "	10 1-2c. " "
500 " " "	9 1-2c. " "

These Prices are Net Cash.

The twine is put up in 50-pound jute sacks, and is manufactured from **Select Fibre; Quality and Length Guaranteed.**

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

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

STAMMERERS

The **Arnott Method** is the only logical method for the cure of Stammering. It treats the **CAUSE**, not merely the **HABIT**, and insures natural speech. Pamphlet, particulars and references sent on request. Address:

THE ARNOTT INSTITUTE,
BERLIN, ONT., CAN.

Alberta Lands For Sale

At Bawlf on the Wetaskiwin Branch. This includes some of Alberta's finest wheat lands. Terms easy. Write at once. Special Inducements to Large Parties.

J. Bradley & Co., Bawlf, Alta

WE Rent, Repair, Sell, Exchange

all makes of Second-hand Typewriters

Write us for information and catalogue of

The Best Visible, The L. C. Smith & Bros. Typewriter

Simmons & Newton, 441 Richmond St., London, Ont.

The Farmer's Advocate

and Home Magazine

"Persevere and Succeed."

Established 1866.

VOL. XLI.

LONDON, ONTARIO, JUNE 28, 1906.

No. 718

EDITORIAL.

Law Needed to Regulate the Trade in Commercial Feeding Stuffs.

An important matter is brought before our readers in the article on "Legislative Control of Concentrated Feeding Stuffs," by W. P. Gamble, B. S. A., Lecturer in Chemistry at the Ontario Agricultural College, and a member of the committee of three appointed by the Dominion Minister of Inland Revenue to enquire into this question. Each year we find on the market an increasing number of commercial feedstuffs of one kind and another, by-products from oatmeal mills, starch factories, breweries, distilleries, cotton-seed oil and linseed-oil factories, etc. Many of these have rather high feeding value, but some few others are hardly better than hay. Samples of the same article prepared by different firms, or even by the same firm, may vary widely, so that there can be no satisfactory general information given as to their value, and the experience a man gains in feeding one lot, is not always a reliable guide in purchasing another quantity of stuff under the same name. Even were each brand constant in composition, the number of these feeds is so great as to cause confusion in the minds of intending purchasers. Appearance is of little or no service in determining the quality of these feeds, nor is the price at which they are sold. Some are offered at much higher prices than are warranted by their composition, while others are obtainable at figures which make them very profitable to use. Usually, we believe, the most valuable ones are relatively cheaper to buy than are the poorer grades. The latter are purchased readily by the large class of people who fancy that with bulk must go value. But even if the seller knew precisely the composition of each brand, and fixed his price accordingly, the feeder would still be somewhat in the dark, for he would not know whether he was purchasing what he specially required to supplement his home-grown stuffs or not. He would not know whether he was buying a food rich in protein, and therefore adapted for growth and milk production, or one rich in carbohydrates and fat, and thus economical for fattening purposes. The composition of our staple grains and fodders is pretty well understood by intelligent farmers, but the trade in these newer mill by-products is enveloped in doubt, hence the need for special legislation to ensure that they be sold under guarantee, so the intelligent feeder may post himself as to their value. Such a law would enable us to use these feeds to better advantage; thus, in the end, it would help their sale, and go far to prevent fraud and disappointment. It would, in short, be an all-round advantage to the feeder, as well as to the honest manufacturer. In several States of the American Union the manufacturers are required by law to stamp on each packet a guaranteed analysis, giving the percentage of protein and of fat, so that anyone at all versed in the subject of feeding may readily estimate the approximate value for the purpose for which he proposes to use it. Each brand must be licensed before it can be sold, and a close Governmental inspection is then maintained to see that the law is complied with. We need similar legislation in Canada. The committee of enquiry above referred to recommends that manufacturers or vendors be compelled to label each package with the net weight of the feed and the percentage of protein and fat, or, if sold in bulk, to produce on demand a guarantee of the per cent. of the two elements mentioned. Such a measure would most

the case very well; it is entirely practicable, and should be introduced without delay. The need for it will increase year by year.

The Automobile Nuisance.

The case reported in our June 14th issue where a horse was killed, a man had his arm broken, and a woman was injured, as the result of either collision or horse-fright—it matters little which—caused by reckless driving of an automobile driver, who had not even the courtesy to stop and see what damage he did, renders timely a further discussion of the means that have been or should be adopted to regulate the automobile nuisance, in the interests of the people who make and chiefly use the roads. At the last session of the Ontario Legislature the question was dealt with in an enactment well in line with the most radical American legislation, and the new provisions go into force July 1st. Thenceforth the maximum speed of such vehicles on country roads is to be 15 miles an hour, and within the limits of cities, towns or villages, 10 miles, while, when meeting or overtaking other vehicles on country roads, a 7-mile clip must not be exceeded. On passing a rider or driver the motorist shall signal his desire, and give the driver an opportunity to turn out to a place of safety. The motorist shall also stop upon request, and remain stationary as long as necessary. He is required to use reasonable precautions not to frighten horses, and, in case of accident, he shall return to the scene of the accident, and, upon request, give his name and address in writing, also that of the owner and the number of license. Failure to comply with this latter precaution relating to accidents, renders him liable to arrest without warrant. The number shall be displayed on the front, as well as the back of the car, and headlights are prohibited. It will, perhaps, be well to see how the new Act works before suggesting any changes, but the temper of the country, so far as we have been able to sound it, is that even the latest law can but mitigate a grave injustice. We have no desire to take a narrow view of the matter, nor to shut out what must sooner or later be an ordinary convenience. The best-informed opinion is that the motor car will come to be used moderately, much as the bicycle now is. It is the pleasure-seeker, particularly the haughty plutocrat or the profligate young snob who is most likely to disregard the rights of the country people. And it does seem about the last straw when a few rich people, many of them foreigners, can ride along the highways, frightening the people who make the roads from sending their wives and daughters to market, or going to church, even. And the situation is all the worse from the fact that the automobile is not in itself a means of pleasure, except to those who love the delirium of speed, who prize the machine on account of its novelty, or who glory in the distinction of possessing something beyond the reach of their neighbors. The plain truth is that the use of the "auto" is mainly an evidence of the vulgarity of wealth.

They tell us the manufacture of automobiles is increasing, and that further restrictions on their use will injure the industry of manufacturing them. About as well argue that it would be a pity to do away with war because assured peace would kill the business of manufacturing the implements of war. Any effort diverted from the manufacture of automobiles or guns will be employed to much better purpose making some comfort or some other luxury. The effect of legislation on the automobile industry may well be the least of our troubles. As for the moral right to use the highway, we have only this question to ask: Which deserves first consideration, the van-

ity of the few, or the convenience, pleasure and safety of the many? From the standpoint of equity, there is justification for the most stringent regulations that can be adopted. In the judgment of good legal authority, any constitutional objections could be made to yield to the demands of wisdom. The two points, therefore, in considering the subject, are expediency and practicability of enforcement. By expediency, we simply imply that if there is any inherent good in the auto, if it has come to stay, if it is the precursor of a modified horseless vehicle that will prove a common boon, and if we must recognize it sooner or later, then it would not be wise to apply unnecessarily drastic measures in its regulation.

Practicability is the principal snag we encounter in considering proposed amendments to the present law. It has been proposed that certain hours of certain days should be set apart when it would be unlawful for motorists to use the roads. One man lamented that impious or tired fathers who would not attend church, did not feel safe to allow their wives and daughters to go, and so all stayed at home. He thought that it would be a good plan to reserve 9 a. m. to 2 p. m. each Sunday, and one or two market days every week. This, of course, would meet the very strongest opposition from the motor interest; no doubt the Ontario Government thought it was going as far as it dared in the recent Bill. However, it is hard to say how much further they might find it possible to go if backed by a sufficiently strong public opinion. Another suggestion has been that municipalities should be empowered to restrict motor vehicles to certain roads, these to be conspicuously indicated. To this it is replied that farmers along the roads prescribed would find the nuisance very much aggravated, while on the other roads a sense of false security might lead to accidents, and punishment in such cases would be rather unsatisfactory compensation to the victim of accident or death. It would also be difficult to indicate clearly after dark the roads on which automobiles were permitted. The whole problem is a vexing one, but any correspondent who can offer practical suggestions how to improve matters, will find through "The Farmer's Advocate" a sympathetic audience, and if his idea is workable, we will lend it hearty support. In the meantime, in so far as Ontario is concerned, the new law is on trial. A strict enforcement will provide the best test of its efficiency.

Stop the Trade in Western Horses.

There is an intermittent trade in horses going on in this country which it seems time to have stopped. Every now and then someone brings down to the East a car of Western bronchos, which are distributed through the country to those who are willing to try the chance of getting better value in horseflesh brought from a country where horses are exorbitantly high than could be secured at home, where ruling prices are considerably more moderate. That some of the Western bronchos are serviceable, and that nearly all of them are tough as whalebone, we do not deny, but that many of the good ones are liable to find their way down East, to be sold on speculation, is manifestly improbable. But human nature is fond of venture, and so it happens that many men will purchase these untrustworthy beasts, and the trade goes on. Were there no risk to any but the purchasers, there would be no call to put an embargo on it, but this fatuous business is costing the country thousands of dollars, and endangering the health of native horses. Every now and then a whisper reaches us that there has

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.

LONDON (ENGLAND) OFFICE:
W. W. CHAPMAN, Agent, Mowbray House, Norfolk Street,
London, W. C., England.

1. **THE FARMER'S ADVOCATE AND HOME MAGAZINE** is published every Thursday. (52 issues per year.) It is impartial and independent of all cliques or parties, handsomely illustrated with original engravings, and furnishes the most practical, reliable and profitable information for farmers, dairy-men, gardeners, stockmen and home-makers, of any publication in Canada.
2. **TERMS OF SUBSCRIPTION.**—In Canada, United States, England, Ireland and Scotland, \$1.50 per year, in advance; \$2.00 when not paid in advance. All other countries, 12s.
3. **ADVERTISING RATES.**—Single insertion, 20 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 arrearages must be made as required by law.
5. **THE LAW IS**, that all subscribers to newspapers are held responsible until all arrearages are paid and their paper ordered to be discontinued.
6. **REMITTANCES** should be made direct to this office, 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 and questions will receive no attention. In every case the FULL NAME and POST OFFICE ADDRESS MUST BE GIVEN.
9. **WHEN A REPLY BY MAIL IS REQUIRED** to Urgent Veterinary or Legal Enquiries, \$1 must be enclosed.
10. **LETTERS** intended for publication should be written on one side of the paper only.
11. **CHANGE OF ADDRESS.**—Subscribers when ordering a change of address should give the old as well as the new P. O. address.
12. **WE INVITE FARMERS** to write us on any agricultural topic. We are always pleased to receive practical articles. For such as we consider valuable we will pay ten cents per inch printed matter. Criticisms of Articles, Suggestions How to Improve the FARMER'S ADVOCATE AND HOME MAGAZINE, Descriptions of New Grains, Roots or Vegetables not generally known, Particulars of Experiments Tried, or Improved Methods of Cultivation, are each and all welcome. Contributions sent us must not be furnished other papers until after they have appeared in our columns. Rejected matter will be returned on receipt of postage.
13. **ALL COMMUNICATIONS** in reference to any matter connected with this paper, should be addressed as below, and not to any individual connected with the paper.

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

been an outbreak of glanders or mange at some point or other, and invariably it is traceable to a carload of Western horses. Little is said about it in the press, for fear of prejudicing our foreign trade. The Dominion Veterinary Department is exceedingly vigilant, and promptly rounds up every case, slaughtering, with partial compensation, in the case of glanders, and quarantining and supervising compulsory treatment in the case of mange, so that in every instance the disease is promptly stamped out. The cost of inspection and compensation, however, is a public tax. For instance, a case of glanders last winter, in the neighborhood of Atwood, Ont., necessitated the slaughter of 41 head, of which nineteen were Western horses, the others having been infected from these, and the money paid out as two-thirds compensation amounted to over \$3,000. The owners sustained a further loss of \$1,500 or more, making a total of nearly \$5,000 worth of horse-flesh sacrificed. As the Government regulation does not permit a payment of more than \$100 on a horse, the owners of some pure-bred Clydesdale mares lost over half their value. Feeling in the district ran high, and one man told us he believed if anyone had brought a car of Western horses in after the glanders had broken out, he would have stood a good chance of being mobbed.

Other cases are liable to occur at any time, besides the risk of human life from glanders, which, as most of our readers know, is communicable to man. We believe it is time to do a little plain speaking, in the hope of stopping this foolish trade, which cannot by any possibility be an economic benefit, but is subjecting us perpetually to unwarrantable risks, and introducing a class of mares, some of which are liable to be bred to perpetuate their imperfections of form and traits of temperament. We have every reason to believe that the Dominion Government would be sustained by the best judgment of the agricultural and live-stock community in placing an embargo

upon the trade in horses between Western and Eastern Canada, since, apart from the risks of disease, there is no advantage of any account to either East or West in its continuance.

Our Cheese and Butter in Britain.

The evidence of Mr. J. A. Ruddick, Dairy Commissioner, before the Parliamentary Committee on Agriculture, at Ottawa, in which he criticised the want of proper facilities on the docks at Liverpool, England, for handling Canadian dairy products, has evidently touched the Dock Board on a tender spot. After some preliminary dissent from the way in which Mr. Ruddick made public his complaints, the Liverpool Journal of Commerce practically concedes the case as made out, and that Liverpool is losing Canadian trade for lack of proper facilities. In the face of the inaction at Liverpool, Bristol and London have been spending large sums in providing cold storage of the most approved character to care for butter and cheese immediately on being landed from the ship. Last year the London docks received 69,750 boxes of cheese and 94,965 boxes of butter more than the previous year, while Liverpool recorded a considerable decrease. Both the Allan and Thompson lines have secured superb facilities for discharging their cargoes at the London docks. At Avonmouth, the Port of Bristol, a great bid is to be made for Canadian trade at the immense new docks being erected at a cost of \$30,000,000. The Journal of Commerce in effect tells the Mersey Docks and Harbor Board that the time has come when they must provide the missing link in the chain of cold storage between the Canadian producer and the British consumer.

The foregoing indicates very clearly how large the dairy products of Canada loom in the important food trade of Great Britain. Practically Canada controls that market for Cheddar cheese, and, in conversation with the writer, recently, Mr. John R. Dargavel, M. P. P., of Leeds Co., Ont., reiterated his conviction that the time had come when Canada should fix the price of her cheese, instead of having it determined in the Old Country for us. Last year we sent Great Britain 87 per cent. of its Cheddar cheese, the other 13 per cent. coming from the United States and New Zealand.

With regard to butter, the position of affairs is different. Ireland, it is estimated, sends yearly \$30,000,000 worth of butter over to England. In all, Great Britain imports about \$100,000,000 worth of butter, of which Canada sends only about \$6,000,000 worth. Apart from Ireland, the Danes are still our greatest competitors. The New Zealand and Australian butters come in when there is little Canadian butter to be secured. Experts say that there is very little difference between Danish butter and the best Canadian creamery butter, but the outstanding point in favor of the Danish product is its remarkable uniformity, both in quality and supply. This has largely been brought about by co-operation at every stage of the industry. Most of the work done in Denmark is the result of private initiative, the creameries receiving very much less Government aid than is generally supposed. The wages are much less in Denmark than in Canada, and the agricultural high schools train a large number of young men for dairying.

HORSES.

The Missouri mule is "some shucks" now; buyers are contracting for the delivery of suckling mules this fall at from \$100 to \$150 each.

The spring house-cleaning should remind the "provider" side of the family that the horse stable would be much better for a sweeping down and whitewashing.

Warm weather and dust very soon cause sore shoulders. Keep the collar clean, smooth and close-fitting, and bathe the shoulders at night in cold water—all of which acts as an insurance against galls.

The first foal of some mares is frequently the only good one they have, the reason offered being that, during her first breeding season she is regularly worked. The second year, having the double duty of nursing and carrying a foal, she is left to run and not fed grain. In the following winter she often rustles on chaff and screenings, and consequently cannot do herself nor her owner justice.

A Prominent Breeder on Hackneys.

One of the most successful of English Hackney breeders, Mr. F. W. Buttle, who owns the famous sire, Rosador, twice champion at the London Show, and the sire of several champions, recently gave the Farmer and Stock-breeder an interview on the subject of Hackney breeding, which, as it expresses the opinion of a breeder in the front rank, we reproduce:

"My idea of a Hackney," he said, "is a horse from 15.2 hands to 15.3 hands, standing on good short legs. We hear a good deal about increasing the size of the Hackney, but if this is done by increasing the length of the horse's legs, it is a great mistake. I do not advocate breeding 15-hand horses, but if we Hackney breeders are not careful what we are about, we are going to lose Hackney type, and if we once lose it we shall never get it back. When we get to 16 hands we invariably get away from good shoulders and I attach the greatest importance to good shoulders. Good riding shoulders are essential for the saddle horse. A horse's action requires to come from the shoulder, and if they are upright his action will be underneath him. With riding shoulders he will go with freedom. Colors? Well, if come to the harness horse for the marts, I agree that it is better to have bays and browns, without any white. If, however, you have a first-class animal, it doesn't matter if he is blue or green. We read about white legs. If you had a whole-colored horse with four black legs, as good as mine with four white ones, I would beat you in the show-ring nineteen times out of twenty. The white legs are more showy, and, as a matter of fact, deceive the eye. The horse for the trade is better without them, but I am trying to breed the other. On this question of color, too, it must be remembered that the best of Hackneys for generations have been chestnuts. If we are to believe that like produces like, then if we are not to breed chestnuts, what are we to breed? The best of the Hackneys of to-day are chestnuts.

"I certainly attach great importance to substance, and agree that sufficient attention has not been given to it. A horse's limbs I consider one of the points of the utmost importance. No matter how good he is on the top, if he has not good legs it is of no use.

"Yes, this is as important in the mares as in the stallions. I like a long, low, roomy mare to breed from, and such a mare should be mated with a proportionate stallion. I would give them another name when they reach 16 hands, as they lose type, or, rather, reach another type. It may also be said that at 16 hands there are many more unsound horses.

"There is a great deal of difference in action. It does not follow that the greatest and highest goers are necessarily the best. There is as much quality in action as in shape. I have said that I like a horse to go from the shoulder, and not to move underneath him, but the importance of hock action must not be lost sight of. A horse is no good unless he flexes his hocks. I may say that since I can remember the Hackney has improved in this more than in anything else. It is, however, very difficult to judge action in a small ring. Some horses give a good show in a small ring, and beat other horses which in a big ring would win easily. Some are able to get along at their best in a few yards, while others require a longer run before they are seen at their best."

"What is your opinion of stallion character? Does it get its due in the show-ring?"

"No, not always. A stallion should be judged as a stallion, and not as a gelding. You must have masculine character in a stallion.

"There are undoubtedly soft Hackneys; there are soft horses of all breeds—even soft Thoroughbreds. As a breed, however, they are as good stayers as any other. In any breed you like you will find soft horses. I may say, too, in this connection, that the Hackney that goes at his best after, say, some ten miles, has the action. Some horses make a great display at first, but after going a bit they seem to lose power over themselves, and move about anyhow."

Stopping a Puller.

A correspondent of the Prairie Farmer gives the following method of breaking a horse of pulling on the halter: "Put a good heavy halter on him, with strong rope 12 or 13 feet long. Tie him with plenty of rope to a hickory sapling (or some other good wood), just large enough to bend some two or three feet when he pulls. Then make him pull, and when he lets up the least bit, the tree will naturally fly back into its natural position, and the horse will follow to where he started from, just because he can't help himself. I never knew of a horse that would pull after two or three lessons."

At all the horse shows of any consequence there are classes for tandem. It adds variety, and is quite in place as an exhibition of driving, but the strong point of this turnout is not utility.

Care of Yearling Colts.

Like children, the future usefulness of horses depends a good deal upon their early environment. Colts usually make good progress during the first half year of their lives, and if they are kept going during the late fall, will pull through the first winter in fairly good fit. But with the coming of the second spring the yearling is launched upon a crucial period. It is usually during the second summer that habits are contracted and the foundation of the future horse is laid.

Good pasture and good fences generally ensure healthy development and good manners. If the grass becomes short, and constant nibbling is required to satisfy hunger's cravings, the colts will become restless in disposition, and will not make sufficient growth of flesh, and if the fences are weak, they will not be long in learning the habit of breaking bounds.

Horse-raisers are often disappointed with the results of the first month's grazing in the spring, largely because the grass is soft and the change from winter feeding too sudden. During this time some good horsemen practice feeding grain until the grass becomes more matured, and in times of high prices for horses, such as the present, the practice is well repaid by extra gains. Pure water, and plenty of it, is also an important factor in the raising of young horses.

Later in the season, when the grass becomes dry, the days hot, and the flies a continual annoyance, the benefits of shade will be much appreciated. Most pasture fields contain a few trees, and where the shade of these is not available, it is time and money well expended to build a rough shed, where the colts can escape from the heat of the sun for a few hours in each day.

This is the day of the three-horse team. The four-horse hitch will soon succeed it.

LIVE STOCK.

Shropshires at Shrewsbury.

Canadians will be interested in a brief summary of the Shropshire and West Midland Show, held at Shrewsbury, England, June 6-9, which was attended by a very large concourse of people, including the Hon. John Dryden, Mr. Robert Miller, of Canada; Mr. Geo. McKerrow, Mr. Wardell, Mr. Chandler, from the United States; Mr. Davenport, from Australia, and representative buyers from the Argentine, etc.

The Shropshire sheep were, as usual, the feature of this show, though we have seen better and also larger classes in former years, viewing the entry as a whole.

Sir Richard Cooper won first and second for yearling rams, the former decision being considered by many one of the most unsatisfactory seen for many years at this show, because the unfortunate preference given this sheep by the judge resulted in Sir Richard's second entry, a grand type of its breed, with excellent flesh and character, being relegated to the second position, and thus prevented from winning the Mansell Memorial Challenge Cup, offered for the best ram, as he was justly entitled to. However, Sir Richard Cooper's entry in the two-year-old class was a real good ram, and he won both the class prize and also the Mansell Memorial Cup. Third honors in the yearling ram class went to Sir P. A. Muntz for a ram of good scale and style. Mr. Victor Cavendish took fourth honors with a good-fleeced ram that stood out well, but was lacking somewhat in quality of flesh. The r. n. ram, owned by Mr. M. Williams, was one of the right stamp, and, though in show-yard parlance he was hardly forward enough to win, he will unquestionably make a grand stud sheep.

The second winner in the old sheep class came from Mr. T. S. Minton, the third from Mr. A. S. Berry, and the r. n. from Mr. Victor Cavendish.

The class for pens of three yearling rams made a very superior entry. The winning pen, owned by Mr. M. Williams, was correctly placed. They won clearly, were wonderfully well matched, most typical of their breed, with good coats and skin. Second honors went to Mr. E. Nock's pen; rather more size was found in these sheep. They were, however, not quite so good to the touch, but equally typical and well grown. Third honors went to Sir W. Corbet. This trio were not quite so matching as the other two, nor did they take so well; but no objection could be taken to their position in the class.

A well-brought-out pen was that which won r. n. for Mr. T. S. Minton. It may be mentioned that Mr. M. Williams won the Pettifer Challenge Cup for best pen of rams or ram lambs in the show. The r. n. for this honor was Sir Richard Cooper's grand pen of ram lambs, first in their class. The Exors. of Mr. P. L. Mills came in second, Mr. E. Nock third, and Sir W. O. Corbet fourth, each with very good lambs indeed.

In the excellent class of yearling ewes, Mr. Victor Cavendish won, and his flock has never before been represented by a better pen, of which

it may also be stated it had very good quality. Sir R. P. Cooper's real good and well-matched pen of excellently-fleshed ewes had to take second honors, and were preferred by some. The same breeder was third with another pen, which had all the quality of flesh of the former pen, but did not match so well. Sir P. A. Muntz was r. n., with a pen of good ewes, three of which will take a lot of beating in any company. The Exors. of the late Mr. P. L. Mills were h. c., and Sir W. O. Corbet c.

A specially fine pen of ewe lambs won in that class for Mr. T. S. Minton, his fourth annual consecutive win in this particular class. Mr. E. Nock and Sir W. Corbet were second and third.

The class for field yearling ewes was good. All its entries, eight in number, were commended. Messrs. J. Barnett, J. H. N. Walford and Sir R. Cooper were the winners of the three prizes, in the order named.

The exhibits in the district classes were very good indeed. The yearling rams shown singly had for the leading winners the Duke of Sutherland, Mr. J. T. Cole and J. Barnett.

In the pens for two-yearling rams, the Exors. of W. Nevett were first and r. n., with two pens of high merit and superior quality. The Duke of Sutherland came second, and Mr. F. Bibby third.

The Duke of Sutherland won for ewe lambs, and Mr. T. Simon was second.

In the ram lamb class Mr. Walford won first with a very choice pen, indeed; the Duke of Sutherland and Mr. C. T. Pulley were second and third. The open classes were judged by Mr. J. E. Farmer, Felton, Ludlow, and the district classes by Mr. R. F. H. White, Ballacola, Ireland.

W. W. C.

purchaser should know what they are, and what relation they bear to standard feeds, bran, etc.

How many of our readers, seeking for some good concentrated feeding stuff, and seeing a particular brand advertised, have been compelled to inquire of their neighbors, or of the vendor, what its value as a food really is, and to accept the information thus gained as, at best, only the opinions of those concerned. Seeing this is so, the question arises, Is there any way whereby the vendor might have definite, reliable information concerning each and every brand of feeding stuffs upon the market?

The Experimental Union of the Ontario Agricultural College has laid this matter before the Minister of Inland Revenue, who appointed as a committee to draft recommendations, Mr. Shutt, Chemist of the Central Experimental Farm, Ottawa; Mr. Macfarlane, Chemist of the Inland Revenue Department, and the writer.

Two methods of dealing with this matter suggested themselves to the committee: First, that standards be fixed for the various classes of commercial feeds; second, that manufacturers or vendors be compelled to label each package with the net weight of the feed, and the percentage of protein and fat, or, if sold in bulk, to produce on demand a guarantee of the per cent. of the two constituents mentioned.

Regarding the former suggestion, it was thought that the fixing of standards does not exactly meet the case, for, as shown by analyses of these materials, at both the Central Experimental Farm and the Ontario Agricultural College, the percentage of protein and fat varies widely, even in the same brand or class, and, therefore, absolute standards cannot be fixed, and

an act purporting to do so, could at best only mention a minimum limit; and, therefore, various feeding stuffs, though differing widely in natural composition, would stand on equal footing in the eye of the law, provided that they tested above the minimum limit of protein and fat, and, therefore, there would be no inducement to manufacture a superior article in a given class. In fact, there would be a tendency to reduce all to the minimum limit. If, however, the second suggestion were followed, the purchaser would be able to judge at once of the relative values of the various brands offered for sale; and as he would, in most instances, purchase the article of higher quality, the inferior ones would naturally drop out of the market.

The committee also recommended "that a comprehensive collection of the concentrated feeding stuffs of the Dominion be made at an early date, including condimental foods, linseed meals, gluten

feeds, gluten meals, cotton-seed meals, etc. We further recommend that samples collected be analyzed, and that the results be published in bulletin form."

This recommendation has been acted upon in full, and the information is now to hand in Bulletin No. 16, Laboratory of the Inland Revenue Department, Ottawa.

The committee was further of the opinion "that bran, shorts, middlings, the whole grains and meal produced by grinding any one grain should not be included among those feeds to be sold under guarantee," as the composition of these is fairly constant. It may be objected that they are subject to adulteration, but this case is, we think, already covered by our Adulteration of Foods Act, R. S. V., Chaps. 24 and 26.

Several States of the American Union have already enacted laws for the regulation of the sale of concentrated commercial feeds, and it seems to me that public opinion in Canada will not only support, but demands legislative action on the part of the Government. W. P. GAMBLE, Ontario Agricultural College.

How the recent revelations of conditions in Chicago packing plants will affect the Canadian stock-raiser is a point of some interest. On the whole, it may be rather to our advantage. At any rate, the health of the people must be paramount to all other considerations, and, in the end, the American meat-producing industry will be better because of the exposure, the compulsory cleaning up, and the more thorough official inspection.

Experiments at the Michigan State Agricultural Experiment Station indicate that tankage can be used to good advantage in the ration for the fattening hog, as well as for the growing pig.



Childwick Champion.

Three-year-old Shire stallion; first at the Royal Show, England, 1905.

Legislative Control of Concentrated Feeding Stuffs.

Editor "The Farmer's Advocate":

In recent years the use of concentrated feeding stuffs has become the general practice among the best feeders of the Dominion. Long experience has shown that better results can be obtained in this way. Hay, roots, corn and ensilage form the basis that make up the bulk of the food for live stock, and supply all the starch, sugars and fibre required. They are, however, with the exception of clover and the other legumes, deficient in digestible protein (nitrogenous or flesh-forming material). This being so, the other components (starch, etc.) are in excess of the animal's capacity for assimilating them, and are, therefore, to some extent wasted. Therefore, in purchasing by-products or commercial feeds to supplement home-grown feeds, the keepers of live stock should bear in mind that the value of the food ordinarily depends, to a very large extent, on the quantity of protein and fat which it contains.

At present, the price asked for cattle feeds bears very little relation to their feeding value; that is, food is retailed at so much per ton whether it is rich in protein, and well suited to supplement our ordinary farm feeds, or whether it is a starchy food, and, therefore, of much less value in compounding a suitable ration for cattle. Such being the case, special care in the purchase of feeds, and some knowledge of their chemical composition, will be found of paramount importance in selecting a feed that will produce the greatest profit. Economic purchase, therefore, does not imply the purchase of the lowest-priced feeds. Many of the waste products of our mills are not worthless, but it is important that the

THE FARM.

Soil Drainage: Where and How to Drain.

Editor "The Farmer's Advocate":

All lands that produce crops satisfactorily must be drained. Some of the best-drained soils are drained by nature. When the subsoil is open, allowing the excess of water to pass through without the soil being saturated for several days after each considerable rainfall, there is no need of artificial drainage. We may ascertain whether a soil requires artificial drainage by a little observation of its physical condition in spring, the growth of the crop, and the amount of matured crop. We should determine whether or not the water-table is above the root-zone at any time of the year. Where the water-table is above the root-zone during a considerable part of the spring, the soil requires drainage. A soil which, when turned, presents a furrow with a very wet, shiny surface, is in need of drainage; it is waterlogged. A soil of this condition is impervious to the air, is of low temperature, is not in a condition to make use of manure or any fertilizer applied, and is in very poor physical condition.

Any soil in which the seeds sown are slow in germinating, and on which the growing crop is patchy as a result, is in need of drainage. The crop on an undrained soil will present a sickly and yellowish appearance, clearly showing a need of drainage. We often observe that the snow is long in melting on a particular field, or on a part of a field; this indicates a lack of proper drainage. A growth distinctive of wet, undrained soils is such weeds as lady's thumb, horse tails, mosses and sorrels. We may be safe in saying that heavy clay soils require to be drained under any circumstances.

Artificial drainage may be effected in two ways, viz., surface drainage and underdrainage. Both systems may be made effective, and may be made so as to ensure so much of the good that will accrue from a drainage system. Let us now consider briefly the two systems, that we may be able to ascertain satisfactorily which system it would be expedient for a farmer to adopt in any soil he may be thinking of draining. A greater area of the cultivated land of our Province today is served by open drains, but I do not think this is in any sense a point in favor of open drains. This system was the first used by the early farmers, and is being rapidly supplanted by underdrainage. For a farmer having an area of land on his farm requiring drainage, and not so situated that he can install a system of underdrainage, surface drainage may be made to answer very well, and will certainly pay for the labor expended. However, open drains are seldom advised, as they have many disadvantages. They take up considerable space, and, moreover, often divide land into tracts of inconvenient shape, and interfere with the moving of wagons and other machinery, etc. They often become the location of undesirable wild herbage. They usually cost more to dig at first, besides costing considerable every year to clean out, and keep clear of sediment. In any case, open drains are not so effective as a system of underdrainage.

Experience has shown that the best method of underdrainage is tile drains. By this method trenches are dug at about an average depth of three feet, and circular tile one foot in length are laid in the trench, thus forming a continuous channel through which the water passes. The bottom of the trench is graded so the water in the drain is all carried to another underdrain, which carries it to an open drain, or may be carried at first to the open drain, and away. The water, as it passes downward through, also moves laterally towards the drain, and as a volume of water is removed, other water of the soil takes the place of that removed. By this method of drainage there is a continuous movement of the water in the soil, the upper water taking the place of the lower as it is removed. This process does not leave the soil without moisture, nor do the drains remove water from below their level, but the soil retains all the moisture held by surface tension.

To secure an effective system, the drains should be laid near enough to each other that the effect of one drain will reach that of the next. In laying drains, proficiency can best be acquired through experience. On planning and carrying to completion a system, much has to be taken into consideration to gain best results. The contour of the land must first be studied, to ascertain a plan of the system, and to gain best outlets, and obviate the occurrence of unnecessary short bends and the use of unnecessary silt basins. The character of the soil must be understood before one can intelligently determine the depth the tiles should be placed from the surface, and at what distance the laterals should be placed from each other. These distances vary in different

soils, while one system will be as effective as the other. There is no improvement that will give better returns for the labor expended and financial outlay than the drainage of rich soils, and to obtain best results, we should carefully consider and so clearly understand the needs of our soils, and so adapt the system of drainage to these needs. CLARK HAMILTON, Dundas Co., Ont.

Why we Advocate Lucerne.

Readers of "The Farmer's Advocate" may have been wondering at the enthusiastic manner in which we have been talking up lucerne or alfalfa for some time back. They may desire to know the reason for our faith. Two members of our staff have had experience with it. The present writer, in particular, has been advocating lucerne for hillsides for the last seven or eight years. Our reasons are these: We had noticed that it did best, held the ground longest, was less liable to be winter-killed, less liable to be crowded out by weeds or grass, and made altogether the best growth on the clay hillsides. We had noticed, also, that those who had lucerne spoke highly of it as a feed. We knew it was a legume, and therefore a nitrogen-gatherer. We knew that most farm rations were rather deficient in the elements in which lucerne was particularly rich. We saw that there was little profit, often loss, in working



Top View of Shorthorn Bull.

hillsides in regular rotation. They took the biggest share of the manure, required the most labor, frequently upset the rotation, by reason of failure to secure a catch of clover, and, withal, were annually washing more or less, so that the patch of clay became larger in area. The great desirability of seeding these hills with a crop that would keep them from washing, do away with the necessity for manuring and cultivation, and yield even a fair return per acre, appealed to us more forcibly the longer we thought about it. Lucerne was the crop par excellence. We tried it. It more than fulfilled expectations in every direction, and we have been growing more enthusiastic over it every year since. The last of May this year we visited the old homestead. There was one piece in particular, of about an acre in extent, a stiff-clay hill along the east side of a field. It was sown five years ago on a corn stubble. The ground was worked up well in the spring, and about twenty pounds of seed harrowed in. It grew pretty well, but some spots were a little yellow and sickly. It often is so the first season. Over these spots we scattered a load of mixed coal and wood ashes from the kitchen range. The growth was clipped with the mower once or twice the first summer, but nothing was harvested, and no stock was allowed on it. Since then three crops a year have been cut from it, until last season, when the third growth was pastured. It yields from five to seven tons of hay each season—hay which cattle and horses eat in preference to clover or tim-

othy, and on which they do decidedly better. Well-cured lucerne hay makes milk of almost June color. Not a particle of manure or fertilizer has been put on this field, but at the time of our visit, May 28th, every square foot of ground was covered knee-deep with a dense growth, as good as or better than it was the second and third seasons. It comes on first thing in spring, and thrives in the driest time of summer, its roots going down into the very bowels of the earth for moisture and plant food, while the bacteria in the little nodules in the roots are continually abstracting nitrogen from the air, to enrich other parts of the farm by adding to the value of the manure pile. Other land has been seeded on the same farm, and wherever there is a clay hillside it does well; on the loamy soil it is subject to winter-killing. It may be asked why lucerne prefers the clay hills? Because there it finds abundance of the mineral elements of plant food, particularly potash. Nitrogen it takes from the air. The hillside location also ensures that no water will stand about the crown of the plant. Water thus standing for any length of time is death to it. We have been observing lucerne elsewhere with the greatest interest, and all the conclusions stated above have been corroborated time and again. Lucerne for clay hills is a regular bonanza. Is it any wonder we are enthusiastic?

Let us add a caution. Sow the seed alone on clean, well-prepared soil, preferably after a hoe crop. Use twenty pounds of good seed per acre. Clip the growth once or twice during the season with the mower bar set high. This will keep weeds from seeding. Don't pasture the first season. Never pasture down close, and never pasture late in the fall. If you fail with the first seeding, try again. Many who are unsuccessful at first, get a good stand at their second or third trial. Prepare to try lucerne next year. It is worth repeated effort to establish. It is the best of all crops for a farm, where labor is scarce, requiring no labor but that of harvesting. It is hard to plow up, but one doesn't require to plow it often. The first crop is difficult to cure for hay, but it can nearly always be done, and if one had no cows or other stock to which it could be fed, and had to draw the first crop to the manure pile, the second and third would still pay good rent. These latter two cuttings would yield three to four tons per acre. Four tons of hay per acre, at \$3 a ton, would amount to \$12 per year—pretty good rent for rough land. Lucerne solves the winter-feed problem, it solves the dairy and soiling problems. Let a man get thoroughly seized with the advantages of lucerne as a crop and as a feed, so that he is anxious to get some sown, and any little difficulties he may meet he'll find a way to overcome. We do not know of any crop which combines more strong advantages with so few disadvantages. Every farmer who can grow it should have from five to twenty acres. Sow it on the stiffest clay hillsides on the farm. If you have no hillsides, try it on the level, but try lucerne.

Cultivating Two Rows of Corn at Once.

A very good wrinkle we noticed lately, in Brant Co., Ont., was an old-fashioned spring-tooth cultivator, arranged to cultivate corn. It was straddling two rows at a time, and doing better work than some of the regular corn cultivators. It lacked guards to protect the hills, and therefore it was impossible to run quite so close to the rows as might otherwise have been done; but as the corn was rowed both ways, and could be cross-cultivated alternately, this was not such a serious objection. The rows were long—over fifty rods, if our eye did not deceive us—and two horses were snaking this cultivator through at a great rate. What a contrast from the old manner of trudging twice through each space with a one-horse scuffer. In economies such as these, permitting one man to do the work that two, three or four did previously, lies the solution of the labor problem.

Advantages of the Split-log Drag.

A reader of "The Farmer's Advocate" whom we had urged to make a split-log drag, asked us what advantages it has over the ordinary leveller. One great advantage is that the drag is used when it is wet—too wet to work on the land. The leveller cannot be used to advantage till the road is crumbling dry, which is about the time when the fields are getting fit to work, when corn and roots should be cultivated, and other duties are liable to be pressing. This results in one of two unfortunate contingencies. The road or the farm is neglected; usually the road suffers. The drag is more likely to be used than the leveller; it can be used with less inconvenience and when the land on the farm is too wet for working, and it puts the road into condition for traffic a little sooner after a wet season. Try the split-log drag.

Best Clover Hay Made by Curing in Coils

Editor, "The Farmer's Advocate":

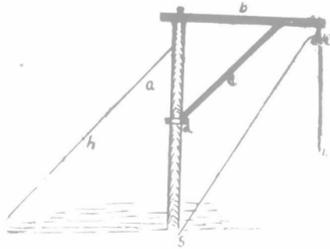
In reply to your enquiry re our method of handling the hay crop, I would like to state, at the outset, that I feel I am by no means an expert in haymaking, but am anxious to get a deeper knowledge of this very important part of farming. I shall be glad if, while getting this knowledge, I am able to give others some little help.

Our hay is mostly clover. There are at least two reasons why clover is grown: It fertilizes the soil, and makes excellent fodder. We have found that, on our soil (clay loam), we get best results from a seeding of 8 lbs. red clover, 3 to 4 lbs. alsike, and 1 to 3 lbs. of timothy per acre. This gives a thick growth, prevents timothy getting woody, and keeps the clover from becoming stalky. It can be readily seen that, except when the clover fails, the percent. of timothy is very small.

We try to begin cutting early, from the twentieth of June to first of July, depending on the season and the urgency of other work being done at the time. If a start can be made when the heads are all in full bloom, by the time the haying is done the clover is beginning to get too mature. Early cutting has at least two advantages: It allows a crop of clover seed to mature after the hay has been taken off, when the clover is in full bloom or a little past full bloom the crop contains its greatest amount of digestible food nutrients. If allowed to get much past this stage, the leaves begin to break off. In this way the most valuable part of the hay is lost—the leaves being very rich in nitrogen.

We are, perhaps, a little old-fashioned in our

method of haymaking. We follow a modified method of green curing. As we coil the hay, we cannot conveniently use the loader. But the scarcity of labor is making us think seriously of practicing some more rapid method—the use of side-delivery rake and loader. Although I have never seen a whole field of hay handled in this way where at least a part of it was not either burnt with the sun, blighted with dew, or washed out



with rain, yet I believe, with care, a good quality of hay can be made.

Early in each day we cut what hay we can take up that day. The tedder is started and kept going whenever it will hasten the curing process. As soon as the hay is fit, it is raked and coiled up, and, in most cases, allowed to stand till the next day before being hauled in. It is unwise to allow the hay to get too dry before raking. Under no consideration should it be allowed to lie till the leaves break off. We prefer to leave the hay in the windrows a few hours, or open the

coils out before drawing. But it is surprising how green clover hay can be taken up without danger of spoiling, providing it has not got wet.

One year a neighbor helped haul the hay. When it was in the barn, the heads were nearly as crimson as when cut. He was certain it would spoil. We put about 36 tons in two bays, 24 x 30. The following spring, our neighbor helped us a few days in seeding, and his horses left their oats to eat the hay.

We use hay fork for unloading, and consider it handier and more rapid, and, consequently, more economical than slings. Our fork is the large size, and what is true of the hay fork is true of all farm machinery. It pays to put more horses on larger implements. One man can handle four horses as easily as he can one.

STACKING HAY.

We seldom, if ever, stack hay. To move the hay from stack to barn in winter means a loss of the most valuable part of the hay. When the barn will not hold all the crop, it pays better to put up the hay in the barn, stack the grain and thresh early. But where it is imperative that the hay crop be stacked, the horse fork can be used as well as it can in the barn. This is done by means of using a crane.

In the diagram, a represents a strong pole, set four or five feet in the ground, supported by rope or wire; b is a stick of timber, 5 x 5 inches, supported by brace, c; at d, the brace swings on a strong hinge. The rope passes over block at e, and is drawn by the horse in such a manner that when the fork rises and strikes the stop-block, it is swung over the stack. The load may be dropped on any part of the stack desired. Elgin, Ont. J. P. JOHNSON.

FARMING IN THE TEMISKAMING CLAY BELT.

The recent Legislative tour into the Temiskaming District awakened a great deal of interest, particularly among agricultural M. P.'s, as to the character of the soil in the "Clay Belt," and how it wears under cultivation. It has a peculiar whitish subsoil and a black, loamy surface soil of varying depths, and the somewhat hurried run on the T. & N. O. R. train through what was perhaps not the most advanced portion of the district from a farming standpoint, did not contribute materially to a proper comprehension of the subject. We have therefore submitted the following questions to a number of men living in the country, who, by observation and experience, are in a position to give first-hand information on the points raised:

1. How many years have you spent in the district?
2. What crop or crops have you grown or seen grown in succession?
3. What rotation of crops and manuring do you advise?
4. How does the land appear to wear under cultivation, judged by the quality and quantity of the crops produced? Give instances.
5. Is it improved in most localities by drainage?
6. What do you consider a fair estimate of the cost per acre of taking off the bush, and preparing for the first crop, deducting the value of the timber?
7. What problems in the clay belts would an experiment farm be useful in helping to solve?

"HAILEYBURY" writes:

1. Nine years.
2. Four or five crops of clover, with fair success.
3. Yes, drainage improves the land.
4. In parts of the district the timber is sufficiently valuable to pay the cost of clearing; in others the timber is of little or no value, and the cost of preparing for crop will range from \$15 to \$25 per acre.

JOHN McLELLAN.—1. Four years here this fall.

2. I have grown timothy, clover, potatoes, oats and peas, all of which do well on cultivated land.
3. Did not have enough of cultivated ground to pay much attention to rotation. First get the land cleaned, then seed down to hay, and in a few years the stumps will pull out.
4. The land is greatly improved by cultivating and manuring, which warms it up.
5. Very little underdraining is done yet.
6. In my opinion it does not pay to clear land and pay mining wages, when there is so much land in the Canadian West. As for the timber, it has been practically skimmed off by the jobber.

D. M. FERGUSON.—1. Three and a half years.

2. I have grown only garden produce myself, but I have seen all crops grown to perfection that are grown in Eastern Ontario, and clover and hay that I have never seen equaled.

3. Ordinary rotation.
4. The longer under crop and cultivated, the better. I have meadows that have been cropped from seven to nine years, and the last crop was the best. I have seen the finest samples of wheat in the field and after being threshed, and the pea crop is excellent, and oats on sod between four and five feet in height, and yielding in a case I know of between 75 and 80 bushels per acre.
5. Yes, but it is easy to drain.
6. This is harder to answer, as so much depends on circumstances. If a man is in a great hurry he can make it cost him \$50 an acre, if he goes at taking out green stumps, but if he gives fire, nature and time (say three years) a chance, I should say \$15 or \$20 would do the work.
7. I should say everything in farming. I mean by that all the grain and root crops, fruit-culture, stock-raising and dairying. This is an excellent grass country. I have the notion that the clover (of which I have seen three crops in one season) is the natural fertilizer, and if plowed under in the fall will give a seed-bed like a garden.

W. BENNET.—1. Two years.

2. On new land, fall wheat, followed by oats and seeded down.
3. Fall wheat seeded with clover, followed by oats with clover, followed by peas, then oats again with clover and timothy, and left for three crops of hay.
4. The more it is worked the better it gets, even without manuring. One field in this section has been cropped for 11 years, with no manure, and produced a good crop every year; also several others nearly as long.
5. Yes.
6. In the green bush, about \$20, valuing timber at \$20; in burnt district, somewhat cheaper.
7. An experimental farm would be valuable (a) in ascertaining if fruit trees can be grown successfully; (b) determining the best rotation of crops; (c) in trying different varieties of roots and grains to suit the soil and climate.

GEO. S. ROYCE.—1. Over 4½ years.

2. Potatoes, turnips, oats, peas; and I have seen wheat and barley grown and good crops reaped.
3. Potatoes or turnips first, then wheat or peas, then barley or oats, then seed down with timothy and red clover and little alsike.
4. It wears well, excepting when the top soil gets burnt all off; even then it will produce good hay crops. I have seen three crops grown in succession of potatoes, and good crops vary: Potatoes, 100 to 200 bags and over per acre; peas, 30 to 40 bushels per acre; oats, 40 to 100 bushels; wheat, 25 to 45 bushels; hay, 1 to 2½ tons per acre.
5. Yes, some of it is improved, and some does not need drainage.
6. From \$10 to \$75 per acre.
7. It would be of great benefit, as there are hundreds of men coming here who want to farm, and know nothing about it. If this country is to prosper, the farming must be looked after better than it has ever been done yet.

NEW LISKEARD.—1. Five years.

2. Peas, oats, wheat, barley.
3. After clearing up land, sow oats, wheat or barley, and seed down with 5 pounds timothy and 10 pounds red clover. Cut two seasons, then break up, sow peas first year, then with one of the others, then seed again (or hoe crop). This keeps a sod in the land which will keep it open and friable.
4. It wears well, but it must not be cultivated or tramped when wet, or it will bake so hard one can do nothing with it. I have about a quarter of an acre for a gradon which I have worked well and manured every year for five years. It was hard and white when I started, now it is very dark and loamy, with fish-worms in it about the size of one's finger. But what the land wants is manuring or a grain crop, plowing in or keeping a sod in it, as I said before.
5. I don't think there is any drainage done in the district, unless it is out of a cellar, then the growth is wonderful. I think the one thing needed is drainage.
6. Fifty dollars an acre; that will clear it off clean. One can't count anything on the timber, as it costs, in most cases, the full value to get it to market.
7. The best kind of fruit of all kinds for the district, also grains and grasses, drainage, and the best system, if it will pay to use fertilizers, and the best way to get rid of many weeds.

NEIL A. EDWARDS.—1. Five years.

2. On the new-cleared land, generally we just take off one grain crop, and seed down to timothy and clover; succession of hay in most new parts, good crops each year, and if the present pace continues, this year's growth promises to be the best. But in sections that are cultivated, a succession of grain crops, including fall wheat, spring wheat, barley, peas, oats and potatoes.
3. First year, potatoes or oats; second year, peas; third year, fall or spring wheat. I would advise top-dressing the wheat with all available manure, and seeding down to common red clover. Fourth year, cut clover twice for hay, or I would strongly advise the raising of clover seed, if we could procure a clover-huller, as the bumblebees are very numerous on the heads of clover while in bloom. All the clover seed I have seen grown here was in the first crop grown, the seed being glossy and very plump. This rotation I would consider sufficient to keep the land up to the highest state of fertility.
4. As I travel, when going down to New Liskeard, about fifteen miles of this district, I have a favorable chance of witnessing the several farms under cultivation from year to year. On those farms, especially taking into consideration the style of cultivation pursued, it must be very rich land to produce such good results.
5. The highest lands here are self-drained, there being ravines or watercourses occurring generally eighty or one hundred rods apart. This will be sufficient drainage in those places, with the exception of a plow furrow in some places when the land is cleared. But we have also the flat, rich bottom land; this land will need a system of drainage. Larger tile for main watercourses, with smaller tile to intersect with main

drain. This "break-off" land, as we call it here, is in some instances quite as dry as the high land, but in other instances, through being blocked up by moss and down timber in the woods, the water spreads over quite a large surface. The most of this land will be sufficiently dry when cleared, but there is no mistake in saying that this land that will need drainage will eventually be the very best farming land to be found in the district.

6. In some parts of this district, where the large timber has been taken off, notably in the vicinity of New Liskeard and other places, I believe the land can be cleared and stumped for about \$20 an acre, because this part, where the timber was culled, was burnt over since 1901, and the larger stumps and remaining trees will be easily disposed of. But north and west from New Liskeard you will find large tracts of excellent timber lands, a goodly share not yet culled. Those farms will produce from 20,000 to 40,000 feet of lumber to the acre; I mean the timber of all kinds, cut down to eight inches, which will be found per acre. This will sell at the sawmill, if you have considerable pine or birch, or ash or elm, on an average of \$10 per thousand feet. At this figure, you will get on an average of \$300 of lumber per acre. You will find acres that won't average those figures, but, at the same time, you will find acres that will exceed this estimate, if the timber is taken off according to these figures. The other part of the clearing can be cleared for \$10 an acre, but circumstances alter cases. If you cannot get sawmills handy enough to draw this timber with profit, it will cost in labor \$30 an acre to chop and clear this land ready for first crop; and again, we have in some parts of this district prairie lands that can be got ready for the plow for \$5.00 an acre.

7. I believe an experiment farm in Temiskaming would be a valuable advantage to the farmers here for the following reasons: This district promises to be an excellent dairy country. The butter now made here by the farmer's wife is of a most superior flavor, with solid texture, even in very warm weather, and is of a golden June color. This, in general, is manufactured in the good old-fashioned way which was generally adopted as in "ye olden time." A dairy school in connection with an experiment farm would be of immense benefit and profit. This farm and dairy school would be able to demonstrate to the world the capabilities of Temiskaming. The experiment farm would be able to inform the farmers here which are the best varieties of grain to sow, which are the best varieties of potatoes to plant, which are the best varieties of fruit trees to plant, and also the best plan to adopt for the cultivation of the same. Sugar beets grow large here. An experiment farm would be useful along these lines, to see if the sugar beet does not contain a large amount of sugar.

Temiskaming Soil and Crops.

Editor "The Farmer's Advocate":

In regard to the passing visitors referred to in your welcome letter, I must say that the appearance of both the soil and timber near New Liskeard is no criterion of our district, because the large timber was culled several years ago, and the clay there is somewhat light in color. But by actual experience, this white clay is different from the white clay occurring through some sections in Old Ontario. On my father's farm, in the County of Middlesex, where I was raised, one of my chief jobs when we were seeding was to wield a heavy mallet or maul and pulverize those white clay lumps with great force. My father kept those small portions of his farm up to a high state of fertility by manuring them heavily; but this white clay occurring in the vicinity of New Liskeard is altogether different, in that it will pulverize itself, and, in actual experience, grows crops of all kinds. Some of this same white clay, one mile and a half north of New Liskeard, on Mr. Bowman's farm, grew the wheat that took the gold medal at the Exposition in Paris, France, and also at Glasgow, Scotland. New Liskeard is situated in the Township of Dymond, but is incorporated into a town now. As you proceed north through the township, the visitor will perceive the clay getting a richer color, and continuing richer-appearing through the Township of Harley, the next township north being Hilliard. This is my favorite township, being my home. I am sending you by to-day's mail a sample of clay loam from the higher land of my farm. The soil from the lower, or "break-off" land is darker and finer. I am also sending you sample stalks of clover and timothy, and also a smaller stalk of timothy from seed sown on the 10th October, 1905. The object of sending you these plants is to show the strength of our soil, notwithstanding its appearance. The timothy stools good and strong, unsurpassed, if equalled, by the richest land in Old Ontario. I am also sending you a sample of Siberian oats, grown in Hilliard, on the farm of Mr. Frank Coutts. I invite a friendly competition by the farmers of Old Ontario to duplicate this sample of oats.

Temiskaming. NEIL A. EDWARDS.
Note—The samples of grain, timothy and

clover received from Mr. Edwards in good condition, bear out the observations made in his letter. The samples of clover and timothy are respectively 18 and 20 inches in length, and the stalks of timothy sown last October had already attained a growth of over 7½ inches. The oats are clean and plump, and a credit to the soil and methods of culture in vogue in Northern Ontario.—Editor.]

Plowing Alfalfa Sod.

Alfalfa is difficult to break. The roots are very large and tough, and resist a plow to the utmost. It is much harder to plow than clover sod. The plow for alfalfa should be a walking plow, strongly made, and of good pattern. It should be provided with two steel shares, one of which should be sent to the smith to be sharpened while the other is in use. The plowman should also be provided with flat files, and at intervals of about twenty minutes he should turn the plow out of the ground and file the edge of the share sharp. There need be no time lost while he is doing this, as the team will need the rest, and it takes but a few minutes to bring the share to an edge if given this frequent attention.

Besides this, there should be affixed to the land-side of the plow a wing running flat in the bottom of the furrow, and extending out three inches into the uncut soil. This wing cuts off the roots of the edge of the next furrow to be turned, so that the plow will only have to contend with those farthest away from the edge of the furrow and firmly fixed in the soil. It aids immensely to use this wing in ease of plowing and steadiness with which the plow runs. It should not run squarely back from the bottom of the land-side, but diagonally, so that roots will not catch on it and make it throw the plow out or draw badly. With the best of plowing, one will hardly cut all the roots, and if the season should be a moist one, there will be a good deal of growth from roots that are cut off and turned under. This need not alarm the novice, for these plants will not make a vigorous growth in the succeeding crop, and do no apparent harm.

The best crop to follow alfalfa is corn, beets or potatoes. Small grain is apt to lodge, though in a desert soil, as in Utah, where the writer once lived, grain had refused to grow at all until planted on alfalfa sod, when it yielded as high as 60 bushels per acre, with irrigation. Likewise, in Colorado, it was thought that potatoes could not be profitably grown until some one tried them on alfalfa sod, when they became a staple and very profitable crop, whole train loads being sent from about Greeley to all parts of the land.

Corn on alfalfa sod will make a greater growth and larger yield than ever before seen on that soil, even in its virgin state.

As the roots are large and tough, and decay slowly, there will be a considerable remnant of the influence of the decaying alfalfa sod the second year, and it is the practice of the writer to sometimes take off two crops of corn in succession, manuring the ground for the second crop, and at once sow back to alfalfa with a nurse crop of spring barley. This is good practice, for the reason that in the second year's manuring the weaker parts of the field may receive a double allowance of manure, and thus the fertility of the whole be brought to a state of evenness.

It is notable that the second seeding of alfalfa on a field is more successful than the first, owing, no doubt, to the greater fertility of the soil, the ready inoculation with right bacteria, and the better drainage, owing to the decayed alfalfa roots which have thus made way for their successors. The third seeding has proven even better than the second on Woodland Farm.

It is foreseen that in a great wheat-producing region like Pennsylvania, where farm practices are so well established and wheat-growing has become a habit, that many farmers who become interested in alfalfa will desire to sow it with a wheat crop. The writer can give scant encouragement to this practice. Indeed, he has never seen an instance of success with alfalfa sown on winter wheat in the spring. The soil is not in condition for alfalfa seed, and the crop seems to exhaust the soil of moisture to such a degree that the alfalfa dies in part, leaving a thin stand. This point has already been enlarged upon, but it is of such vital importance in a scheme of rotation in which alfalfa enters, that it is repeated.—[Pennsylvania Bulletin, No. 129.]

The Rat Nuisance.

In reply to a question, The Country Gentleman recommends copperas to drive away rats. Pulverize and throw plentifully about where the rats go; also about their holes. It is supposed to make their feet sore. Freshly-slaked lime has the same effect. Somebody may find this suggestion worth trying, though, for our part, we have great faith in cement floors and cats.

THE DAIRY.

Keep Up the Milk Flow.

From now on pastures will be getting short and brown in many localities, unless we are favored with an exceptional season. A great deal of cow energy will be wasted in roaming over short commons and fighting flies in the blazing sun. Some dairymen make a practice of stabling their cows during the midsummer days, letting them out into the pasture at night. Many, however, object to the work entailed, and, for the majority, it is perhaps a doubtful economy. There are few herds, though, which would not pay better profits if a little extra feed were furnished. Nothing we have ever tried equals lucerne for this purpose. It may be cut daily and carted to the stable or thrown over into a field or paddock, and our experience is that it is eaten with scarcely any waste. The immediate results in the milk pail are encouraging, and it cannot be too strongly emphasized that a sustained milk flow goes far to prolong the milking period, and the profits from the cows are in this way greatly increased. If one has no lucerne, a little new clover hay will be relished, and will help out the pasture, while maintaining the milk flow fairly satisfactorily. Another good supplementary feed is green wheat or oats, and when pastures are short it pays better to cut a portion of the grain green than to let it all ripen and thresh it. Particularly if there is a spot that is lodged, does it pay to make milk out of it. Lodged grain not only fails to fill satisfactorily, but frequently smothers the young clover. Mowing the crop for green feed gives the clover a chance, and prevents a patch of weeds in next year's meadow. Too many dairymen begrudge their cows a little extra feed. They feel as though so much grain or hay were disappearing down the cow's muzzle, and nothing would ever come of it. A traditional conviction asserts that pasture is the only feed a cow ought to get in summer, and if the season is dry and fodder famine is threatened, they are more parsimonious than ever. They are not aware that pasture yields the least nutriment per acre of any crop. An acre allowed to grow a crop of hay will afford sustenance for a cow nearly three times as long as an acre pastured in the ordinary way. The only offsets in favor of pasture are the saving of labor and the health of the cows under this system. But when pastures are short or fodder famine is threatened, it pays handsomely to cut mature or nearly mature crops, so as to spare the pasture, and enable it to retain its vigor, so that when the rains do come it may furnish good grazing to bring the stock to the stables in thrifty condition in autumn. Feed the cows something when pastures begin to fail. Don't let the milk flow drop off. It's a losing game any way you look at it.

Canadian Record of Performance.

INSTRUCTIONS FOR OWNERS OF PURE-BRED DAIRY CATTLE.

1. Blank forms for recording weights of milk are mailed on application to Live-stock Branch, Department of Agriculture, Ottawa.

2. One of these forms should be posted in the stable in a convenient and well-lighted place, with pencil attached; the spring scale should be suspended close by.

3. Weigh the milk from each cow at each milking. Give fair weight, and enter the weight in the proper space; be sure to deduct weight of the pail.

TAKING COMPOSITE TEST SAMPLES.

One preservative tablet must be placed in each bottle before the first sample of milk is poured in.

On three days, about the middle of each month, after weighing the milk, pour it from one pail to another twice, and while the milk is still in motion take one dip of milk with the small dipper provided for the purpose, and pour it into the test bottle bearing the name and number of the cow.

The six dips of milk from the milking of each cow for the three days should exactly fill the bottle. Screw the top of the bottle on tightly.

Be sure that the cow's name and number appear on the bottle, inclose in box, and express to tester, as directed.

Caution.—Keep the box containing the test samples locked in a safe place from children or other inquisitive persons, as the preservative used is a DEADLY POISON.

The box should be kept in a cool place, and should not be disturbed, except when fresh samples are taken.

Mix the milk in the test bottles each time a fresh sample is added, by giving the bottle a rotary motion.

The following equipment is necessary, and may be procured from any dealer in creamery supplies:

- A circular spring scale.
- A sample bottle for each cow.
- A small dipper.
- A box for holding and expressing samples.
- One package of 500 preservative tablets.

Co-operative Dairying in Hastings Co., Ont.

Editor "The Farmer's Advocate":

Once barley-growing was the subject that occupied the Hastings Co. farmer's mind, but times are changed, and the change was brought about by the American Government imposing a higher duty on that imported grain. Dairying had been carried on to some extent, but not so extensively as it has been since the exportation of that grain was practically prohibited by the increased duty. At the present time, however, the average farmer of 100 acres (which is the size of most of the farms of Hastings Co.) is keeping from ten to fifteen cows, and on that sized farm twelve to fifteen acres are kept for pasture. The grasses grown for pasture are a mixture of red clover, timothy and red top. Lucerne is grown in sections where the land is elevated and well drained. Taking one year with another, about the 20th of May the cows are turned to grass in the day time, and fed hay and grain night and morning, for eight or ten days longer, when the hay is withheld and grain fed for a while. The water is in or adjacent to the pasture, and where it is not a running stream or living spring, is pumped into a large trough by means of an ordinary hand pump or a windmill. Everyone that has to use a trough for watering aims to have those troughs full during the whole day, so that the cows may get a supply at any time. Salt is also kept in troughs in the pasture, or the lane leading to it.

If the pasture becomes dried up before the fodder corn is far enough advanced for feeding, oats and peas and barley and oats are cut green, and fed along with bran. Sometimes clover hay and ensilage are fed with bran; that is, in the case of those who have silos.

A cool, clean stable is considered the most suitable place for milking, and it is done with clean, dry hands. Some good dairymen milk near their milkstand, having a nice grassy plot for that purpose. We consider it more cleanly to milk with dry than with wet hands, and the cows are not so liable to have chapped or sore teats. If cows are uneasy, or kick while milking, kindness and gentleness is the best treatment to give. If the calf has been treated kindly until it has become a cow, it seldom turns out to be a kicker. The same remedy will apply to cows holding up their milk. Cows inclined to leak their milk should be milked at regular times, not too long between milkings. We do not reject the first streams when milking, and find that prolonged stripping pays, as it increases the percentage of butter-fat in the milk, and aids in keeping up the flow. It is seldom that one milker has to milk ten cows on the average farm, as two or more do the work, but if one has to do it, he would require about eighty minutes. The majority of dairymen weigh their milk, and a few sample for Babcock testing. The milk is sold at the cheese factory, so that a cow that gives a large quantity is the most profitable cow. After the milk is drawn from cow it is strained at once, and after milking is finished it is again strained into a milk can, which is placed on a milk stand away from all foul and impure air. Ice or cold water is put in a cooler, and that put in the milk and left until the milk-drawer comes for it the next morning. The morning's milk is usually sent in a separate can.

This being a cheese section, separators are only used spring and fall. Nearly all the factories in Hastings County are owned by joint-stock companies, and actual expenses are only charged the stockholder; any that have not stock are charged 1 1/2 cents per pound of cheese, or about 15 cents per 100 pounds of milk for hauling and making. Hastings County exported more cheese than any county in Ontario last year, and the prospects are for a greater export this year than last. We received over 85 cents per 100 pounds of milk last year. Any good cow will produce 6,000 pounds of milk during the cheese season, which commences the last of April and closes first of November, giving the owner over \$50 for seven months, and 4,500 pounds of whey extra for hog feed. This we consider more profitable than any other branch of farming, as the crop product of the farm is returned to the soil, on account of its all being fed at home. W. A. ESMOND, Hastings Co., Ont.

Cow-testing at Cowansville.

We give below the results of the fifth period in the Cow-testing Association, at Cowansville, Que.: Five herds test 4.0 per cent. fat, and over, which is the more noticeable, as with herds 20 and 27 it is the average of 25 and 22 cows. While the general average test is 3.6, there seems too many individual cows testing under 3.0 per cent. There is a strong contrast between herds 16 and 24 in the average yield, the difference being over 400 lbs. milk and 15 lbs. fat per cow. The number of cows tested was 373; average yield of milk, 566 lbs.; average test, 3.6; average yield of fat, 20.3 lbs.

The Difference in Dairy Herds.

Prof. W. J. Fraser, Chief of Dairy Husbandry, University of Illinois, writes in Wallace's Farmer of a test of two dairy herds at that station:

Is it clearly understood that some herds do not pay for the feed given them? That other herds pay too small a margin of profit to justify the investment in money and labor? And that still other herds are making their owners big money? Do dairymen in general know that these differences rest on plain causes that may be readily understood, and that a change from the poor herd to the highly profitable herd is a comparatively easy matter, within the reach of any farmer who is able to keep cows at all? For answer, look at the following facts, personally known to members of this department.

The cows in the better herd were picked up here and there at moderate prices. They have been producing milk throughout the year at the rate of eighteen cans to forty-five cows, or two and one-half cows to a can (eight gallons). The latter herd has been yielding at the rate of five and one-third cans to thirty-four cows, or 6.4 cows to the can.

When milk sells at \$1.15 per 100 pounds, this means that the average cow in the better herd produces 29 1/2 cents' worth of milk per day, or \$88.50 worth as the total for a year of ten months. The poorer herd yields 11 1/2 cents' worth of milk per cow per day, or \$34.50 for the year. There is some difference between these cows and their incomes.

If it costs \$32 per cow for feed in the poorer herd, just \$2.50 per head is left as the profit for one year. But if the better herd is fed at \$40 per cow, it leaves \$48.50 per head as profit. Here is a difference of \$46 in clear gain, or, in other words, it takes nineteen cows of the one kind to equal one cow of the other kind. In a herd of 40 cows this difference would amount to \$1,840.

If a man desired to make \$1,000 per year profit in the dairy business, he would have to keep 400 of these poor producers. But he could get the same results with 21 cows like those in the better herd. Truly there is a large and vital difference between these two herds, and one that no dairyman can afford to overlook.

These estimates are conservatively made from the facts known, and do not yet represent the widest extremes in Illinois dairy conditions. It is altogether probable that this poorer herd is kept at an actual loss, and quite possible that the better herd makes more money than is here credited to it. The test shows that for profit, 1 of these cows equals 19 of the other herd; 10 of this kind equals 190 of the other herd; 20 of this kind equals 380 of the other herd; 40 of this kind equals 760 of the other herd; 80 of this kind equals 1,520 of the other herd.

Eighteen dairy herds in another part of the State were tested by this station. For one year the average production of the best six herds was 280.5 pounds butter-fat per cow, and of the poorest six herds 172.7 pounds.

Counting the butter-fat at 25 cents per pound, the best herds made an income of \$70.13 per cow, and the poorest \$43.18. Here is an average difference of \$26.95 per cow. In a herd of 50 this would amount to \$1,347.50.

Granting that it costs \$32 per cow to feed the poorest herds, and \$40 per cow to feed the best herds, the net profit would average \$11.18, in the former, and \$30.13 in the latter; that is, every cow in the best herds earned nearly three times as

much money for the farmer as did the average cow in the poorest herds. Which kind is the best to keep?

To return the dairyman a profit of \$1,000 per year, would require 90 cows like those in the poorest herds, but only 34 of the kind in the best herds. Thirty-four of the best kind, at \$55, would cost \$1,870, but 90 of the other kind at \$35 would cost \$3,150, requiring an investment of \$1,280 more than for an equal herd of the best cows. It is easy to see that it would take more labor and more men to feed and milk 90 cows than it would to care for 34. The 90 poor cows would consume \$2,880 worth of feed, and the 34 good ones \$1,360 worth—\$1,520 in favor of the good cows. Which kind is the more economical?

The average cow in the best herd makes an annual income of \$87.54, and, at \$40 for feed, a profit of \$47.54, while the average cow in the poorest herd makes an income of \$35.51, and, at \$32 for feed, a profit of \$3.51. Here is a difference in profit of \$44.03 per cow, and it takes 13 1/2 cows of the one kind to make their owner as much clear money as one cow of the other kind. To make \$1,000 profit per year, would require a herd of 285 cows like those of the poorest herd, or just 22 cows like those of the best herd. Which kind should the dairyman build up?

The estimates of these twelve herds take note of only the feed and the butter-fat. The calf, the skim milk and the manure will certainly pay for the labor and the interest on investment.

Cheese Instructors Meet.

A meeting of the cheese instructors in Western Ontario was held at the Queen's Hotel, Tillsonburg, on Friday evening, June 15th. The instructors all report the quality of the cheese made up to June 1st as being the finest they have seen any year since the present system of instruction was introduced. The quality of the milk is also finer than ever before. Probably the outstanding feature of improvement reported by all the instructors is the large number of new milk cans purchased by the patrons, and there is no doubt that the improvement in the quality of the milk is due largely to this fact. Another feature is the very great number of wire curd knives that have been purchased by the makers. In some groups half of the factories have purchased wire knives, and in others three-quarters of the factories have them. All are agreed that the wire knife is a decided improvement on the old-style knife.

The most discouraging feature about the work is the indifference on the part of many patrons about keeping their milk in clean places. Farms have been visited by the instructors, and the patrons have promised to move their milk stands, but after one or two weeks' time, the instructors find the milk being kept in the same old place. Just how this feature can be remedied is a difficult problem. The patrons know they are doing wrong, but they will not do the right thing. The greatest fault the instructors report is keeping the milk standing over night in barnyards. In many cases the milk wagon is backed up to the cow-stable door, and the milk left on it all night; those cases would be fit subjects for the Sanitary Inspector.

We are again compelled to report that a number of cases have been found in each group where the milk indicates adulteration by watering or skimming. One would think that patrons would all



In the Good Old Summer Time.

be satisfied with the returns this year from honest milk, but it seems that there are still a number who are too anxious to get rich fast. Let this be a warning to them that they are known by the Instructors and makers.

On Saturday morning the Instructors had the pleasure of visiting the celebrated dairy farm of Geo. Rice. Mr. Rice drove us around the farm, and we saw some of the finest corn and potato crops to be seen anywhere. His dairy cows are a fine sight. Some of them were seen milked and the milk weighed, several giving from 30 to 34 pounds at the morning's milking. Before leaving the farm we were treated to a feast of strawberries and cream, and all agreed Mr. Rice was a good fellow.

The balance of the day was spent at the Courtland cheese factory, which is ably managed by Mr. Frank Travis. The Instructors took off their coats and went to work, and as the work was going on, details of making the cheese were thoroughly discussed and worked out. It was a real pleasure to spend a few hours in such a well-equipped and clean factory. To see Mr. Travis and his three assistants dressed in white was a sight some of our Instructors do not see the like of in a long time. All left for home feeling that they were better able to do their work, and also that it was one of the most profitable and pleasant days they had ever spent.

These meetings are of great value to the instruction work, as the Instructors are able to do more uniform work after meeting and talking over the work with each other, and other meetings will be held during the season.

GEO. H. BARR,
Chief Instructor.

Determining Moisture in Dairy Products.

Editor "The Farmer's Advocate":

There is a strong demand at present for a practicable method of knowing the moisture in dairy products, especially in butter. We have been working on such a method for some time, and give our experience up to date, in the hope that it will stimulate further work by others and bring out practical experience by dairy workers. (Incidentally, we may mention that the bottles to be used in Babcock testers for determining moisture, but which really did not determine moisture, but fat, in butter, we have not found satisfactory.)

First. We had a steam oven, made by a local tinsmith, of the following inside dimensions: 6 x 8 x 10 inches. There is an inch space between the outside and inside part all around the oven, except on the front side, where is hung the door. There is an opening on the top about one inch in diameter, which opening passes through both parts of the oven, and allows a thermometer to be suspended in the oven through a cork, which makes a close connection, and enables the operator to see the inside temperature of the oven without opening the door. The oven is connected to one of the steam pipes in our creamery by 1/4-inch pipe. There is a regulating valve on the pipe, and also a steam gauge near where the steam enters the oven at the top. There is an outlet for condensed steam on the opposite side at the bottom, also of 1/4-inch pipe, with a valve, and this leads to the outside of the creamery, to allow steam and water to escape. The oven is made strong enough to withstand 10 pounds steam pressure, though we usually run with 6 to 8 pounds, which is sufficient to maintain a temperature of 100 degrees to 105 degrees C. (not Fabr.). There are two perforated movable racks in the oven, about three inches apart, and the bottom of the oven makes a third shelf. The oven will hold 12 to 18 samples, and requires very little attention. The cost was about \$5, complete.

For drying the samples, we purchased a dozen of what are called "patty pans." These pans are about 2 1/2 to 3 inches in diameter, and 1/2 inch deep. It would be more convenient if all were exactly the same weight, but a person soon gets to know the weight of each. We number the pans, and have the weight in grams marked on each for reference.

In sampling butter from a churning, we take 2 to 4 ounces from different parts of a churning just before packing in boxes. If butter is already in boxes, then draw two or three tules from the tub or box. The samples are put in a tightly-stoppered bottle having a capacity of about twice the volume of sample—i. e., if taking a two-ounce sample—which is sufficient from a churning of 100 to 200 pounds butter, and in the same proportion for larger churnings, then have a four-ounce sampling bottle. This bottle should have a rather wide opening for putting in samples easily.

The plan chiefly followed by us is to melt this sample by setting the bottle in a dish of warm water. When liquid, shake thoroughly, and measure about 3 c. c. of the liquid butter (using a 6.01 c. c. pipette) into each of two of the "pans," which have been previously weighed. Note the weight of the "pan" and butter; subtract the weight of "pan" from weight of

"pan" and butter, and you have the weight of butter in each pan. Now transfer to the oven, and allow to remain for 5 to 6 hours. Then weigh, and return to oven for 1 to 2 hours, and weigh again. If the second weighing is the same, or nearly so, as the first, the water has been all evaporated. It is now a simple mathematical calculation to determine the percentage of moisture in the butter, e. g.: Weight "pan," 16.45 grams; weight "pan" and butter, 18.78 grams; weight butter, 2.33 grams; weight "pan" and butter after drying, 18.45 grams; percentage of moisture in butter, $18.78 - 18.45 \div 2.33 \times 100$, or 14.16 per cent.

For accurate work, it is better to have a balance that will weigh to the second or third decimal place, although we doubt not that for ordinary creamery practice, weighing to one-tenth of a gram will be near enough. It is also better to duplicate samples, and take the average.

We are working along similar lines for determining the moisture in curd and cheese, and hope to have a practicable method, whereby cheesemakers may know approximately the percentage of moisture in curds at dipping time, thus ensuring more uniformity in cheese.

The foregoing is to be understood as a method whereby the creameryman and the cheesemaker may know approximately the percentage of moisture in dairy products, and does not claim to be scientifically accurate. It is often advisable to sacrifice a measure of scientific accuracy in order to secure practicability.

Hoping this may tend to relieve the anxiety of some of the boys who are unable to sleep nights for fear of the Revenue Officers or Dairy Authorities swooping down on "over 16 per cent. moisture in butter." I am,
Dairy Dept., O. A. C. H. H. DEAN,
Prof. Dairying.

Cow-testing at Brockville.

The Brockville Cow-testing Association maintains its good record in the fourth test, under the Dominion Department of Agriculture. Thirty-four cows gave over 1,000 pounds milk, all but five of them testing over 3.0 per cent. fat. The average yield of fat per cow is again the highest of any association. The contrast between two of the herds tested was very striking, five cows gave almost as much milk as the twelve. The number of cows tested was 146; average yield of milk, 891 pounds; average yield of fat, 30.2 pounds; average test, 3.3.

APIARY.

A Norfolk County Apiarist's Homestead.

The accompanying engraving shows a group taken at the quarterly meeting of the Norfolk (Ont.) Beekeepers' Association, held on May 31st, at the farm of Chas. W. Challand. In the background is shown a glimpse of Mr. Challand's apiary, and behind this, again, part of the orchard which produced prizewinning fruit, exhibited at the Fruit, Flower and Honey Show, Toronto, in 1904 and 1905. In 1905 it took five firsts with seven entries, and in 1903 three firsts on as many entries. This is the farm, by the way, on which a great mastodon skeleton was found seven years ago; the tusks were 9 feet 5 inches long.



Norfolk Co Beekeepers in C. W. Challand's Apiary.

and weighed over 300 pounds; the teeth measured 4 1/2 x 8 inches. Thirty years ago this was solid beech and maple woods; to-day it is a fine steading, with 14 buildings, all told, including a building he has recently completed for extracting honey, and also for a store-room. The idea of social gatherings of beekeepers and persons engaged in other branches of agriculture, to discuss in an intelligent, friendly way interests in common, as our friends in Norfolk do, is very much to be commended.

More Fruit-growers Should Keep Bees.

It has long been the writer's opinion that fruit-growers ought to keep more bees than they usually do, and this impression was very materially strengthened by a recent trip through one of the best fruit sections of King's County. The evidence in favor of beekeeping was along two distinct lines, each of which is well worthy of careful consideration. In the first place, we drove, in the course of the afternoon, past hundreds of acres of orchards, all in full bloom; the whole country seemed white with apple blossoms. Not only was every tree in the orchards full, but every old roadside tree was a veritable bouquet, and, in looking at them, I couldn't help thinking what an immense amount of labor was involved in the carrying of the pollen from the stamens to the stigmas of all these blossoms, for repeated and careful experiments have shown that, to a very large extent, indeed almost exclusively, this transfer of the pollen is done by insects, and not by the wind, with the ordinary orchard fruits of this region. And if all this labor must be done by insects, what countless numbers would be required to do the work, even under the most favorable conditions; that is, with continual fine weather, while, with a good deal of cloudy, rainy weather, during which bees work but little, there must be a large increase of workers, or else some of the work must go undone, and I believe the latter is what very often happens. And, very naturally, when any work goes undone it is that which is farthest from the hives which is neglected; so that the man who keeps the bees right alongside of his orchard is the one who would profit most from their pollenizing during rainy, catchy weather, which would be just the time when it would be most important. For although it is well known that bees will often go miles from the hive in search of honey, yet it is certainly reasonable to expect that, for the most part, they would work near home, and that, particularly when showers came frequently, they would stay near the hive. So much for the pollenizing side of the question; and while I have made no careful comparison of orchards where bees are kept with those which depend on wild bees or the neighbors' for pollination, and while such a comparison would be very difficult to make, since bees are only one requisite, yet it seems to me only reasonable to accept the view that I have just set forth.

The other argument in favor of beekeeping is, of course, the value of the honey produced. On the drive I speak of, we stopped for tea at the home of one of King's County's large fruit-raisers, who last year sold in the neighborhood of \$5,000 worth of apples, and among the other good things on the supper table was a square of honey

in the comb. Honey being something that I am particularly fond of, I asked about it, and was told that it was "homemade," and that, besides supplying all that could be used on their own table (which, to judge from the performance at the table that night, would be no small item, especially if they often had visitors like myself), they sold about \$50 worth of honey per year, "and," the owner added, "I am satisfied that this is one reason why my orchard bears so well."

The writer is satisfied of this, too, and if six or eight stands of bees—which is what my host kept—will give the results cited, with practically no trouble whatever, certainly one is justified in concluding that it pays to keep bees.

F. C. SEARS,
Horticulturist, N. S. Agr. College.

POULTRY.

Dry Feeding of Poultry.

Dry feeding of chickens and adult fowls, as opposed to mash feeding, is being seriously recommended by many expert poultry-raisers. Their great point is, that by this method they are approaching closer to nature's ways, and thus promote the health of the fowl. This matter was well covered by A. F. Hunter, Suffolk Co., Mass., in an address before the Poultry Institute of Ontario. The Prairie Farmer makes these extracts, touching on the matter of dry and wet feeding:

A farmer in Illinois tells his experience in feeding, and how he came to adopt the dry-feeding method. He says: "After reading much upon the subject, I concluded the greater part was nonsense, and I now fully believe that inside the next ten years feeding poultry in every stage will be much simplified. I have had some experience in growing hogs, and did considerable experimenting with feeding. I found that by using ground mixed grain, fed dry, I could grow a prettier, more shapely and firmer-fleshed hog than by feeding a slop."

"Nothing under the sun fed in its natural state will blow up a pig to such an extent as a rich slop, and no pig so fed will have the fine symmetrical appearance of one that is fed more in accordance with nature. I fully believe the slop-feeding is destructive of the digestive organs of pigs, and also fully believe the mash business for chickens and hens gives the same unfortunate result. Any mash will begin to sour soon after being eaten and subjected to the heat of the body, and this too-early souring of the food in the crop, before it is properly passed on to the gizzard and intestines, is the foundation of sour-crop and bowel trouble. I will guarantee you that if cracked or whole grain is given regularly (and not in spurts now and then), examination of the crop at any time will not reveal that sour smell so frequently noticed in mash-fed pens."

"When dry-fed, a chick will not gulp down a great amount of the food at one time, and I fully believe that, with dry feed moistened with saliva, it will not sour nearly so quickly as if it is moistened with hot water or milk. If my method of feeding will grow good, healthy Plymouth Rock pullets to weigh 7½ to 8½ pounds in seven or eight months, I believe that pullet is in a better shape to lay, and, if continued on dry food, will, at two years of age, lay as many or more eggs than a mash-fed chick and hen; and not only this, but the eggs will be larger and more fertile, and when you come to sell the carcass it will have both a better appearance and better weight. I know the eggs I am getting now are better in size, color and shell than any I ever bought; I mean 35 to 50 per cent. better in quality, and this I attribute to my having adopted the dry-feeding method. I am certain that dry food properly fed means health, with no sour crop and no bowel trouble."

"When I began dry-feeding I had never seen an article upon the subject. I knew I could do better with hogs on dry food, but had never studied why. I knew I had too much to do, was too busy with the farm work to grow chickens with mashes. I planned my year's campaign before a chick was hatched; that is, the best of grain, sweet milk before the chicks all the time, best scraps also, and charcoal accessible all the time, with clover-hay chaff for litter, and good range. I have experimented with dry feed for chicks for two years—the past year for all ages of poultry—with the best of success."

Here is another writer's argument: "Well-bred chicks are naturally hardy. Chicks born of strong, hardy parents, come into the world about

as well fitted for the battle of life as anything we know of. Given half an opportunity, fed within the bounds of reason and common sense, and properly brooded, it seems almost impossible to kill them. They have an ample coat of down which protects them from almost all kinds of weather for short periods."

"Given a well-regulated brooder, they will cheerily run out into an almost zero temperature, and apparently be as happy and contented as though it was warm, summer weather, and they certainly grow much better than when placed in what some call better conditions."

"Fed improperly, or kept at too warm a temperature, or when they are so unfortunate as to have had weak parents on one or both sides, the reverse conditions seem to be the result—they are about as delicate, puny and unsatisfactory atoms of mortality as the world produces."

"By closely studying nature's methods with chicks, we find that the mother hen, leaving the nest when the chicks are from one to two days old, does not have the chance to lead the way to a dough dish, and fill them up with an indigestible mess of dough. On the contrary, she starts out on a hunt, and, if she is undisturbed, she makes a good display by nightfall, and has succeeded in filling the crops of her numerous family."

"If we could dissect those crops, we would not find a scientifically-prepared mixture of one to four, or one to five, or sixteen to one, or any other startling array of chemical combinations. Instead, we would find a bug or two, a worm, some seeds that we may have carefully planted in the garden a day or two ago, together with a variety of weed seeds, and plenty of grit."

"This composite mass has been gathered together in ten or twelve hours' time, with a liberal sprinkling of exercise thrown in, and if the weather conditions are favorable, and the mother hen does not drag the youngsters around through



A Garden at Eagle, Alaska.

the wet grass too much in the morning, she usually comes out at the end of the season with as many full-sized chicks as she started from the nest with."

"Your mash-fed chicken gets up in the morning, waits around an hour or two until the feeder gets ready to bring along a bucket of hot or cold mash, which is thrown down on a board or trough, and a wild scramble begins. Each one gulps down what he can reach; the weaker gets a little, and the stronger gets the bulk of the food."

"If the mash is hot it raises the temperature of the birds above the normal, perspiration is started, and this opening of the pores of the skin paves the way for a chill, and the foundation of colds and croup is laid. The food goes through the crop with very little change, except fermentation, and the extra work of preparing the food for digestion is thrown upon the gizzard and intestines, whereas the saliva of the mouth and kneading of the crop should have done quite a little towards softening and partly digesting it."

"But, it is objected, the fowls won't eat it. This is true. They will not eat the dry mash for a day or two when they have been brought up on the wet-mash ration; but, brought up on a dry mash, they eat it freely and whenever the appetite prompts, and it never stands before them sour."

David Baskerville, of Boissevain, Man., contributes to "The Farmer's Advocate," Winnipeg, the following recipe, which he says is a "sure cure" for egg-eating hens: "About one pint of vinegar to a gallon of mash or damp chop, mixed and fed. Two or three feeds of this will cure the worst egg-eating biddy on record."

GARDEN & ORCHARD.

Insects Mentioned in the May Fruit Crop Report.

By Dr. J. Fletcher, Ottawa.

In the Fruit Crop Report up to May 31st, by Mr. A. McNeill, Chief of the Fruit Div. of the Dominion Department of Agriculture, several insects are mentioned which have given trouble, and have been the cause of considerable loss in various parts of the Dominion. There are four insects mentioned, with the suggestion that those who suffer from them should write for information to the various institutions where official entomologists are employed. These insects are the Woolly Aphis, Crown Borer, Tree Borer and Leaf Roller. The Editor of "The Farmer's Advocate," always on the alert to secure useful information for his readers, has asked me to send him for publication a short note upon these insects. Unfortunately, I find there is some doubt on Mr. McNeill's part of exactly what insects are intended by the writers, and he has merely quoted the names used by his correspondents. Through the courtesy of Mr. McNeill, however, I have been able to find out from the context in some of these reports what insects were most probably intended.

The WOOLLY APHIS is undoubtedly the Woolly Aphis of the apple, although a woolly aphid on the plum and cherry is spoken of from British Columbia. For many years the Woolly Aphis of the apple has been an unimportant pest of the fruit-grower in Canada, but during 1905 it was conspicuously more abundant than it had been, for many years, and it would appear, from the correspondence of the Fruit Division, that the insect is showing indications of increase in some districts. There are two forms of the Woolly Aphis, one of which occurs on the roots of apple trees and related plants, such as the mountain ash and hawthorns, and the other, which attacks

the branches and stems. In both cases gall-like swellings are caused, which injure the trees, and in crevices of which the eggs of the insects are laid. The form which occurs most commonly in Canada is that which clusters on the trunks and branches, where it may be seen during the summer and autumn in white, woolly masses, particularly on the shoots at the base of neglected trees. The root form is by far the more injurious in the United States, and everywhere is by far the more difficult to control. The plan which has given

the best results is to uncover the infested roots and dig in tobacco dust around them. Bisulphide of carbon has also been used, by making a hole within a few inches of the infested roots, pouring in a small quantity, and then covering the hole up quickly. These treatments of the root form are seldom necessary in Canada, and the clusters which appear on the trees in summer and autumn can easily be destroyed by spraying them forcibly with kerosene emulsion, diluted with hot water, applying the spray as hot as it can be conveniently handled, and holding the nozzle close to the colonies.

CROWN BORER.—There appear to be two insects referred to by correspondents under this name, and, fortunately, the remedy for both is the same. The crop attacked in all instances was strawberry, but neither of the insects is the true Crown Borer of the Strawberry (*Tylocladia fragariae*). British Columbia and Nova Scotia reports referred to the Black Vine Weevil (*Otiorynchus sulcatus*), which has been doing harm in those Provinces during the last three or four years. In Ontario the ordinary White Grub was the culprit. Both of these insects do most harm in old strawberry-beds, and the best way of fighting them is to adopt the one-crop plan, which is now much used by fruit-growers. Mr. Macoun, the Horticulturist of the Experimental Farm, tells me that he has tried this plan, and that it is, in addition to being a good remedy for these insects, also a paying operation, for he gets far better berries, which bring better profits than the rather larger crop of smaller berries. The young runners are planted in spring, and by the first autumn matted rows, two feet wide, of good strong plants have formed, from which the crop is picked the following summer, and the beds are

then plowed down, and their place is taken by other beds previously set out the same spring. If it is desired to propagate some special variety largely, the beds may be left for another year, but all beds should be plowed down after two crops of fruit. The White Grub passes two years as a grub, during the first of which it does far less harm than when it is bigger. The Black Vine Weevil, although not so long-lived, does comparatively little harm in new beds.

LEAF ROLLERS.—There are several species of caterpillars of small moths which are known by the name of Leaf Rollers, and which attack the foliage of apple trees during the month of June. The Eye-spotted Bud-moth has been extremely abundant and is the one most complained of in Eastern Canada during the last spring, and both it and two other common kinds of leaf rollers can be controlled by spraying orchards regularly with poisoned Bordeaux mixture—a regular practice with most progressive fruit-growers. The dark-brown caterpillar of the Eye-spotted Bud-moth passes the winter in small silken shelters on the twigs, and emerges from these about the time the leaf buds burst, and does a great deal of harm by boring into the young growth, frequently destroying whole clusters of blossoms. The true leaf rollers—small green caterpillars—come later, and are destroyed by the first spraying for the Codling Moth. In the case of the Bud-moth, however, when it is found to be abundant, the trees should be sprayed, either with supplementary spraying of poisoned Bordeaux before the blossoms open, or where the useful practice is adopted of spraying trees with the simple sulphate of copper solution, one pound in 25 gallons water; four ounces of Paris green may be put into every barrel (40 gallons) of the solution.

BORERS.—For the prevention of the two common borers of the apple, which sometimes do a great deal of harm in apple orchards, I know of nothing better than washing the trees at the beginning and again at the end of June with an alkaline wash. One which has given good results here is to reduce soft soap to the consistency of thick paint, by adding a saturated solution of washing soda in water, and into this put one pint of crude carbolic acid to the gallon of wash. If too thin for putting on conveniently with a white-wash brush, slaked lime may be added, till the wash works conveniently. If this is painted on to the trees on the morning of a warm day, it will dry in a few hours and form a tenacious coating which is not easily washed off by rain. The application of this wash to trees in June prevents the female beetles from laying their eggs on the bark. It should be used every year as a regular practice.

If correspondents are at any time troubled with insects in their orchards, I shall at all times be glad to receive specimens, and do my best to answer enquiries about them. Such enquiries and parcels of specimens may be sent FREE by mail.

A Bonanza Story of Nova Scotia Orchards.

The only community we have ever visited where the farmers never seem to tire of telling how much money there is in their business, is the Annapolis Valley, Nova Scotia. Apples are the staple crop, and the orchards are cultivated, pruned, sprayed and cared for generally in a way that puts the average Ontario orchardist to shame. Soil and climate favor this region, and these factors, combined with up-to-date orchard management, result in splendid yields of high-class fruit, a considerable proportion of which is marketed by the individual orchardists, who ship on their own account to commission firms in the Old Country. The net prices realized by growers are away in excess of those received by Western growers, except where the latter have formed co-operative shipping associations, in which cases the returns compare more favorably with those obtained by the Nova Scotians. Some of the Annapolis Valley orchards are quite extensive. The accompanying half-tones show views in the famous Hillcrest orchards, at Kentville, owned by the Hillcrest Orchards, Limited, President and Managing-Director, Ralph S. Eaton.

One illustration shows a specimen tree in a ten-acre block of Gravensteins, the variety which, perhaps more than any other, has made Nova Scotia orchards famous. The other cut shows a view of a quarter-mile row of Gravensteins and Kings, showing trees thirteen years of age in the foreground. An 8-foot, reversible extension disk harrow, changed over from an ordinary 6-foot Massey-Harris, and used extensively in the orchard, to suit the low-branching "fillers," is seen in the foreground; also two spraying outfits, kept constantly at work during May and June (not used, generally, on trees in bloom), and a sulky gang-plow. The spraying outfits consist of one-hundred-gallon hogsheads, on low-crank axle wagons, two lines of 25-foot hose, and two sets of tripple nozzles on the end of quarter-inch iron pipe. It can be seen how great is the advantage of the low wagon for stepping on and off, and placing the cask on or off, and clearing the branches of the trees. The height of spray is either arranged by the length of rods or the man spraying standing on a platform in front of the cask. Spraying from the ground is preferred always, when possible.

Bearing orchard in this district is commonly valued



A Hillcrest Orchard Gravenstein.

Specimen tree in a ten-acre block, grown by Ralph S. Eaton, Kentville, N. S.

at \$1,000 an acre, and the following figures, giving the returns of nine orchardists in the district, show that, after deducting expenses of 50c. per barrel for picking, packing, barrels, and cartage, and \$20 per acre for the cost of plowing, harrowing, spraying, fertilizing, and seeding to clover, which is commonly sown in July as a cover crop, to be plowed down the following spring, the average net returns for a period of five years equal an interest ranging from 12 per cent. up to 25 per cent. per annum, on a valuation of \$1,000 per acre. Following are the tabulated figures:

ESTIMATES OF YIELD AND RETURN FROM SOME NOVA SCOTIA ORCHARDS THE LAST FIVE YEARS.

Owner of Orchard.	Average No. bbls. shipping apples acre bearing orchard has produced.	No. acres orchard considered in the estimate.	Average price per barrel these apples returned.	Average return per acre orchard has given.	Interest on \$1,000 per acre.
J. E. Smith, Wolfville	165	4½	\$2.12	\$349.80	25 %
Arthur C. Starr, Starr's Point	100	14	2.13	213.00	15½ "
G. C. Miller, Middleton	111	2	1.98	219.78	18½ "
Geo. H. Starr, Port Williams	117	9	2.25	263.25	15½ "
Chas. E. Sheffield, Upper Canard	100	4	2.25	225.00	15½ "
F. H. Johnson, Bridgetown	100	6	2.25	225.00	15 "
E. J. Elliott, Clarence	128	2½	2.38	304.64	23 "
Ralph J. Messenger, Bridgetown	100	3½	1.90	190.00	12 "
F. C. Johnson, Port Williams	121	9	\$2.50	\$302.00	22 %



A Hillcrest Orchard Outfit.

As the country becomes older parasitic diseases and insects multiply, says a Maryland Agricultural Experiment Station Bulletin. While in the great potato lands of the West the plant grows luxuriantly, and is but little injured by blight or insects, here (in Maryland) these often cause the loss of one-half of what the land would produce without them. And we have become so used to this loss that we do not see the damage, and count this half crop a full crop.

JU
th
gra
win
hef
Jan
We
of I
for
not
but
the
also
the
plan
out
cloy
rain
ence
grow
hold
ther
trees

Fru
T
miss
this
adop
ensur
hibit
fruit
are c
TI
\$20
Prov
Prov
every
prize
La
plums
medal
from
tural
Societ
La
variet
as col
Ser
prize-
27th
Ser
Buildi
before
Wolf

Potat
Th
Maryla
increas
or four
varieti
State
acre w
The ap
prevent
beetles
ties, ca
probab
tense s
even w

TH
Some
Alcol
drinking
heat
tinguish
the flame
2. Al
not, as a
3. Al
be cheap
4. It
used for
5. It
coal oil
and there
6. It
summer e
7. It
age from
grain
8. Ge
gium, Ita
Portugal
hol for in
is largely
stated.
Est. Ca

Cover Crops.

"Cover crops benefit the orchard in many ways, the most important being in taking away from the trees water and plant food, so that the trees gradually slow down their growth and go into the winter well ripened up," said Prof. F. C. Sears, before the Nova Scotia Farmers' Association, last January. "Sow the cover crop about July 1st. We have found crimson clover, sown at the rate of 15 pounds per acre, one of the very best crops for this purpose. And it has proved satisfactory, not only in the experimental orchard at Wolfville, but also in our model orchards in all parts of the Province. Summer vetches and buckwheat are also good, and where couch grass is troublesome, the last named and rape are perhaps the best plants to use for cover crop, as they help to kill out the couch by smothering. Common red clover is considered very good by some, and certainly has its advantages, but in my own experience and observation it does not make enough growth in the autumn, and growers are apt to hold on to it in the spring to get a growth, and thereby dry out the orchard soil and injure the trees."

Fruit Exhibits for Dominion Exhibition.

To all Canadian Fruit-growers: The Commissioners of the Dominion Exhibition, to be held this year at Halifax, Sept. 22nd to Oct. 5th, have adopted a most elaborate prize-list for fruits, to ensure the largest and most instructive fruit exhibit ever shown in Canada, and all Canadian fruit-growers, from every section of the Dominion, are cordially invited to assist.

The special Canadian prizes of \$50, \$30 and \$20 are offered for collections of fruits grown in Provinces named, only one prize going to each Province. Another class is arranged in which every Province competes separately for three prizes each of \$30, \$20 and \$10.

Large prizes are offered for exhibits of pears, plums, peaches and grapes. Gold and silver medals, and diplomas, are offered for exhibits from any Fruit-growers' Association, Horticultural Society, Farmers' Institute, Agricultural Society, or Electoral District Society, in Canada.

Large prizes are offered for all the commercial varieties of apples, in barrels and boxes, as well as collections.

Send to M. McF. Hall, Manager, Halifax, for prize-list, and send him entry card before August 27th.

Send all fruit exhibits to me, Horticultural Building, Dominion Exhibition, Halifax, to arrive before September 28th. J. W. BIGELOW, Wolfville, N. S. Supt. Horticultural Dept.

Potato Spraying in Maryland and New York.

Three years' test of spraying potatoes at the Maryland Experiment Station showed an average increase of 52 per cent. on fields sprayed three or four times from June to September. On late varieties, when no blight was present, New York State experiments showed a net profit of \$11 per acre when potatoes were only 25 cents a bushel. The application of Bordeaux mixture, aside from preventing parasitic diseases and repelling flea beetles, conclude the Maryland Station authorities, causes the plants to make a better growth, probably by protecting the foliage from the intense summer light and heat, and so is of value even when no disease is present.

THE FARM BULLETIN.

Some Things About Denatured Alcohol.

Alcohol can be prepared so as to render it unfit for drinking, and its advantages as a means of producing heat, power and light are many and varied:

- 1. If alcohol catches fire, the flames can be extinguished readily by water, while water merely spreads the flame when put on burning gasoline.
2. Alcohol is practically odorless, while gasoline is not, as everyone knows.
3. Alcohol is perfectly safe, non-explosive, and can be cheaply manufactured.
4. It can be used for everything that gasoline is used for.
5. It will give light for the home at less cost than coal oil or electricity; the light is white and steady, and there is no staining of lamp chimneys.
6. It can be used as a substitute for coal oil for summer cooking.
7. It can be made from waste products and roughage from the farms, such as poor potatoes, apples and grain.
8. Germany, France, Switzerland, Holland, Belgium, Italy, Russia, Sweden, Norway, Austria-Hungary, Portugal and the United States impose no tax on alcohol for industrial purposes, and, as a result, the fuel is largely used in these countries for the purposes above stated.
Let Canada get in line.

Seeds and Weeds.

During June the Seed Branch of the Dominion Department of Agriculture and the Farmers' Institute Branch of the Ontario Department have been co-operating in holding a series of Field Meetings in the interest of the cause of good seeds and eradication of weeds. There were really four series or divisions, and a set of two speakers for each one. A member of "The Farmer's Advocate" staff visited the meeting held on the farm of Geo. Hedrick, at South Woodlee, in Essex County. The speakers here were Messrs. Simpson Rennie and L. E. Annis, of York Co. A few dozen farmers assembled, and were seated on benches in the orchard. The speakers had with them mounted specimens of some of our worst weeds, which they spread out on the grass. Besides, they gathered others from a nearby wheat and clover field. Mr. Annis first discussed the Seed Control Act, which, he says, a good many people still fail to understand clearly. It has, however, been so often discussed in our columns, that we are scarcely justified in repeating it now. For the most part, we believe it is those who do not take an agricultural journal who are puzzled about the Act. Weeds, he said, are the farmer's greatest enemy, and they are yearly increasing in numbers and variety. It was as a means of controlling the pest, by ensuring the sowing of clean seed, that the Seed Control Act was passed, and it is already having a noticeable effect in this direction. Cleaner seed was offered this year than had been available for years. A man who desires pure seed, can now be sure of getting it. If he does not, he has a means of redress. It is true that the only outlet for seed which could not be cleaned and made fit to comply with the provisions of the Act was now the United States, and this market may be shut off by the enactment of similar legislation in that country. The only recourse then will be to grow clean seed, and this can be done by cutting off or mowing down early weeds growing in fields of clover intended for seed. This should be done anyway, as it ensures a cleaner sample of seed and a better price from the seedsmen who buy it to handle.

Good farming will be clean farming, was the moral of Mr. Rennie's address. Eradication of weeds is not particularly difficult, if one will study their habits and bear in mind a few simple principles. The first essential is rotation of crops. This provides a chance to combat any and all classes—annuals, biennials and perennials. He discussed perennials first. These are plants the roots of which remain in the ground year after year, propagating, in some cases, by running root-stalks. Such are Canadian thistles. He recalled the first patch of these which appeared on his father's farm. He and his brother gathered the roots up in baskets after the plow. Subsequently he tried to get under them by plowing deeply, but, after discovering one growing from the root in a twelve-foot-deep well, excavated a few days previously, he gave this up. Afterwards, he found an easier way of coping with them. Any plant will die if you do not let it breathe. Strip a tree of its leaves a few times in summer, and it will die. Cut off all the thistle tops as soon as they appear, and you will very soon exhaust the roots and kill them. Cutting when the thistles were in bloom would not kill them, and it was not wise to depend on that system. Use a broad-share cultivator, and cut them off repeatedly while young. The perennial sow thistle can be killed the same way, although it is a very much worse pest than the Canadian thistle. It has been found in a good many localities, and should be watched for sharply. Bindweed would yield to similar treatment, only it must be thorough and prolonged. He advised summer-fallowing a spot where bindweed was found, and cultivating it once a week. He did not recommend a hoe crop, because a few plants were liable to twine around the crop and escape the cultivator. The writer happens to know, however, that two or three properly-attended hoe crops in succession will completely eradicate this persistent pest. For ragweed, plow lightly after harvest, cultivate to germinate weed seeds, and then plow more deeply later on. If ragweed appears in seeded fields, run the mower over after harvest, before the weed has a chance to seed. Curled dock should be pulled from the meadows when the ground is soft, say after a rain. Carry away and burn. If left to lie on the ground, there will be enough substance in the root to mature the seed. Burdock he had got rid of by digging out the plants that were in their second year of growth. Cut them off four or five inches below the surface of the ground. Never mind the seedlings. Only a few of them will live over to the second year, and it will be quite time enough to dig them out then.

Spraying has been found fairly effective for wild mustard, but if one has a farm badly overrun with this weed, he has a job ahead of him. If he has a clean farm, and allows it to get overrun, he has himself to blame.

Mr. Rennie then spoke on seed selection and cultivation. In planting potatoes, he recommended planting good-sized tubers, cut to one or two eyes per set. Planting small potatoes causes varieties to run out, and provides a market for the seedsmen's novelties. Two or three men who adopt the plan of using small potatoes as "seed potatoes," can in a very few years produce enough "seed" for a whole neighborhood.

East Prince, P. E. I.

There is no talk of drouth so far this season. We have indeed had rain enough, and to spare. The farmers who own high, dry land are in luck this season, while those whose land is low and flat have not been able yet (June 12th) to work some of the soil. Fields that were about ready to put teams on three or four weeks ago, have since been covered with water; even some of the new meadows, which looked promising in early spring, are black and dead, in consequence of the long continuation of rainstorms. A great deal of buckwheat will be sown this year on land that was intended to grow oats. The pastures are growing well, and there is every promise for the best season of dairying that P. E. Island has had for a long time. The new meadows on high land will be a heavy crop. The grain is not growing very fast, the weather being so cool, but the warm days will soon be here. A lot of farmers in some sections have still some fields not sown, and will not be sown yet for some time. Harvest may be a good one, but it will be late, and a late harvest is sure to keep the fall work behind.

Notwithstanding the very low price of potatoes all spring, a large acreage has been planted for another crop. The old McIntyres are still the favorites, although a larger percentage of white and other varieties than usual were planted this season.

The orchards just now are a sight to behold. As last year was an off year for fruit, nearly every tree this year is white with bloom, and if the June frosts keep off there will be an abundance of fruit.

Mr. Richard Burke, our Fruit Inspector, is now visiting a few of the different orchards throughout the Island, giving practical lessons on spraying and the care of the orchard.

The very high price paid for fowl of all kinds last fall was an inducement for people to go into poultry-raising. Nearly every farmer has geese this year, but I regret to say that, in this locality at least, very poor hatches are reported. Great quantities of eggs are handled by the merchants, and the price is good—14 cents cash.

Many of our farmers are improving the appearance of their premises by cleaning up their road-front and planting a few young maple and other trees; and what is prettier than our own native rock maple? Why invest in imported ornamental trees, when we can have for nothing, by going back to our own wood-lot, all we need of the prettiest of ornamental trees? Plant more trees, farmers, it will add to the appearance as well as to the value of your farms. A little paint, or even whitewash, gives a home a thrifty, prosperous appearance. Paint preserves the wood, and adds much to the appearance. Some farms are still changing hands, and some still have the "West craze," but where a man finds a better farming country, he will find many worse than little Prince Edward Island. As Father Burke says, what we want to make our Island about perfect is the tunnel, and I hope our Rev. friend will keep everlastingly at it until we get it, and when it does come (which it surely will), no one man on this Island or off will deserve as much thanks as Rev. Father Burke.

The Island is alive with horse-buyers, and many valuable ones are being picked up. I fear that many that should be kept for breeding purposes are sold for tempting figures. Wool is away up in price, and the merchants are advertising for it at 30 cents per pound. This, with lambs at 4 or 5 cents a pound, live weight, should make sheep-farming one of the most profitable branches of the farming industry; and yet, how few farmers keep sheep. C. C. C.

Free Expert Advice in Farm Drainage.

Last year the Department of Physics, under Prof. Reynolds, who has since accepted the professorship in English, was authorized by the Minister of Agriculture to go out among farmers, when requested, and take the levels of their lands for drainage purposes, locate the drains for them, and give information generally on the subject of drainage, the only outlay entailed being the travelling expenses from Guelph to the place of operation. This proposition was announced in "The Farmer's Advocate," and quite a number of farmers have availed themselves of the opportunity of having their drains properly planned and located. Usually several in one vicinity make arrangements together to have their work done at the same time, and each paying only his proportionate share, the expense is very small.

We understand this offer still holds good, and those who are contemplating the inauguration of drainage systems should apply to Prof. Wm. H. Day, the new head of the Department of Physics, Ontario Agricultural College, Guelph.

Live-stock Importation.

Commenting on the new customs regulations, by which a settler may bring into Canada, free of duty, live stock for the farm, published in our issue of May 31st, "The Farmer's Advocate" of Winnipeg says:

"Why the sapient Government officials included swine to the number of one hundred and sixty, remains to be explained, and only goes to show the distance between departments, although in buildings a couple of blocks apart. All Canadian live-stock associations should protest against this new regulation, as likely to render the ingress of hog cholera easy, which would be regrettable, especially in view of the great sums expended by the Veterinary Branch to stamp out the disease. Wake up, Mr. Fisher! Who else is supposed to be on the lookout to protect the live-stock interests of Canada?"

Farm Notes from Waterloo.

Editor "The Farmer's Advocate":

Two and a half inches of rainfall during the week ending June 9th, following, as it did, a period of dry weather, has proved a blessing to growing crops. The hay crop, which was beginning to suffer severely, may now be an average one yet. Young clover was generally a good catch, and seems to be holding its own nicely. Spring grains are pushing up rapidly, and at the same time strongly. Wheat is a good even stand, practically none having been plowed up this spring. Corn is late, as the dry weather retarded its germination. Sugar beets, in many cases, came up unevenly, seeds which got down into the moist soil starting at once, while the rest remained dormant until started by recent rains.

Prices for farm produce are in general satisfactory. Hay brings \$8 to \$9 a ton, according to quality; oats are 42 cents a bushel. The surplus potatoes were shipped, at 65 cents a bag. The high prices prevailing for dairy produce and for hogs, shows the wisdom of staying by this grand combination, even through occasional periods of depression. In striking contrast to the dairymen, this spring, is the feeder, who may count himself fortunate if he comes out all right. Horses are higher-priced than ever, and farmers are launching into horse-breeding as though they were confident they would remain so.

Statute labor is nearly all done for another year. Many roads have, no doubt, undergone more or less improvement of a permanent nature, but at what a tremendous expenditure of time and labor. Surely, with such a dearth of efficient farm laborers, farmers might see that this is work which might be left to the most ordinary kind of laborers, employed under a competent road overseer. If farmers are once agreed that they want another system of maintaining country roads, there will be nothing to prevent their getting it; but they are not yet by any means unanimous about it in this county. Roads here are mostly in good condition, owing to the good gravel procurable in plenty.

"SOUTH WATERLOO."

Fireproof Cement Concrete Structures.

Cement is rapidly coming into general use for building purposes. In the great Peavy elevator fire, at Duluth, the wooden working-house, containing 938,000 bushels of grain, valued, in all, at nearly \$1,000,000, was a total loss, but the concrete annex, containing an immense quantity of rye, flax and wheat, went through the fire intact. According to a report in the Northwestern Miller, the two buildings were about 35 feet apart, and the heat from the millions of feet of dry timber in the wood house was so great that steel rails between the two were subjected to a welding and fusing temperature, while for hundreds of feet away it was so hot that men could not live in the glare. The 8 to 12 inches of cement between this heat and the wheat within the nearest row of bins in the concrete house were amply sufficient to protect the grain from injury.

With the foregoing in view, the new elevator of the Goderich (Ont.) Elevator and Transit Company, now in course of erection, is being constructed throughout of cement and steel. Both working-house and storage bins are being built of those materials exclusively. This fact is regarded as of the utmost importance to patrons of the Goderich elevator, as it guarantees safe storage for their grain in a fireproof elevator. Not only will this be of great advantage to Ontario millers in ensuring the safety of their grain, and obviating any risk of disturbance to their business by the sudden cutting off of their supplies, but it will also do away with the payment of heavy insurance charges.

Cultivating Corn in a Buggy.

Invention begets invention. In the County of Essex, Ont., a large area of corn is raised. "Only ten acres," was the way one man's diminutive acreage was referred to. The rows are long—forty rods, and upwards. Naturally, 2-horse corn cultivators have come largely into use. In one portion of the county last week we saw dozens of them, and only about half a dozen one-horse scufflers. Of course, all the two-horse outfits are riding implements, and it is found that sitting on a cultivator, under an Essex sun, with head down and eyes watching the rows, is a drowsy job, liable to give one a headache. Did they discard the machine on that account? Scarcely. They have rigged up sun-shades for their cultivators, much like buggy-tops. In fact, old buggy-tops are very convenient for the purpose. One man, again, had a neat canvas over the top and extending part way down each side, though not so low but what he could look out and see what was going on. Another had an expansive top, without "side curtains." Remembering the days we have trudged after the scuffer, or broiled on the riding cultivator, disk, self-binder, and so on, we were quite taken with the notion of the covered carriage for cultivating corn, and would commend it to the "sporty" boy or hired man who finds it hard to keep awake during the day time. The idea is, on the whole, preferable to Charles Dudley Warner's scheme of having a person of African extraction to hold an umbrella over him while he hoes. We will now be prepared for a further innovation in the form of a double seat, so that the boys may take their sisters—or some other boys' sisters—out driving while they work. Really, farming is getting to be quite a delightful job.

Picou County, N. S., Crop Prospects.

It is to be sincerely hoped that the "unexpected will happen" in reaping the harvest of 1906, for, in looking over our fields at the date of writing, it is surely not a case of "great expectations." Not often has the good prospects of early spring been so ruthlessly dissipated. Following a winter of alternate freezing and thawing, came a very mild April and a cold, wet May, and so far in June there has been little change, except that for the last week the weather was dry, and with two very heavy frosts. On June 8 and 13 ice formed on still water, but the following days being cold, the damage will certainly not be so great.

Fruit trees, especially plums, blossomed well, as also did strawberries, although the latter were considerably winter-killed. Fall-plowed land set very hard, and in a good many cases had to be plowed again. Two very heavy rainfalls so thoroughly soaked the ground that seeding is not over yet, and rarely has so much bare ground been seen at this time of year. Pasture, very good at first, owing to the mild weather in April, is not so good now, as stock was turned out too early for the good of the land.

Live stock of all kinds is high in price, and butchers are experiencing a good deal of trouble to get what they want. Wool is selling for 27 cents per pound, and some choice lots brought 28, and mutton and lamb high, accordingly. This will have a tendency to induce farmers to increase their flocks by refusing to sell their best ewe lambs.

Principal Cumming, of the N. S. Agricultural College, is inaugurating a vigorous campaign in Institute work this summer, in which sheep-raising is receiving considerable attention. A society has also been formed for the encouragement of sheep-raising in Nova Scotia, with headquarters at Truro. A. R. Coffin, Esq., is Secretary, and the society comprises most of the woolen manufacturers and others interested in the woollen trade.

A feature of the live-stock trade this spring is the scarcity, and consequently the high price, of young pigs. Generally they sell at \$2.00 or \$2.50 at two or three weeks of age. This spring, however, \$3.50 and even \$4.00 was asked and received. Small litters, and the failure of a great number of sows to breed, seems to be the reason. The high price of pork has also something to do with it. Butchers are offering 9 cents by the carcass for pork. ANDREW McPHERSON.

Mr. Gordon on the Cattle Trade.

Mr. J. T. Gordon, M.P.P., head of the firm of Gordon, Ironsides & Fares, cattle exporters, has returned from Great Britain, and, in discussing the cattle markets, he said: "I think we have touched the bottom rung of the price ladder, and, though I do not this year look for the high prices of four years ago, I consider the prospects excellent for steady and healthy improvement, brought about by the enormous increase in consumption in Canada and the United States, and the steadily improving conditions in all lines of trade in Great Britain, which is, after all, our natural market. South American chilled beef is our strongest competitor to-day in the British market, and it is certainly to be reckoned with, as cattle can be raised there so cheaply, and can be put on the market in such fine condition. Competition in this direction is certainly keen."

Trade already opened up well this season, and shipments have been heavier than usual, owing to the increasing number of cattle that are being fed in Manitoba during the winter. We have shipped more stalled cattle this spring than we ever did before. On my return to Liverpool from the Continent, I inspected a shipment of Manitoba stalled cattle that had just been landed, and I must say I was proud of them, as they were of excellent quality, and arrived in good condition.

"I think the British Government did a wise thing when they disallowed the act to remove the embargo on Canadian cattle. As you know, I have always maintained that it would be a most serious matter for producers of cattle in Manitoba and Ontario if the embargo were removed. Our cattle can be fed just as well and much more cheaply at home than they can in Great Britain. No sane man can believe that our farmers can continue to take everything out of the soil and put nothing back, without ultimate disaster, and the cheapest, easiest and most natural way of returning fertility to the soil is by feeding stock and growing crops suitable for feeding. I am quite satisfied the British Government have no idea of removing the embargo, and those most interested in the trade, outside of the commission men, are in favor of the embargo remaining."

Spraying for the Destruction of Mustard.

The most effective, safest (as regards the grain crop) and most economical spray to use is a two-per-cent. solution of copper sulphate (blue-stone). This is made by dissolving 2 pounds of blue-stone in 10 gallons of water.

The spraying should be done thoroughly, and for that purpose 50 gallons per acre will be required. If a heavy rain follows within 24 hours, the operation will have to be repeated.

In order that the work may be effective, spraying should not be delayed after the mustard plants have

reached a height of 6 to 9 inches. If allowed to grow taller than this, stronger solutions will be necessary, and in larger quantity, as the grain would then protect the mustard. FRANK T. SHUTT, Chemist, Dominion Experimental Farms.

To Place Telephone and Express Companies Under the Railway Commission.

A special Parliamentary Committee at Ottawa has been considering the question of regulating telephone companies and bringing express companies under the control of the Railway Commission. One drafted clause, declaring that, "notwithstanding anything in any act heretofore or hereafter passed by Parliament, all telephone tolls to be charged by the company are to be subject to the approval of the Board of Railway Commissioners of Canada," and requiring the filing of copies of the tariffs, passed the committee without opposition. So, also, did the clause providing that contracts giving exclusive privileges are not to be taken into consideration in determining compensation. A clause which occasioned some controversy and some proposed amendments was the one providing that the Board may order the telephone company to make connections with municipal telephone systems. It was finally carried in amendment that the connection should not be given when, in the opinion of the Board, the lines serve the same territory in whole or in part, as the Bell Company.

A bill providing for the bringing of express companies under the control of the Railway Commission, was introduced into the House by Mr. G. O. Alcorn, and passed its first reading on April 3rd. After holding it up for some time on the question of constitutionality, the Government, finding it was very popular in the House and country, have adopted and recast it, and it will appear with the telephone clauses as an amendment to the Railway Act of 1903. Mr. Alcorn has announced that he considers Mr. Emmerson's clauses, dealing with the subject, go far toward meeting his object, and, as his own bill, being a public bill, would not be reached in the House this session, if passed by the committee, he agreed to accept Mr. Emmerson's clauses. An opinion was read from the Department of Justice disagreeing with a constitutional objection that had been raised by a representative of the Canadian and Dominion Express Companies, to the effect that the Federal Parliament had not jurisdiction in the matter, but that such regulation was a matter of property and civil right, and, therefore, within the jurisdiction of the Provincial Legislatures.

Dual Telephone Service a Nuisance.

"In some rural districts," says The Farmer (St. Paul, Minnesota), "we are getting a very unfortunate condition of affairs in the shape of dual telephone service. The usual outcome is that the patronage becomes divided, with the result that when one farmer wants to call up a neighbor, he finds that he cannot reach him on account of his being on the other system. A farmer desires to call together a threshing crew, but can't reach more than half of his neighbors. The business man in the village must rent two 'phones in order to communicate with all his country customers. After two telephones are once established in a community, it seldom happens that either one is driven out. If complete telephone communication is to be had, keep out the second company."

This tip may prove a timely warning to some of our readers, not forgetting, of course, to make as secure provision as may be against any possible exactions by a monopoly.

Fair Dates for 1906.

Toronto Open-air Horse Show.....	July 2
Inter-Western Exhibition, Calgary.....	July 10-12
Winnipeg Industrial Exhibition.....	July 23-28
Brandon Exhibition.....	July 31-Aug. 3
Cobourg Horse Show.....	Aug. 14-16
Canadian National, Toronto.....	Aug. 27-Sept. 6
St. John, N. B.....	Sept. 1-7
Canada Central, Ottawa.....	Sept. 7-15
Western Fair, London.....	Sept. 7-15
Michigan West, Grand Rapids.....	Sept. 10-14
Sussex, N. B.....	Sept. 10-14
New York State, Syracuse.....	Sept. 10-15
Chatham, N. B.....	Sept. 14-21
Dominion Exhibition, Halifax, N.S.....	Sept. 20-Oct. 5
Prince Edward Island Agr. and Industrial Exhibition.....	October 8-12
Provincial Exhibition, New Westminster, B. C.....	Oct. 2-6
American Royal, Kansas City, Mo.....	Oct. 6-13
International, Chicago.....	Dec. 1-8
Ontario Winter Fair, Guelph.....	Dec. 10-15

Packing-house Inspection.

An Ottawa despatch states that Mr. W. W. Moore, Chief of the Markets Division of the Department of Agriculture, has been delegated by Mr. Fisher to make an inspection of all the meat packing-houses in the Dominion. He commenced with the Hull factory of the Geo. Matthews Co. While such an inspection may be useful as a temporary move, what would seem to be needed is the inauguration of a permanent and comprehensive system of inspection by a staff of qualified officers, clothed with ample powers to prevent the development in Canada of conditions such as were recently exposed in Chicago.

MARKETS.

Toronto. LIVE STOCK.

Receipts at the City and Junction yards last week were not so large as the week before by 2,000 cattle. Trade was fair, but not so active, with prices steady for prime cattle, but those of medium quality were easy at a little lower prices.

Exporters—Prime shipping cattle sold at \$5.15 to \$5.30 per cwt.; fair to good, \$5 to \$5.10; medium, \$4.75 to \$4.95; the bulk selling at \$4.85 to \$5.10. Export bulls sold at \$3.75 to \$4.25 per cwt.

Butchers—Choice picked lots of prime butchers', \$4.85 to \$5 per cwt.; loads of good at \$4.65 to \$4.80; medium, \$4.30 to \$4.50; common, \$4 to \$4.25 per cwt.; stall-fed cows, \$3.75 to \$4.25; grass cows, \$2.75 to \$3.25. Butchers' bulls, 1,000 to 1,500 lbs. each, sold at \$3 to \$3.60 per cwt.

Feeders and Stockers—Receipts of these classes have been light, but enough to supply the demand. Few short-keep feeders are wanted. Prices are quoted as follows: Short-keep feeders, 1,075 to 1,150 lbs., each, \$4.50 to \$4.75; good steers, 900 to 1,050 lbs., \$4 to \$4.25; light feeders, 800 to 900 lbs., \$3.30 to \$4; stockers, 500 to 700 lbs. each, \$3.25 to \$3.60; medium stockers, \$3 to \$3.25; common stockers, \$2.75 to \$3.00.

Milk Cows and Springers—Receipts have been large, greater than the demand, few outside buyers being on the market. Prime-quality cows sold at \$50 to \$55 each; good cows, \$40 to \$45; medium, \$30 to \$37.50; common, \$25 to \$30 each.

Veal Calves—The run of veal calves has not been so large. Prices steady to firm at \$4 to \$6.50, and \$7 for prime-quality, new-milk-fed veals.

Sheep and Lambs—Receipts were moderate, with prices firm, especially for spring lambs. Export ewes, \$4.25 to \$4.50; bucks, \$3.50 to \$4 per cwt.; yearling lambs, not too big or fat, sold at \$6 to \$7 per cwt.; spring lambs, \$4 to \$6.25 each.

Hogs—Packers are trying to get prices down, and \$7.25 is the highest, quoted by Messrs. Harris & Kennedy, but drovers are paying farmers these prices in the country, and hogs should be quoted on the Toronto market at \$7.50 to \$7.60.

Horses—The horse market has been somewhat brisker again, and prices have been firmer. Several shipments of carriage horses from Toronto to distant parts of Canada and to the States have been reported. Carriage horses continue scarce. One chestnut mare of excellent quality was sold to a gentleman in Montreal at \$500. Good-looking delivery horses, those with good appearance, as well as substance, are eagerly looked up and readily bought at good prices. Draft horses are not so much sought after as earlier in the season, but good horses of this class bring good prices still. The sale at the Repository, on Tuesday, 19th, was reported a great success. C. A. Burns, the manager, reports horses scarce and bringing good prices at present. Reports from the Canadian Horse Exchange are on the same lines. The buyers at last week's sales were principally from the city, but there were many outside places also represented. Following are the prevailing prices reported by Burns & Sheppard: Single roadsters, 15 hands, \$125 to \$160; single cobs and carriage horses, 15 to 16.1 hands, \$130 to \$175; matched pairs and carriage horses, 15 to 16.1 hands, \$350 to \$500; delivery horses, 1,100 to 1,200 lbs., \$150 to \$175; general-purpose and express horses, 1,200 to 1,350 lbs., \$160 to \$190; draft horses, 1,350 to 1,750 lbs., \$175 to \$200; serviceable second-hand workers, \$60 to \$75; serviceable second-hand drivers, \$60 to \$80.

COUNTRY PRODUCE.

Butter—Receipts moderate. Prices inclined to be firm. Creamery prints, 22c. to 23c.; solids, 21c. to 22c.; dairy lbs. rolls, 18c. to 19c.; tubs, 17c. to 18c.; bakers' tubs, 14c. to 15c.

Cheese—New, 12c. per lb., and 12½c. for twins.

Eggs—Receipts have not been as large. Prices firmer at 18c. per doz.

Poultry—Spring chickens, 15c. to 17c. per lb., live weight, and 20c. to 25c. per lb.; dressed; spring ducks, 20c. to 27c.

THE CANADIAN BANK OF COMMERCE

Paid-up Capital, \$10,000,000. Reserve Fund, \$4,500,000

HEAD OFFICE, TORONTO

B. E. WALKER, General Manager

ALEX. LAIRD, Asst. Gen'l Manager

BRANCHES THROUGHOUT CANADA, AND IN THE UNITED STATES AND ENGLAND

BANKING BY MAIL

Business may be transacted by mail with any branch of the Bank. Accounts may be opened, and deposits made or withdrawn by mail. Every attention is paid to out-of-town accounts.

per lb.; last year's pullets, 14c. to 16c. per lb.; fat hens, 11c. to 13c. per lb.; turkeys, 14c. to 16c. per lb.

Potatoes—Eastern, by the car lot, on track, at Toronto, at \$1 to \$1.10 per bag for Delawares, and 95c. to \$1 for Ontarios.

Baled Hay—Car lots, on track, at Toronto, \$9.50 to \$10 per ton for No. 1 timothy; No. 2 at \$7.50 to \$8 per ton.

Straw—Baled, in car lots, at Toronto, \$5.50 to \$6 per ton.

Beans—Prices unchanged at \$1.75 to \$1.80 for hand-picked; prime, \$1.50 to \$1.60 per bushel.

Honey—Prices firm at 9½c. to 10c. per lb. for strained, \$1.25 to \$2 per dozen for combs.

Bran—Offered at \$16.50, outside.

Wheat—Ontario No. 2, white, 82c. bid, outside; No. 2, mixed, 82c. bid, outside, but offered at 83c.; Goose, no quotations; spring, No. 2, Ontario, sellers at 83c., outside.

Rye—72c. bid, outside.

Barley—No. 3, 46c. bid, outside.

Oats—No. 2 white, buyers at 39c., outside, sellers at 40c.

Corn—No. 3 yellow, sellers at 61c., on track, at Toronto.

Montreal.

Live Stock—With an unchanged market in England, exporters have been showing a disposition to operate more freely than formerly, and Liverpool space for July has been taken at 40s. That figure has been asked for Glasgow and Manchester, while London is being taken at 32s. 6d. Local cattle market firm, owing to smaller offerings of cattle and continued good demand from butchers. Choice stock, 5½c. fine, 5¼c. good, 4½c. to 5c.; medium, 3½c. to 4½c.; common, 2½c. to 3½c. Sheep, 3½c. to 4½c. per lb.; lambs, \$3 to \$5 each, and calves, \$2 to \$10, the latter for choice large calves. Hogs, 7½c. to 7¾c.

Horses—Practically no sales have been made to the railway-construction people, as yet, but local dealers are in hopes that in about another month there will be an active call from these sources. Heavy-draft, 1,500 to 1,700 lbs., \$250 to \$350 each; light-draft or coal-carters, 1,400 to 1,500 lbs., \$200 to \$250 each; express, 1,100 to 1,300 lbs., \$150 to \$225 each; choice saddle or driving horses, \$350 to \$500 each, and common, old stock, \$75 to \$125 each.

Dressed Hogs and Provisions—Dealers say they do not notice any great difference lately in the demand for Canadian tinned meats, but call for American meats is light. All other lines of provisions in active request. Fresh abattoir-killed hogs, 10½c. to 10¾c. Hams firm at 13½c. to 14c. per lb. for large, 14½c. for medium, and 15c. to 16c. for small and choice.

Hides and Tallow—Prices have registered an advance in lamb skins and clips, these being now quoted at 25c. each. No. 1 beef hides, 12c. per lb.; No. 2, 11c., and No. 3, 10c., tanners paying half a cent more. No. 1 calf skins, 15c. per lb., and No. 2, 13c. No. 1 horse hides selling slowly at \$2 each, and No. 2 at \$1.50 each. Market for tallow is dull, prices being 4½c. per lb. for rendered tallow, and 14c. to 24c. per lb. for rough tallow. The quality of the beef hides is now fair, having improved considerably of late.

Cheese—Predictions of lower prices have been upset by the recent course of the market. The board at Peterborough experienced a sudden rise on June 20th, and the result was an immediate firmer feeling here, holders raising their figures from 11c. and 11½c. for Easterns, to 11½c. to 11¾c.; and from 11½c. and 11¾c. for Ontarios, to 11¾c. The rise is attributed to a "short" interest here. Stocks in both England and Canada are light, and the consumption is good, though against this is the heavy production here. Total shipments from Montreal to June 16th amounted to 361,755 boxes, against 305,009 for the corresponding period last year.

Butter—Prices firmer of late. Finest salted creamery, 21½c. to 22c., dairies being around 18c. for best Ontarios. Saltless, 22½c. for best. On the whole, prospects for dairy-produce prices are bright. Total shipments from Montreal to June 16th, 50,220 packages, as against 52,222 for the corresponding period last year.

Eggs—Straight-gathered, 17c. Dealers have been trying to get prices down in the country, but have not succeeded very well. Although several packers are through with their pickling operations, there does not appear to be many more eggs for consumption. The explanation offered is that eggs are now being put into storage.

Potatoes—Market firm; 70c. to 80c., carloads, on track, per 90 lbs. Grain—Trading light, and prices are holding fairly steady. Oats firm, at 43½c. for No. 2, store, 43c. for No. 3, and 42½c. for No. 4.

Hay—Market easy, after a decline to \$10 for No. 1 timothy, \$9 for No. 2, and \$8 for clover-mixed. It is claimed that some are paying more, others stating they are buying at the above and less.

Chicago.

Cattle—Common to prime steers, \$4 to \$6.10; cows, \$3 to \$4.50; heifers, \$2.75 to \$5.25; bulls, \$2.75 to \$4.25; calves, \$5.75 to \$6.50; stockers and feeders, \$2.75 to \$4.75.

Hogs—Choice to prime, heavy, \$6.55 to \$6.62½; medium to good, heavy, \$6.50 to \$6.55; butchers' weights, \$6.50 to \$6.60; good to choice heavy, mixed, \$6.50 to \$6.55; packing, \$6 to \$6.55.

Sheep and Lambs—Sheep, \$4.50 to \$6.35; yearlings, \$6 to \$7; shorn lambs, \$5.25 to \$7.60.

Cheese Board Prices.

Picton, 11½c. Peterboro', 11 5-16c., 11½c. and 11 3-16c. Stirling, 10 15-16c. Woodstock, 10½c. Madoc, 11 1-16c. to 11c. Kingston, 11½c. to 11 3-16c. Tweed, 11c. South Finch, 11½c. bid.

British Cattle Markets.

London—Cattle are quoted at 11c. to 11½c. per lb.; refrigerator beef, 8c. to 8½c. per lb.; sheep, dressed, 14½c. to 15c. per lb.

Buffalo.

Veals—\$4.50 to \$7.50. Hogs—Heavy, mixed and Yorkers, \$6.80 to \$6.85; pigs, \$6.75 to \$6.80; roughs, \$5.75 to \$6; dairies, \$6.65 to \$6.75.

Contents of this Issue.

ILLUSTRATIONS. Childwick Champion ... 1027 Top View of Shorthorn Bull ... 1028 In the Good Old Summer Time ... 1031 Norfolk Co. Beekeepers in C. W. Challand's Apiary ... 1032 A Garden at Eagle, Alaska ... 1033 A Hillcrest Orchard Gravenstein ... 1034 A Hillcrest Orchard Outfit ... 1034 EDITORIAL. Law Needed to Regulate the Trade in Commercial Feeding Stuffs ... 1025 The Automobile Nuisance ... 1025 Stop the Trade in Western Horses ... 1025 Our Cheese and Butter in Britain ... 1026 HORSES. A Prominent Breeder on Hackneys ... 1026 Stopping a Puller ... 1026 Care of Yearling Colts ... 1027 LIVE STOCK. Shropshires at Shrewsbury ... 1027 Legislative Control of Concentrated Feeding Stuffs ... 1027 THE FARM. Soil Drainage: Where and How to Drain ... 1028 Why We Advocate Lucerne ... 1028 Cultivating Two Rows of Corn at Once ... 1028 Advantages of the Split-log Drag ... 1028 Best Clover Hay Made by Curing in Coils (illustrated) ... 1029 Farming in the Temiskaming Clay Belt ... 1029 Temiskaming Soil and Crops ... 1030 Plowing Alfalfa Sod ... 1030 The Rat Nuisance ... 1030 THE DAIRY. Keep Up the Milk Flow ... 1030 Canadian Record of Performance ... 1030 Co-operative Dairying in Hastings Co., Ont. ... 1031 Cow-testing at Cowansville ... 1031 The Difference in Dairy Herds ... 1031 Cheese Instructors Meet ... 1031 Determining Moisture in Dairy Products ... 1032 Cow-testing at Brockville ... 1032 APIARY. A Norfolk County Apiarist's Homestead ... 1032 More Fruit-growers Should Keep Bees ... 1032 POULTRY. Dry Feeding of Poultry ... 1033 GARDEN AND ORCHARD. Insects Mentioned in the May Fruit Crop Report ... 1033 A Bonanza Story of Nova Scotia Orchards ... 1034 Cover Crops ... 1035 Fruit Exhibits for Dominion Exhibition ... 1035 Potato Spraying in Maryland and New York ... 1035 THE FARM BULLETIN. Some Things About Denatured Alcohol; Seeds and Weeds; East Prince, P. E. I.; Free Expert Advice in Farm Drainage; Live-stock Importation ... 1035 Farm Notes from Waterloo; Fire-proof Cement Concrete Structures; Cultivating Corn in a Buggy; Picton County, N. S.; Crop Prospects; Mr. Gordon on the Cattle Trade; Spraying for the Destruction of Mustard; To Place Telephone and Express Companies Under the Railway Commission; Dual Telephone Service a Nuisance; Fair Dates for 1906; Packing-house Inspection ... 1036 The Very Latest Treatment for Milk Fever ... 1049 The Selection of Show Sheep ... 1053 Alcohol in Gas Engines; Under the Wing of McGill ... 1055 MARKETS ... 1037 HOME MAGAZINE ... 1038 to 1047 QUESTIONS AND ANSWERS. Veterinary. Horse rubbing its tail; partial paralysis; inversion of uterus; lame mare; indigestion; swollen knees ... 1046 Chronic cough—spavin ... 1052 Miscellaneous. Fencing a lane; calves suck each other; chicken cholera; description of simple ice house; best kind of belt ... 1045 Diseased meat; ditching; veterinary ... 1046 Line fences; loss of scales; expense of tile draining; cows failing to breed; crossing Holsteins and Ayrshires; lost dog—hired man quitting; cost of rape seed, etc. ... 1052



Life, Literature and Education.



William Makepeace Thackeray.

It is rather strange that so little is known of the life of Thackeray. In these days of publicity, when the most private affairs of every illustrious man are pried out, and in cold blood set up in type, this might seem a thing to be regretted. Why not, for instance, have a series of "Love Letters from Thackeray," with all sorts of interesting allusions to domestic affairs which are not nor ever were anybody's business but his own? Such a series from such a man might prove a rather interesting condiment. Rather obviously, however, it reflects rather favorably upon the character of Thackeray himself that he has chosen the other part. That such a man as he should deliberately give orders that no anecdote concerning himself, no great harangue over his character, his likes, his dislikes, his foibles, should be recorded by his family, those best situated to know, is surely a strong testimony to us who would still dare to ask, "What manner of man was this Thackeray?" to a modesty which must, in these days of advertising, prove as interesting as novel. Perhaps Thackeray lived somewhat before the days of advertising—and yet, even the love-letters, and the reverse kind, of Dickens have been published; and Dickens was his contemporary.

As a matter of fact, although Thackeray positively forbade that any "life" of him should be written during his lifetime, or published after his death, from what has been handed down of him from the broad range of society in which he was so well known, we know him to have been a man of singularly admirable character, gifted, in spite of his apparent cynicism, with the gentlest heart in the world, charitable to a fault, witty, bright in conversation, level-headed above all things, severe only upon insincerity, affectation and cant—three similar things, perhaps, with a difference. "His face and figure," said one who knew him at the height of his power, "his 6 feet 4 inches in height,

with his flowing hair, already nearly gray, and his broken nose, his broad forehead and ample chest, encountered everywhere either love or respect, and his daughters to him were all the world." If he had a weakness, perhaps, it was that he was possessed of a settled melancholy. This, however, he fought off persistently for the sake of those about him, covering it up with a playfulness which sometimes became almost buffoonery, and laughing, where a weaker man might have given way to irritability and gloom. For this melancholy, perhaps the greatest reason was that it was constitutional. True, his married life was very unhappy. Very early his wife lost her reason, and from that time until his daughters grew up he had no home life, but lived continually at the clubs. Nevertheless, brilliant success came ultimately to him in his work, and his daughters came to be all that he could have wished of them.

Briefly, the story of his life was this: He was born in Calcutta, India, in July, 1811, and was the only child of Richmond Thackeray, who held the position of Secretary to the Board of Revenue there. When the child was only five, however, the father died. His widow married again, and sent the boy to an aunt in England. Here he went to several private schools, entering the Charter House (which he usually referred to afterwards as the Slaughter House) in 1822. In "Pendennis" we find an account of his school-days there. Thackeray was not brilliant at school, nor ever a great favorite with his masters, although he showed some ability in writing verses and in drawing pictures. In 1829 he entered Trinity College, Cambridge, where he remained for scarcely a year. During this time, however, he found the first outlet for his talent in writing for a small University paper called "The Snob," of which he was assistant editor. At Cambridge, too, he entered a poem, "Timbuctoo," in competition for the Chancellor's prize, which was, however, won by Tennyson.

On leaving Cambridge, Thackeray, who was at this time in no way hampered for money, went to the Continent, and, apparently, with the object of becoming an artist, spent some time in study in Paris and Weimar. But he never really learned to draw, and, presumably, since he presently gave up the study, became aware of the fact that he never should learn. Subsequently he illustrated his own books, but his drawings are merely burlesques, as, perhaps, he intends them to be. At all events, they usually bring out his ideas fairly well, with that emphasis on the side of ridicule which no one else, perhaps, would have accomplished so successfully.

In 1832, when he became of age, he became the proprietor of a paper, but lost heavily in the speculation. At this time, too, he fell, it is said, into the habit of gambling, and lost there again. At all events, he got away with his fortune in short order, and presently found himself under the necessity of working for bread—possibly the best thing that could have happened him,

as he was beset with an unfortunate faculty of leaving things off until it was impossible to do so any longer. He now contributed to several magazines, chiefly to Fraser's and Punch, writing first under the name of Michael Angelo Titmarsh. These first letters, which were extremely clever satires on current subjects, attracted some attention, but, strangely enough, while Dickens, a year younger than Thackeray, had burst forth into a blaze of popularity, Thackeray was still only "Titmarsh," comparatively unnoticed, nay, comparatively unknown. Today, popular though Dickens still is, no critic of authority hesitates an instant about which of these writers to place first as an artist in literature. Thackeray's first essays, too, were as powerful, in many respects, as his later works; but at the time, somehow, they did not catch the popular fancy. Perhaps, when the new writer struck, he struck too severely, straight out from the shoulder, and to pay too much attention, or to retaliate, would have been to acknowledge too well that a mark had been found. At all events, this inappreciation worried Thackeray. He must have been conscious of his own power, but few others seemed to recognize it, and he was continually harassed as to whether his work would meet with the success which meant not only the bread, but the butter, too, of himself and his family.

At times, it seems, this worry even drove him to think of giving up literature as a profession. More than once he tried to get a place on the Civil Service, and once, he essayed to become a Member of Parliament. In each case defeat met him (although in the latter case by a very small margin), and thus, probably, the country was saved a first-class novelist, at the expense of a very poor civil servant.

In 1843 his "Irish Sketch Book" was published, and was met in Ireland with such a howl of resentment that, it is said, an Irish Colonel came over with the intention of fighting a duel with the author. As the Colonel left, however, on the best of terms with the offender, it is to be judged that the meeting was not exactly sanguinary.

In 1846 appeared the "Snob Papers," in which every conceivable type of snob was sketched, dissected or tomahawked, in a brilliant series of satirical portraits. Thackeray was, in fact, in his element when on the subject of the snob—not, perhaps, that it was so much his pleasure to lance, to probe, to cauterize, as he needs must in such a theme, but because so great was his horror of insincerity, sham, humbug, in any capacity whatever, that he must perforce seethe it down, laugh it down, burlesque it down. "I have," he says, "and for this gift I congratulate myself with a deep and abiding thankfulness, an eye for a snob. If the truthful is the beautiful, it is beautiful to study even the snobbish; to track snobs through history, as certain little dogs in Hampshire hunt out truffles; to sink shafts into society, and come upon rich veins of snob-ore." And so, from the beginning to the end

Thackeray hunted snobs. In his younger days he perhaps overdid the matter; as he grew older he meliorated his assertions, as most people do with added age and experience, and became delightful.

In 1846, also, he started Vanity Fair, the work which really laid the foundation of his greatness, or, rather, of the appreciation of it. In writing Vanity Fair—the very name of which was a stroke of genius—he departed completely from the prescribed method of novel-writing. Previously it had been the fashion in novels to represent people as either all good or all bad. This seemed to Thackeray as nonsense, and he set out to picture actual life. As a consequence, publishers at first fought shy of the book. His good people, the critics said, were all fools, and the clever ones all knaves. They also said that Thackeray had taken upon himself to pronounce upon all the vices of the world, and that he had made the vicious of more importance than the noble. Thackeray, however, took the stand that no one is either all good or all bad. Rawdon Crawley, for instance, is a very human knave, who shows a bit of the better man throughout; Amelia is a thoroughly good, constant woman, with little weaknesses and oddities common to such a type. Becky Sharp is, perhaps, the strongest personification of selfishness ever portrayed in literature, and has, perhaps, as slight a mixture of the good with the evil as any of Thackeray's characters. She is, however, in her way, a masterpiece.

After "Vanity Fair," Thackeray wrote many novels of wonderful power: "Pendennis," "Esmond" (accorded by critics the honor of being the very type of the highest literature), "The Newcomes," "The Virginians." He died on the 20th of December, 1863, with yet another novel in hand, "Denis Duval."

Upon none of these can we touch in the space of a limited article. We can, however, and do recommend Thackeray to all lovers of high-class fiction. As you begin to read him, you may possibly feel almost pugnacious at him for his apparent cynicism. As you read on, keeping in mind the character of the man, you realize that, although he is a satirist, he is no cynic, and that he has simply asserted in cold blood things that people, as a rule, try to force themselves not to believe. His humor, too, is delightful, and scarcely a chapter in his work fails to contain more than one masterpiece of it. One is tempted to quote examples, but space forbids.

Thackeray's novels are nearly all long, two volume novels. They cannot be skimmed over in a hurry; but they will amply repay the trouble of reading. The other day the Governor-General of Canada visited this city. In our public library he enquired what had been, this year, the most popular book. He was unhesitatingly told "The House of Mirth." It may be very well to keep up with recent fiction, but we trust the readers of "The Farmer's Advocate" will not wholly set aside the old writers for the new. Thackeray, we venture to say, will compare favorably, even with Mrs. Wharton.

Live in the Present.

Some people waste years of their lives brooding over what has been, and worrying over what may come. Meanwhile, the blessings of the present flit, unenjoyed, to the limbo of the past, and the future draws swiftly into the unappreciated present. There is only one time to live, and that is now. Not that we would blot out the past, nor counsel recklessness of the future. An occasional reminiscence is good. The bright spots of bygone days are pictures hung in the halls of memory. The disasters have value for the lessons they teach, the hints they afford, and the part they play in the inestimable work of character-moulding. The future, on the other hand, is to be faced, but faced with courage, not fear, with resolve to improve on the past, to turn misfortune to account, and, above all, with a supreme confidence that, in the grand, Omnipotent scheme of material and moral evolution, the dark threads are necessary for the weaving of the completed pattern.

The past and the future are valuable for the light they shed on the present, for the help and comfort and inspiration they afford. Beyond this, retrospect is idle and anticipation vain. Now is the time to live. Make the most of the present.

Care of Our Country Cemeteries.

Someone has said that you can estimate the finer and better feelings of a community by the way in which the local burying-ground is cared for. Now, while it is hardly fair to accept any such thumb-and-finger standard as this, the fact remains that much more should be done to care for the last resting place of our fellow citizens. Too often the country cemetery is the most neglected spot in the whole countryside. The fences are either levelled or tumbling down. Many of the tombstones have fallen, or they are far from being perpendicular. The paths are hard to find, and the very graves are covered with a rank growth of nettles or burdocks, or other foul weeds.

It may be urged that it makes no difference to the dead where they lie, or how their graves are kept. That may be true. Their work is over. Their spirits do not rest beneath the sod. But, what must be said of the living who allow all that is mortal of the departed to rest amid conditions that would not be tolerated on even a fourth-rate farm? What sort of a son or daughter is it who can allow his parents' grave to be the source of every noxious weed? Surely a community is far gone in its loss of self-respect that ignores the last resting place of its pioneers, without whose labors and privations its present comfort and wealth could never have been brought about. Besides, what encouragement has a young man to toil, and deny himself for the good of the community, when he thinks that in a few short years his body will be covered up by nettles and thistles, and even his name forgotten? In this country we do not believe in the worship of ancestors. Indeed, we are too much inclined to forget that generations of men and women have lived before us, and that we have our comforts because they thought and toiled. In so far as we are thus forgetful, we are the losers.

This matter of the care of the country cemetery is one that concerns the community as a whole. Many families have buried their dead, and have moved away. Such cannot attend the graves they leave behind them. Rather, this is a matter for the organizations of the community. Let each congregation that has one attend to its own God's acre. Let our township councils consider this matter.

Our American cousins have a custom that we Canadians would do well to follow. Once each year, in the time of flowers and sunshine, the graves of the nation's fallen heroes

are visited and decorated. Would it not be well if rural and village Canadians had one day set apart for caring for the graves of their dead? On that day each man should turn out to work, or he should give a liberal equivalent for a day's work, the sum so given to be spent in procuring the necessities for a worthy care of the local cemetery. The form the movement may take is immaterial, but the time is ripe for many a community to wipe out the disgrace it has brought upon itself for the way in which it has neglected its burying-ground. O. C. Wentworth Co., Ont.

Red-winged Blackbird.

(*Agelaius Phoeniceus*—Blackbird family).

The blackbirds make the maples ring With social cheer and jubilee: The red-wing flutes his "O-ka-lee!"

—Emerson.

Passing near ponds or marshes at almost any time during the summer, you may hear the call, described by Emerson as "O-ka-lee" (with the accent and a rising inflection on the last syllable), rising above the low bushes, and if you watch closely enough, you may catch sight of the little patrol who has uttered it. The red-wing is not the soldierbird, but there is certainly something martial about his uniform, and something businesslike about his manners and his cry, as though he would warn you from the wild-rose bush, where his nest is hidden, and dare you to cross over the line.

If you see the male red-wing once, you are sure to know him again. His plumage is black as black can be, but the scarlet dash on the shoulder is edged with gold, like the gold braid on a soldier's epaulettes. The male, however, has taken all the fine clothing to

and fruit—and small blame to him if he wishes for a change in his bill-of-fare—seven-eighths of his food is made up of injurious insects and harmful weed seeds. Can we not recommend him to your mercy?

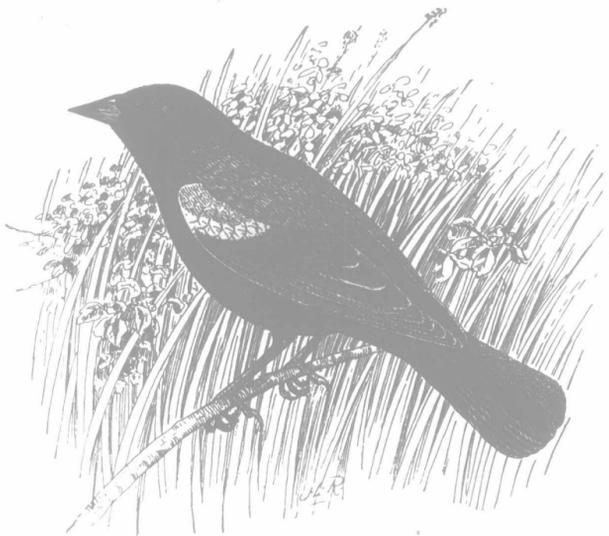
Current Comment.

THE SITUATION IN RUSSIA.

Premier Goremykin at present holds a most precarious position. After the recent terrible massacre of Jews at Bialystok he issued a declaration that amnesty—for which the populace of Russia has been crying since the beginning of the Parliament—would not be granted until assassination and outrages cease. As a consequence, the fury of the people has redoubled, and even the soldiery cannot be depended upon by the members of the aristocracy; it is rumored that disaffection is rife even among the regiments of the Guards. The Ministers of the Russian Cabinet, recognizing the crisis, all wish to resign, and may have done so ere this paper reaches its readers. Should this occur, and a new Cabinet be created, in part at least, from the Duma, there may still be hope for an abatement of the storm in Russia.

WALTER WELLMAN'S AIRSHIP.

All the world will soon be interestedly following Walter Wellman in his flight to the North Pole. On June 16th he sailed from France on the steamship *Frigga*, taking with him the airship in which the attempt is to be made. His party consists of 35 men, but only four beside him-



Red-winged Blackbird.

himself. He does not seem to be concerned at all that his spouse goes out in a very rusty black gown, dingly speckled with dull whitish and yellowish flecks, with, perhaps, a few touches of red and a tip or two of white on the wings.

The red-wing builds its nest near ponds, sometimes in low branches, hanging quite over the water, or among the reeds and grass of marshes. The nest is seldom more than four or five feet above the ground, although, occasionally, it has been found much higher. From three to five eggs, white or greenish-blue in color, and curiously streaked and mottled with black or purple, are deposited.

The whole blackbird race, with the exception of the meadow-larks, bobolinks and orioles, which are "cousins" of the dusker members of the family, have somehow received a bad name. Red-wing, however, scarcely seems to deserve the opprobrium perhaps better merited by some others of the connection. His long, conical bill shows that he is particularly adapted for insect-eating (that of the seed-eater is invariably short and stout), and, as a matter of fact, although he will, at times, eat both seeds

and fruit—and small blame to him if he wishes for a change in his bill-of-fare—seven-eighths of his food is made up of injurious insects and harmful weed seeds. Can we not recommend him to your mercy?

self will make the trip in the airship, the rest remaining on the Island of Spitzbergen, where a supply and observation depot will be set up, and a wireless telegraphy station established. Walter Wellman is a Chicago newspaper man, and his trip to the North Pole was not of his own planning. He was, in fact, engaged on other work in Washington, when he received a telegram from the manager of the *Tribune* to prepare for an expedition to the Pole. The whole venture would seem, therefore, to be a monument to American newspaper enterprise and the craving of a reading public for sensation. Doubtless, however, should he succeed in the object of the trip, Mr. Wellman will contribute immensely to the cause of science.

The airship which he has taken was built especially for him in France. Its cigar-shaped balloon is 164.04 feet in length, and 52.49 feet at its greatest diameter. The rest of the apparatus consists of a steel car, three motors, two screws, a

steel boat, and motor-sledges for use on land. Food for seventy-five days will be taken aboard, besides instruments, tools, lubricating oils, and 5,500 pounds of gasoline for the motors. The length of the car, which is made of steel tubing, is 52.5 feet; the engine room and cabin for the crew are enclosed, and the steel boat is suspended immediately below the car. In it the gasoline, etc., will be stored.

PERSONNEL OF THE NEW PROVINCIAL UNIVERSITY BOARD.

The personnel of the new Board of the University of Toronto, is as follows:

John Hoskin, K. C., LL. D., president of the Toronto General Trusts Corporation; Hon. S. H. Blake, K. C.; Senator Sir Mackenzie Bowell; Jas. L. Englehart, Petrolea, now a member of the Temiskaming & Northern Ontario Railway Commission; Rev. Father Teefy, formerly superintendent of St. Michael's College, now in a similar position at St. Basil's Novitiate; His Honor Colin Snyder, of Hamilton, Judge of the County of Wentworth; Byron E. Walker, general manager of the Canadian Bank of Commerce; G. R. R. Cockburn, president of the Ontario Bank and the Consumers' Gas Company; Chester D. Massey, treasurer of the Massey-Harris Company; Rev. D. Bruce Macdonald, principal of St. Andrew's College; W. T. White, general manager of the National Trust Company; E. C. Whitney, Ottawa, brother of the Premier, a prominent lumberman; Dr. Goldwin Smith; Chief Justice Hon. Charles Moss, LL. D., the present vice-chancellor of the University; E. B. Osler, who represents West Toronto in the House of Commons; J. W. Flavelle, president of the National Trust Company; J. A. Macdonald, managing editor of the *Toronto Globe*; Hugh T. Kelly, barrister, Toronto, partner of the Hon. J. J. Foy.

Mr. J. E. Hodgson has resigned as High School Inspector for Ontario, and has been succeeded by Mr. H. B. Spotton, M. A., F. L. S. Mr. Spotton is well known as the author of several popular text-books on botany.

Some Shots from Thackeray.

"The Duke (whom Major Pendennis and Pendennis met at a crossing) gave the elder Pendennis a finger of a pipe-clayed glove to shake, which the Major embraced with great veneration. . . . Old Pendennis, whose likeness to his Grace has been remarked, began to imitate him unconsciously after they had parted, speaking with curt sentences, after the manner of a great man."—Pendennis.

"And it must be remembered that this poor lady had never met a gentleman in her life until this present moment. Perhaps these are rarer personages than some of us think for. Which of us can point out many such in his circle: men whose aims are generous, whose truth is constant, and not only constant in its kind, but elevated in its degree; whose want of manners makes them simple, who can look the world honestly in the face with an equal, manly sympathy for the great and the small. We all know a hundred whose coats are very well made, and a score who have excellent manners, and one or two happy beings who are what they call in the inner circles, and have shot into the very center and bull's eye of the fashion; but of gentlemen, how many? Let us take a little scrap of paper, and each make out his list. . . . My friend the Major (Dobbin), I write, without any doubt, is mine. He had very long legs, a yellow face, and a slight lisp, which at first was rather ridiculous. But his thoughts were just, his brains were fairly good, his life was honest and pure, and his heart warm and humble."—Vanity Fair.

The Quiet Hour.

Neighboring.

"All worldly joys go less
To the one joy of doing kindness."

Which now of these three, thinkest thou, was neighbor unto him that fell among thieves?

And he said, He that shewed mercy on him. Then said Jesus unto him, Go, and do thou likewise.—St. Luke x.: 36, 37.

Instead of preaching, to-day, I shall tell you something about the friendly "neighboring" that is being done in cities, and, as my own experience is very limited, I shall draw largely from a weekly magazine called "Charities and the Commons."

First, let us look at that friend in need, the "visiting nurse." She walks briskly along the dirty street to the house where her patient is lying, sick and uncomfortable. She walks in at the open door, climbs flight after flight of filthy stairs—trying hard not to breathe the tainted air of the dark, close passages—and knocks at the door of the right tenement. There she, perhaps, finds a sick child lying almost uncovered on the bed, while the worn-out mother and three willing but ineffective neighbors "struggle with a frightful mess of dirty poultice in a pail." The nurse takes command at once, clears the room of most of the would-be helpers, and does whatever is needed in a brisk, business-like fashion, before moving on to visit another patient. This may be a woman, not very ill, but most uncomfortable with dirty bedding, unwashed face and tangled hair. There may be fresh things in the tenement, but the friends have neglected to put them on. The nurse gives the poor woman a bath, makes the bed tidy and fresh—as far as is possible—directs the willing, but ignorant, little daughter, who is chief nurse, how to make the disorderly room a little more neat, and also how to prepare some food and serve it temptingly. The weary face on the clean pillow brightens as the room begins to look more as it used to do before she broke down. The nurse is not a paid machine, but a sympathetic human being, who chats away cheerily as her capable hands and brains bring order out of chaos. Soon the poor woman's troubles

are poured out, and the visitor takes time to listen with a kindly interest which is by no means assumed, for it is a joy to come into living touch with other lives—a joy not unmixed with pain, for there are so many burdened lives and her power to lighten the burdens is far less than her will. But at least she brings some sunshine into every house she visits, and life is well worth living when one can do that, for we all want to help a little in the great Christian duty of bearing one another's burdens. Even a lad of eighteen, whose mother told me yesterday that his ambition had always been to become a prize-fighter, is not altogether without high ideals. He is working hard every evening at the science—if it can be called a science—of prize-fighting, in the hope that some day he may make enough money to keep his mother in "style." There is always, I believe, a streak of good to be found in the most degraded people, though it may never be discovered by a superficial observer who doesn't visit them in their homes.

Perhaps our good nurse may visit a patient who is not only unwashed and generally dilapidated, but is lying in the midst of such horrible dirt and disorder as our good Canadian housekeepers could not even imagine. The table is covered with dirty, broken crockery, old bottles and battered tins, ashes cover the stove, and cinders are scattered over the floor, the window is shut, and a couple of dogs are yelping under the bed. The air—if it has any right to the name of "air"—is simply dreadful. The food standing on a rickety chair beside the patient is not only hard and indigestible, but is dished on a dirty, broken plate, and is enough to frighten away the appetite of a strong man. The nurse rolls up her sleeves and cleans the patient, making the bed look like an oasis in a desert of filth, then she goes away after promising to come to-morrow with fresh sheets and pillowcases. She has set the ball of cleanliness rolling, and there is nothing like making a beginning. Next day she will probably find the floor swept, the dishes washed and put tidily on shelves with clean shelf paper under them, the stove swept up, and, possibly, cleaned. Cleanliness and orderliness are attractive and infectious, and kind neighbors are pretty sure to drop in and talk the visitor over, lending a hand when they see what she has begun. Then they go back to their own rooms and tidy up there, opening the windows and washing the children. They get interested in the improved look

of things, and possibly are even inspired to sweep the entry and stairs, or even to wash them—not before they need it. So the nurse has worked a greater reform than she dreams of by one short visit.

In some cities big "nurses' baskets" are kept filled by the women of various churches. They contain "bedding, night-gowns, old linen, infants' clothing, jellies, canned fruit, breakfast foods, bouillon, soaps, toilet articles, and dozens of other useful things which abundantly stock both the loan-closet and the gift-closet of the nurse."

But it is not only in cities that the visiting nurse is found. She is an established and much-needed ministering angel in some rural districts also. I will quote again from my magazine:

"It takes the strength and courage of a heroine to go out on a Christmas night in a blinding snowstorm for a lonely eight-mile drive over the hills; and, finding a family of seven living in one room in indescribable squalor, a room of one bed, upon which three of the five little children were ill with diphtheria, and the mother, helpless from a broken arm, caring for the pale sick baby upon her breast—to remain there in that hovel of disease and misery, far from neighbors and friends, for days and nights—with nowhere to rest her head."

One nurse made two calls each day on a sick child who had only been in this country a week. The father, mother and child had escaped death only by hiding for three days in a cellar—this was, of course, before they left Russia. Everything they owned, but the clothes they wore, had been stolen. A large majority of the people living in the streets around me are Russian Jews—there are two families from Russia in the house where I am living, at least, I think so—the people in the basement don't talk English, so it is not easy to learn anything of them.

Dirty tenements, bad air, overcrowding and dark rooms provide good soil for consumption germs, and a grand battle is being waged against that plague. Free exhibitions are constantly being held, which are advertised in all the schools. I attended one of these a short time ago, and was greatly interested in the models of tents and shacks for open-air treatment of tuberculosis. Some of the little, airy dwellings had dolls in beds with their heads outside the window and their bodies inside the room. There were photographs of terrible, crowded sweat-shops, where workers bent over machines, and dirty little bedrooms, lighted day and

night by flaring gas, where human beings sew all day long. Some of them were evidently far gone in consumption, and in one picture, the woman had wrapped around her, for warmth, part of the garment she was making. Then there were contrasting pictures of bright, airy model work-rooms and tenements. There was also a life-size bedroom built in the exhibition hall. This was labelled, "The Wrong Kind of Bedroom," and it looked very like the average—or a little below the average—bedroom in these streets. The old bedstead was partly covered with a ragged, dirty quilt, there was a chair with a carpet seat, very dirty and partly torn off, an old rag of a carpet was spread crookedly in front of the bed, two or three glaring pictures were hung—or tacked—to the wall, and the window was shut, and the blind down. Beside it was another room of the same size, labelled, "The Right Kind of Bedroom." It was clean and dainty, with a cheap, flowered wall paper, white iron bedstead, with clean, white quilt, clean floor—no carpet—little iron washstand with big granite bowl and pitcher (the other room had no washing arrangements at all), there was a wooden rocking-chair, and the window was wide open. I don't see how anyone could look at those two rooms, and then go contentedly home to one of the wrong kind. An object lesson like that must do more good than any amount of lecturing. As I said, cleanliness is infectious, and one cleanliness in a district is an inspiration to the neighbors—that is a very valuable kind of "neighboring." When seeds with life in them are planted, it is not necessary to wait around for years to see if they are going to grow and increase. Beauty and purity only need to be seen to be desired. That is the reason we cannot help trying to be like God if our eyes are fixed on the beauty of His Holiness.

We can all do something to help a neighbor—don't let us waste the opportunity now at hand by idly dreaming of the things we should like to do if we only had a chance.

"Friends, in this world of hurry,

And work, and sudden end,

If a thought comes quick of doing

A kindness to a friend,

Do it that very minute! Don't put it

off—don't wait.

What's the use of doing a kindness, if

you do it a day too late?"

HOPE.

Children's Corner.



A Strange Friendship.

Photo contributed by the Brothers of the Trappist Monastery, La Trappe, Que.

Bird-hunting Competition.

The prize was won by Percy Cumming, South Gower P. O., Ont. Jennie Claus, whose list is the longest, only described 48 birds. Edith Deadman sent in 55 names, but did not describe any. Some of the descriptions sent in were excellent, especially those by Ernest Palmer, Nellie Scott, Jessie McDonald, Gordon Gilmour, and Muriel Haslam. Parts of these lists will be printed, besides that of the prizewinner. The following are the competitors arranged according to length of lists:

Jennie Claus, 70; Percy Cumming, 51; Roy Smith, 50; Ernest Palmer, 48; Nellie Scott, 45; No name given, 46; Jessie McDonald, 44; Winnie Niven, 36; Eva Hodgins, 31; Gordon Gilmour, 30; Gertrude Bacon, 29; Flavia Tuckey, 27; Evelyn White, 26; Elsie Andrews, 25; Irene Blair, 23; Elizabeth Eaton, 18;

Muriel Haslam, 17; Jean Abernethy, 16; Edith Stickney, 15; Isabel McGee, 12; Helen Tamblin, 30.

Letters for Children's Corner MUST BE addressed—

COUSIN DOROTHY,

52 Victor Ave, Toronto.

Prize List

I have seen the following birds this spring:

1. Crow.—A large black bird.
2. Robin.—One of our common birds, grayish body and red breast.
3. Blackbird.—A medium sized, glossy-black bird.
4. Snipe.—A medium-sized, grayish-colored bird, which calls before a rain.
5. Chipping Sparrow.—A small gray bird, with red crown.
6. Pheasant.—A small gray bird, whose coming is a sure sign of spring.
7. Yellow-hammer or Flicker.—A gray bird, with black and yellow markings.
8. Barn Swallow.—A bird with fluffy breast, chestnut throat and forked tail.
9. Eaves Swallow.—Much like No. 8, only builds under eaves and has different-colored eggs.
10. Chimney Swift.—A dark, sooty-colored bird, a very swift flyer, builds in chimneys.
11. Black-and-white Creeping Warbler.—A small, quick, sweet-singing warbler.
12. Bobolink.—A black-and-white bird, which sings in the meadow. He is a very beautiful singer.
13. Song Sparrow.—A small gray bird, and very popular; most widely distributed in all parts of the country.
14. English Sparrow.—Known to all as fighters and bullies. Very few of our other birds can live near them.
15. Tree Sparrow.—Somewhat larger, but very much like our Chipping Sparrow, with a black spot in its breast.
16. Night Hawk.—A harmless bird, which devours many insects.
17. Chicken Hawk.—The smallest of the Hawks, which feeds on chickens.
18. Hen Hawk.—Larger than No. 17, which feeds on hens. It is sometimes heard crying before a rain.
19. Great White Hawk.—Also destructive.
20. Crane.—A large, clumsy water fowl.
21. Another water bird I never saw until this spring, much like the crane, but smaller and livelier.
22. Plover.—A dark-colored bird, seen flying over ponds.
23. A small gray bird, found by water, has a very peculiar bobbing motion while walking and standing.
24. Partridge.—A grayish brown bird, like a hen.
25. Wren.—A small gray bird, very quick and shy.
26. Gold Finch.—A beautiful little yellow bird, heavily marked, with black on crown and wings.
27. A small slate-colored bird, with fluffy breast; have only seen a few.
28. Black-capped Chickadee.—A small and very friendly bird.
29. Meadow Lark.—A medium-sized bird, a good singer, a mixture of gray and yellow.
30. King Bird.—A medium-sized, gray bird, dark head, buff breast.
31. Pigeon.—These are about the size of a crow; various colors; common around buildings.
32. Baltimore Oriole.—A beautiful bird, colored orange, with black head and wings, splendid singer, builds a hanging nest.
33. Bluebird.—Named from its color, a sweet singer, and a true sign of early spring.
34. Wood Thrush.—Medium size, with dark-brown back and mottled breast very scarce.
35. Brown Thrush.—A medium-sized bird, light-brown back, gives a sharp, shrill call.
36. Blue Jay.—A medium-sized, blue bird, with dark markings, has a shrill call, very shy.
37. Loggerhead Shrike.—A buff breast, a darker back, with black across eyes and wings.
38. Cuckoo.—A grayish-colored bird, large, have seen but one this spring.
39. Yellowbird.—A pretty little yellow bird, and beautiful singer, resembles a Canary.
40. A small bird, something like a Canary in size and action; color, slaty, with a yellowish tinge; has a hanging nest.
41. A black-and-white Woodpecker, with a small orange spot on the very front of its head. It is quite small.
42. A small yellow bird, with black markings, very quick and sly.
43. A small gray bird, with three black stripes on its head.
44. Whip-poor-Will.—A dusky colored bird, with some white on tail. Its song is a whistled repetition of its name.
45. A small gray bird that whistles throughout the day—not very loud, but it can be heard a very long way. It sounds like some person whistling. It is found in heavy woods.
46. A medium-sized bird, of a mixed rusty color.
47. A gray bird, with black stripes from its eyes back to neck and around breast.
48. A dusky-colored bird and a lighter-colored mate. I think it is a Cow Bird.
49. Cat Bird.—A bluish gray color, with a black cap. It sounds like a cat.
50. A gray-colored bird, with a rusty-colored head and neck; a beautiful singer.
51. A small gray bird, with greenish shade over back. Its whistle is very noisy. PERCY CUMMINGS (age 16).

Other Birds Described.

Chickadee.—This little fellow is black on the wings, tail, and also a ring around his neck. His throat, breast and under parts are white. He stays here both summer and winter, and always seems to be plump, sleek and merry.

Gull.—The Gulls, which live chiefly on fish, arrive as soon as the lake opens. They are larger than most of the Hen Hawks, and are pure white, except on the wings, which are usually mixed with black. The beak is yellow, long, and hooked in such a manner that it makes fishing easier for the bird than it otherwise might be.

Partridge.—The Partridge is brown on the wings, back and head, and gray on the tail, with white on the end. The male has a brown or red ruff around his neck, which makes him look very gay. This is why they are called "Ruffed" Grouse. They sometimes spread out their wings and tail and strut along a log like a gobbler, drumming as they go. They live in fields and woods. They are game birds, and delicious as a spring chicken.

The Sapsucker is the smallest of the Woodpeckers, and picks holds in the bark of trees to get the sap and also the flies which come there. All Woodpeckers have sharp points on the end of the tail by which they hold themselves to the tree while they tap-a-tap, tap, for worms.

Crossbeak.—The Crossbeak is bright scarlet. The breast is gray. He is as large as a robin. We often see him eating the sumach flowers in flocks of from three to twenty. He has a crossed bill, and hooked something resembling the Fish Eagle.

The Scarlet Tanager is bright scarlet, not quite as large as a robin, and black on the wings.

ERNEST PALMER (age 13).
Gravenhurst, Ont.

The Redstart is about 4 inches long. It is black with red spots on each side of breast and wings. It is a bush bird.

Cedar Waxwing is brown on back; belly, yellowish gray. It has a red spot on the wings. It eats insects and sometimes apple blossoms.

The male Cow Bird is black, with a brown head. The female is a light brown. It lays its eggs in other birds' nests. It sometimes flies around the cattle after flies.

The Loon, or Great Northern Diver, is about eighteen inches long. It is black and has a large, white spot on its breast. It is a water bird, and can stay under water several minutes.

The Canada Jay is about nine inches long. Its back and belly are gray. Its wings and tail are black.

The Sand Marten is about five inches long. Its back is shiny black, and its belly almost white. It nests in sand banks, and eats flies.

DOE LAKE. GORDON GILMOUR.

Yellow Warbler.—Length about five inches: upper parts rich olive yellow, brightest on the rump and crown, but dark brown on wings and tail, with inside half of each tail feather yellow and some yellow edgings on the wing feathers; under parts bright yellow; in male, streaked with rich brownish red.

Pine Grosbeak.—Length about nine inches; general color of male strawberry

red; the wings and tail dark, with some light-brown and white edgings; tail, forked a little.

ELIZABETH EATON.
Upper Canada, N. S.

The Sparrow Hawk, or, as we call it here, the Mosquito Hawk, is about the size of a pigeon. It has mottled-gray, black-and-white feathers. It is very cruel to little birds, and has been known to dash through a window to get after them. He swoops down so suddenly and low sometimes, we think that he is going to take our hats off.

The Crane is a very large and stately

bird. It has very long legs and a long beak. It is great fun to watch them on the shore, for they have a habit of bowing and dancing. It has pretty light-gray feathers, and always looks nice and clean. The crown of its head is red and bare. Some people use them for food, but they are valuable for the oil got from them.

The Kingfisher is a lovely bird. It is seen along the shores of any river. Its feathers are blue, with a reddish breast. It sits very quietly on a stone or branch, watching the fish swimming. Suddenly, down it drops into the water, splashes widely for a few seconds; comes up with a fish in its mouth, and goes back to its branch, and then throws the fish in the air, catches it when it comes down, and swallows it whole. It runs very quickly along the bank, and pops into a hole, where it has its nest. It is a great wonder for anyone to get Kingfisher's eggs, for they are so cute to hide their nests.

MURIEL HASLAM (age 9).
Springfield, P. E. I.

Golden-crowned Kinglet.—Red head, and the body, grayish brown.

Downy Woodpecker.—Red spot on top of head, white breast, and black-and-white back.

Yellow-billed Sapsucker.—Long yellow bill, with a red spot on throat.

Oven Bird.—Slate-colored back, and dirty-white breast.

JENNIE CLAUS (age 16).
Vineland, Ont.

Bronze Grackle.—This is somewhat like a blackbird, only its feathers shine bronze. It is rather larger than a common blackbird.

The Junco.—This is a slate-colored bird. It is a small bird. It is often seen in the woods.

The Red-headed Woodpecker.—This is a very beautiful bird. Its body is a and white, and all its head is crimson.

The Ruby-throated Hummingbird.—This bird is like the other species of hummingbirds, only the feathers at its throat shine like rubies.

Aberdeen, Ont. JESSIE McDONALD.

Red-winged Blackbird.—Black, upper part of wings red.

Great Blue Heron.—Above, gray; throat, white, spotted with bluish gray.

Snowbird.—Above, brownish gray; head and neck, darker; beneath, white.

Pine Grosbeak.—Head, neck and breast, crimson; back, black.

NELLIE SCOTT (age 11).
Eramosa P. O.



In Cherry Time.

"Open you mouth and shut your eyes."

About the House.

For Picnic Time.

Picnic time is here again, and with it the perennial question of "what to take"—by which, of course, to the initiated means what to take in the baskets by way of luncheon. We have all been at picnics at which cold roast chicken, Boston beans, salads and pie figured. As a rule, however, where there is of necessity such an insufficiency of dishes, it is better not to take things that tend to look mussy. The half of any repast is its attractiveness. Sandwiches are always in order, and should be made of several kinds in order to suit all tastes. Pickles and olives are good, also cake, nuts and raw fruit. For drink, lemonade is as satisfactory as anything, although some prefer raspberry vinegar, bottled fruit juice, or cold tea, chilled, if possible, by placing the can containing it in a vessel of cold water for a time before serving. For packing the luncheon boxes, nothing can be nicer than the little squares of butter paper. Wrap it neatly about the sandwiches, about the cake, etc., and so avoid the too-common sight at a picnic, of a ham sandwich garnished with a lump of chocolate. When baking bread for sandwiches, try making little loaves in pound baking-powder cans. There is less crust, less waste, and then the slices look so nice. The wooden picnic plates, which may be bought at the rate of ten cents a dozen, or less, are a great convenience. They are very light, may be packed into

small space, and do away with the danger of breaking, so unavoidable when delft or other ware is used.

Peanut Sandwiches.—Slice thick gingerbread with a very sharp knife (it must not be too fresh), and fill with chopped peanuts mixed with dressing.

Sardine Sandwich.—Chop the fish finely. Butter the bread, and lay on each slice finely-sliced cucumber, previously steeped in vinegar. Spread with the fish, season, and make into sandwiches.

Chicken Sandwich.—Chop cold chicken and walnut meats until fine. Season, mix with dressing, and use as sandwich filling, with a lettuce leaf in each sandwich.

Cheese Sandwich.—Rub the yolk of 1 hard-boiled egg smooth with 1 tablespoon melted butter, and $\frac{1}{2}$ lb. cheese (grated). Season with salt, cayenne and dry mustard. Moisten with 1 tablespoon water, and spread. Put a lettuce leaf in each.

Sweet Sandwiches.—Spread the upper slice thickly with whipped cream, and the lower with chocolate icing.

Horseradish Sandwiches.—Mix grated horseradish with very thick whipped cream, and use as filling, with lettuce leaves.

Egg Sandwiches.—Slice hard-boiled eggs and use as filling, with lettuce leaves and salad dressing.

Devilled Eggs.—Boil eggs hard, and split lengthwise. Take out the yolks, and mash with finely-minced ham, pepper, salt, and mustard. Refill each half, place together again, and wrap each egg in white tissue paper, twisted at the ends.

Chicken Jelly.—Simmer until the meat

drops off, putting 1 pint cold water for every pound. Put in the feet, well skinned and scraped. Strain. When cold, remove fat, and season with salt, pepper, a bit of lemon peel and parsley. Reheat the liquid, and add to it a little gelatine dissolved in cold water. Pour over the chicken, and set in a cold place to harden.

Veal Loaf.—Two lbs. chopped veal, $\frac{1}{2}$ lb. salt pork, 2 eggs, 1 cup milk, 1 cup crumbs, salt and pepper to taste. Make into a loaf, and bake 2 hours.

On Canning Fruit.

When canning any kind of fruit, it is necessary first to sterilize the jars by twirling them in boiling water. By putting them in sidewise so that the water will touch both inside and outside at the same time, there will be little danger of cracking the glass. The lids and rims should also be sterilized and kept in boiling water on the stove until time to adjust on the jars.

The following recipe for canning red raspberries, given in the Boston Cooking School, is said to answer as well for all sorts of small fruits, plums, peaches, etc., being given, of course, a longer time to cook than the more tender berries. By this method, it is asserted, the fruit is kept whole, and retains more of the fruit flavor than when stewed in a granite kettle before canning.

Fill the jars with the fruit, shaking down well, but do not crush. Adjust rubbers and screw on covers loosely. Put several folds of cloth in a kettle or boiler to prevent contact, then put in the jars, separating them from each other

with a folded cloth. Surround with tepid water to rather more than half the height of the jars. Then bring to boiling point and boil until the steam will issue from the jar of fruit when opened. Lift from the kettle, and fill to the brim with a boiling syrup made in proportion of 1 cup sugar to half cup of water, and, for a pint can of raspberries, add 1 tablespoon of currant juice. The currant juice gives the berries such a rich flavor that those canned without it seem flat in comparison.

The Pathos of Thackeray.

"Perhaps as he was lying awake then, his life may have passed before him—his early, hopeful struggles, his manly success and prosperity, his downfall in his declining years, and his present helpless condition—no chance of revenge against Fortune, which had the better of him—neither name nor money to bequeath—a spent-out, bootless life of defeat and disappointment, and the end here! Which, I wonder, brother reader, is the better lot, to die prosperous and famous, or poor and disappointed? To have, and to be forced to yield, or to sink out of life, having played and lost the game? That must be a strange feeling when a day of our life comes, and we say, 'To-morrow success or failure won't matter much; and the sun will rise, and all the myriads of mankind go to their work or their pleasure as usual, but I shall be out of the turmoil.'"—Of Mr. Sedley, in Vanity Fair.

The Ingle Nook.

I was very much struck by a statement may by "A Country Contributor," in the Ladies' Home Journal recently, to the effect that in looking back over her life, she recognized a distinct charm running through it, due to the fact that she had contrived to fill it with variety.

I think there are some people under the sun who do not pay enough attention to this little detail of variety in life, one, too, so much within the power of nearly everyone—most of all, of farmers' wives—whatever may be said to the contrary—to possess. There are some mistaken mortals, you know, who set such a high value upon method, "system," that they become absolute slaves to it. They have made a rule to wash on Monday, sweep on Friday, etc., etc., and nothing short of an earthquake is permitted to interfere with it. Does a pleasant little picnic happen along on a Monday—"Oh, no, I have to wash," says this fettered one; and so she drudges away over the tub, while her neighbors are away having a good time and ready to come home cheerful and refreshed, with a ripple of bright talk that will make the whole house merrier for a week.

Of course, we don't mean to decry system. System is a good thing, a necessary thing in every well-regulated house. But don't let it become a bond. That washing might be just as well done on Tuesday as on Monday once in a while, and so it is with most other things. A woman's duty is to keep her house in order, but it is also her duty—and who will say not her first one—to make that house a home, to keep just as bright and merry, and pretty, and young as ever she can.

Some people are wont to look with severe countenance on anything which savors of the nature of a fad. Music, painting, drawing, amateur photography, making botanical or other collections, "doing" pretty needlework, studying insects, etc.—all of these are religiously frowned down by these moralists who would not let a farm woman do anything but cook, and scrub, and make butter, if they could prevent it.

If you are wise, however, you will not listen to these meddlers. You have your own life to live, and no one else's. It is your possession, yours to live in your own way, if you would be individual. If you are the happier and brighter for having a bit of a fad, and can afford the time or money involved, you will do well to indulge in it. Don't neglect your house, of course, but fill in such time as you can spare as you choose. We have only one life to go through, and it is our right to get all the happiness out of it

that we can. It is not selfish to wish to be happy. Happiness is one of the most contagious things in the world. Be happy yourself, and you simply cannot help making things more cheerful for others too. There are too few sunshiny faces in the world.

But, dear me, I must stop. Dame Durden is a dreadful rambler sometimes.

A Valuable Budget

Dear Dame Durden,—I see in a recent Advocate you wonder if it is true that "a little liquid ammonia in the stove polish will prevent its burning off." Well, it is true enough, for I have used it for a long, long time. I discovered it by accident, and thought everybody else knew it. I will also tell you a few other little things I have found out for myself. That a little baking soda with the brick will give knives an extra polish. To wash a painted ceiling, use the mop. Wet it just so that it will not drip, then go over a piece, about a square yard, then wring out your mop and wipe it dry, and you will be surprised how easily it is done. When taking a cake from the oven, have a paper dipped in cold water to set it upon, and it will come out of the pan nice and smooth.

As every farmer's wife will know that the butcher knives are a nuisance in the knife-box, I devised a plan which I like very much. Take a narrow strip of leather (I used the back of an old mitt), cut it out about half an inch wide, and as long as you need; tack it on the wall just over the kitchen table, and put in as many tacks as you need to make loops for the knives. A little ammonia poured on the hot kitchen stove will drive out flies, providing you open the doors to let them out—they'll go. Someone, I think, it was Lankshire Lass, asked for salt-rising bread. I will tell how I make mine, and as it usually gets a prize at our fall fair, I think it must be good. About five o'clock in the morning I scald a bowl, and put in about a cup or a cup and a half of Graham flour, $\frac{1}{2}$ teaspoon of soda, and $\frac{1}{4}$ teaspoon salt. Put in hot water, enough to make a batter, but do not scald. Set it in a pail of hot water, just hot enough so that you can hold your hand in it; leave it on back of range (I leave it on reservoir). When it has risen to about twice its bulk, or until you think it light enough, take three or four cups of sweet milk, scald, and then mix with the "rising," adding 1 teaspoon salt, and $\frac{1}{4}$ of soda. Have the flour warm, and make a nice sponge, and set it to get light in a warm place (I use the warming-closet of the range). When it is light, mix stiff, but not too stiff; put in pans, and prick each loaf with a fork,

and set to get light. When light, bake in a very moderate oven, and you will have a very nice, sweet bread, but do not be surprised if it has a very disagreeable smell when you are making it. I have been told that "the worse it smelled, the better the bread." I wish you every success with it.

Now, dear Dame Durden, I did not intend to come again so soon, but something just compelled me to do it, and I sat right down in the midst of all my work this morning.

Hoping these suggestions may help someone, I am a well-wisher of the Ingle Nook.

Kent Co., Ont.

I am very glad you felt compelled to write us, and I am sure a great many others will be so too. Your hints all seem excellent.

In Need of Help.

Dear Dame Durden,—I am another newcomer, although I have enjoyed the many helpful letters in the Nook for a long time. It seems encouraging to think we can come with any of our troubles, and they are many, in housekeeping. I believe that is what encouraged me to draw up my chair, and I feel very much in need of help as the warm days are coming closer. My trouble I think will be new in the Nook, being the management of a coal-oil stove. The great trouble is I am afraid of it exploding or doing something dreadful. It is a wickless, blue flame. One burner will sometimes, or every time, I might say, make a splutter and then go out, and the other has been satisfactory till last fall. It gave a very big blaze, and little oil turned on, and would burn long after it was shut off, and had a boiling or sizzling sound, which has put me from using it till I can learn more about the management of it. I would be very thankful if someone could tell me how to bake in the oven. I know in cooking schools they are used for everything, but I am always afraid to turn on half the oil that can go to the burner. They are a great saving of work in warm weather if the housewife could be taught how to use them through the Nook. Hope I have not taken up too much of your space, dear Dame Durden.

Will give you a recipe for lovely cookies: One cup sugar, $\frac{1}{2}$ cup butter, $\frac{1}{2}$ cup cream, a little soda on the point of a spoon, 2 teaspoons baking powder, flour to mix soft. Roll thin. When baked, spread jelly on one, place another on top. These are excellent.

Elgin Co., Ont. MAPLE LEAF.

Has anyone had this precise trouble? I haven't had time, so far, to interview a manufacturer, but will do so this week.

Primrose—Cream Puffs.

Dear Dame Durden,—We have taken "The Farmer's Advocate" for four years, and I have been very much interested in the Ingle Nook Chats. I am a newcomer, but I could like to ask some advice about growing primroses. When is the right time to separate them, and how to take care of them? Also I should like a recipe for cream puffs.

Northumberland Co., Ont. TINKER.

Your question re primroses was answered in the "Flower" department June 14 issue. Here is a very good recipe for cream puffs: Put 1 cup boiling water in a granite dish on the stove. Drop in $\frac{1}{2}$ cup butter, and when boiling hard, turn in 1 cup of flour. Mix very quickly, and set away to cool. When cold, rub in three eggs (without beating them), one at a time, and when well mixed, drop in little rough heaps on a buttered pan, and bake in a rather hot oven about 25 minutes. When cold, cut open at the side, and fill with whipped cream or boiled custard.

Another Letter on the Fair Question.

Jack's Wife has come forward at the time needed again. Haven't some of the other chatters something to say on this question also?

Dear Dame Durden,—A few weeks ago you renewed Bernice's request for ideas on the improvement of fairs. As I do not want to talk too often, I have been waiting to see what others had to say—but, for once, the chatters are silent.

When I read how A Constant Reader and her friends supplied tea, etc., to weary ones, I thought at once of those to whom a fair is, I believe, a real trial, and yet, like all other women, they like to attend the fair for the outing—to see the exhibits—and to see their friends. I refer to mothers, especially those with babies less than two years of age.

Many a time have I watched a proud young father strutting about the grounds, carrying a tired, cross, sleepy baby over his shoulder as if it were a sack, or under his arm as if it were a bundle of old clothes, or, if it were still a very young baby in long clothes, he would carry it lying on both hands, which he held far in front of him, as if he were carrying a very full pan of milk. And after him would come the equally proud, but usually very weary-looking young mother, who really wanted to come, but who would have been more comfortable at home, where she could nurse her poor baby, away from all curious eyes, and when he was asleep, could lay him in his crib to rest. Now, Constant Reader, why do you not go a little further in your work? Rent a corner of the hall, if you can, but, better, buy a tent, or erect a small building for the purpose—anything that will prove a shelter from sun, wind and rain will do—and fit this up for a "House of refuge for mothers only." The furnishing would need to provide a couple of couches (cots and mattresses with a blanket cover make cheap and comfortable ones), several rockers or arm-chairs, and a few ordinary chairs, an oil stove and kettle for water in which to heat the milk for the poor bottle-fed babies. And would not this be as good a place as any to have your cup of tea and cake or sandwich? But be sure in arranging the luncheon department that you do not destroy the privacy of the mother's rest. If you have gone to much expense in fitting up your building, charge a small fee for the use of it. Few women would refuse to pay ten cents for the sake of getting a comfortable rest for herself and babe. A cup of tea and a sandwich could be five cents extra.

And, now, another suggestion to add to this is—Arrange for a decent closet, with a screened entrance, near to the larger building; but be sure you can keep it in reasonable condition, else leave it alone altogether.

Another thought has just occurred to me, could not a women's exchange be arranged at our country fairs? Many busy farmers' wives buy ready-made undergarment, aprons, etc. Why could not someone, who has much time on her hands, make up these garments in ordinary sizes, make them well and not too elaborate, use good material and good thread, good buttons, and sew them up and charge reasonable prices? These could be exchanged for whatever was



"A Friend in Need."

wanted—fancywork, sofa pillows, towels, holders, pillow-slips, and a long list of useful things. Perhaps Mrs. Farmer's Wife has butter and eggs she would exchange for something she needs. I know there is always good demand among town folks in the fall for crocks of good butter.

But I must cease, or you will be telling me to stop my chatter.

Grandma, I have not attended Women's Institute meetings, simply because there are none in my neighborhood. But I read and enjoy all the reports I can get of such meetings; and I believe they are

a great influence for good, but, as I said before, they reach only a few people, and unless it is a real live Institute, it is apt to drift into trivialities.

As someone else said, I read every word of "The Farmer's Advocate," even to most of the advertisements, and I enjoy the Home Department more all the time. I am sure we should be grateful to the publishers for giving us so many pages. We are not satisfied yet by any means, but we are very thankful for what we do get, and hope the constant improvement shown will long continue.

JACK'S WIFE.

The Emancipation of Lydia Duroe.

Mrs. Simon Bale stepped with ponderous solemnity up the path between the flower-beds with their brown and tattered company. It was the second of November, and the air was full of the fine, sharp voices of dead leaves and bare, scraping branches; there was quite a wind that afternoon. Before Mrs. Bale touched the door, Mrs. Warren opened it from within.

"I see you going over to Lydia's," she said in the repressed tone with which one speaks of a house where death is guest, "and I told Jessie that I thought likely you'd stop in on the way back, so I was sort of watching for you. Lay off your things, Em'line."

"I dunno's I'd ought to," Mrs. Bale responded, doubtfully unwinding the nubia that framed her broad face. "I can't stay more'n half a minute, for I've got to get back and make biscuits for supper. Well, there, Jessie, I've jest discovered you, curled up in that corner."

The young girl looked up with a serious smile. She had an odd, eager, little, brown face, with eyes so blue that at times, when alight with excitement, the effect was almost startling. People often looked at her with the curious feeling that she had spoken and they missed her words; they couldn't make her out, they confided to each other.

Mrs. Bale, surrendering her wraps, sank heavily into the nearest rocking-chair. Mrs. Warren took the one opposite, and for a moment or two they rocked in silence. Mrs. Bale was the first to speak.

"Well, and so poor Betsy's gone at last!" she sighed. "It came on me like a clap this morning; she'd been hanging on about the same for so many years that I s'pose we didn't realize that she really had been failing all the time. Lyddy says she passed away real easy, in her sleep."

"Last night," Mrs. Warren confirmed her. "Lyddy didn't know till this morning. She came running over before I was dressed, an' I jest flung on what was nearest and went back with her. She looked as peaceful as a child."

They both glanced instinctively towards the opposite house. A brown tangle of honeysuckle and roses hid the door, but every now and then something black fluttered against the pale sky.

"'Twas a blessed release, if ever there was one," Mrs. Bale asserted. "It's full five years now since she's been a comfort to herself or anyone else. There ain't many would have done for her as Lyddy has—and she no kin at all."

"I said so to Lyddy once. I said that it didn't seem right she should be wasting her life on an old woman that had no claim on her. If she knew, 'twould be different," I said. "But she don't sense anything that's going on round her, and you're jest throwing away the best years of your life," I told her."

"'Tain't hard to guess what Lyddy answered," Mrs. Bale said with some amusement. "Nobody ever got any thanks for telling Lyddy to consider herself."

"No more I didn't," her friend returned. "Lyddy said that Betsy had taken care of her mother, and she wa'n't one that could forget things like that. Betsy should have all that she could give her as long as she lived. As for her not sensing what went on around her, she didn't know about that. She certainly knew the difference between her and anyone else."

"She certainly did," Mrs. Bale agreed. "That was what made me maddest. She'd treat Lyddy like the dirt under her feet, but if Lyddy wanted to go over to

Medford for a day shopping or anything, there'd be hurrah, boys, sure enough. Poor Lyddy used to come home before half her errands were done, all wore out with worrying over things that might have happened. And there Betsy would set and scold at her for going and leaving her."

"I don't think Lyddy minded the talking—she always maintained that Betsy wasn't responsible. But it got pretty hard along towards the last when Betsy got so fractious. I recollect I was over one evening last summer when Lyddy was trying to get her to bed. I declare it was a regular performance."

"Come, Aunt Betsy," she'd begin, sort o' peaceable, but commanding underneath. "'Come what?' snaps Aunt Betsy, sitting up straight an' prim."

"Why, come to bed—didn't you hear the clock strike nine?"

"Never struck!" says Aunt Betsy.

"So then Lyddy—I declare, her patience jest beat me—would go and bring the clock and show her, and like as not Aunt Betsy would declare 'twas only six, and that Lyddy was jest plottin' to get her out of the way. And sometimes Lyddy'd get the best of it and sometimes she'd have to set up an hour or two before she could get her out of her chair. And even then 'twas only begun. Like as not when Lyddy took off her dress she'd ketch hold of the bed-post and refuse to let go. I mind one evening I was over when she jerked the bed all round the room—you know she was real strong in ways. I declare I laughed till I cried to see her—I jest couldn't help it," and Mrs. Warren wiped away mirthful tears at the remembrance. "I'd ought to be ashamed laughing with her laying over there," she acknowledged, "but there, I dunno's it's wicked. 'Tain't as if 'twain't happier for her more'n everybody else, even Lyddy. I've been thinking all day, and wondering how it seemed to her to be done with all her cranks an' twists. More'n once I've seen a puzzled look in her eyes as if she kind o' half realized that things wasn't right with her. Well, I guess they're all right now."

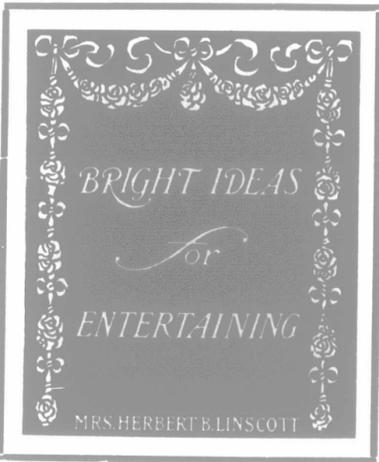
The two women rocked softly. In the silence the stove creaked and a fly buzzed about the pane. When Mrs. Warren spoke again, it was of the living, and not of the dead.

"I've been figuring up," she said, "Lyddy's forty-one, ain't she? And her mother had her first stroke when she was twenty-five; that makes sixteen years she's been tied up—first her mother all those years; then the very week after she was taken her father had that spell of rheumatism that left him crippled and helpless; and after he went, there was Betsy. Sixteen years is a good deal to take out of a woman's life. There ain't many would have taken it the way Lyddy has."

"No more there ain't," Mrs. Bale assented warmly. "I said to Simon this morning as soon as the news came—'Well, Lyddy's free now,' I said, 'and I do hope the Lord'll make up to her for the years she's given to other people.' She's the salt of the earth, as Lyddy Duroe, but sometimes I dunno how much satisfaction there is in that. I hope the Lyddy Duroes will get rewarded hereafter, for it does seem, sometimes, as if about the only reward they get down here is more trouble."

"Well, it seems as if Lyddy might enjoy herself a spell now. She's got enough to live on, and she's real young-seeming. I declare I've seen Lyddy times, when her cheeks was pink and her eyes shining, when she didn't look a day over thirty."

Mrs. Bale caught and answered the in-spooken suggestion with an alertness



**Picnics, Parties
Social Evenings**

and all other forms of entertainment will prove a greater success if you consult our book, "**Bright Ideas for Entertaining.**"

It contains 235 pages of novel and practical ideas.

There should not be a dry moment.

Nothing makes the time drag so much as the lack of something to do.

Young and old, rich and poor, big and little will all find scores of valuable suggestions in this book.

There should be one in every home.

Send us **only one** new subscriber to THE FARMER'S ADVOCATE AND HOME MAGAZINE (not your own name) and \$1.50, and we will mail the book to your address postpaid. Do it to-day. Address:

The Wm. Weld Co., Ltd., London, Ont.

100%

good bread is what every user of "Five Roses" Flour gets as the result of Baking Day. This is more than can be truthfully said of any ordinary brand on the market. Users of "Five Roses" never have any sour, soggy bread, but always sweet, crisp loaves that are the delight of every bread-eater throughout the world.

Ask your grocer for a 7-lb. bag to-day and test it yourself.

LAKE OF THE WOODS MILLING CO., LIMITED.



TO FARMERS:

If your local dealer cannot supply you with **Plymouth Binder Twine**, write us, and we will put you in the way of securing the Celebrated Plymouth Brands.

**PLYMOUTH AGENTS
55 Colborne St. TORONTO, ONT.**

**TO SECURE THE BEST RESULTS
Place an Ad. in the Farmer's Advocate**

It Won't Cost You One Cent

To have an Overcoat made to your order and sent on approval.

We will mail you an elegant assortment of patterns, selected from our enormous stock of suitings and overcoatings, with tape line and self-measurement blanks—ALL FREE

We will make up your Overcoat according to your directions, express it to you, and give you the privilege of trying it on and carefully examining materials and workmanship.

If there is a single fault—if we have not lived up to our promises—send the coat back at our expense. And we will take your word for it.



Overcoats, \$15, \$18, \$25, WRITE TO-DAY for samples. ROYAL CUSTOM TAILORS, Toronto, Ont



WE WANT TO MEET YOU

Ladies from out of town who anticipate visiting the city during the spring or summer are cordially invited to visit the most up-to-date institute in Canada for the treatment of skin, scalp, hair and complexional troubles. For over 14 years we have been most successfully treating

Superfluous Hair

Moles, Warts, Ruptured Veins, Birthmarks, Pimples, Blackheads, Eruptions, Eczema, Rash, Dandruff, Wrinkles, Falling Hair, Freckles, Mothpatches, Oily Skin, Gray Hair, Corns, Bunions, etc., and improving and beautifying the figure, hair, hands and complexion. Every year shows an increase in the patronage extended us, showing that our efforts are appreciated. If you have been unsuccessful with others, try our treatment. Satisfaction positively assured.

Send 10 cents for our handsome treatise on Dermatology and sample of cream.

GRAHAM DERMATOLOGICAL INSTITUTE,

Dept. F. 502 Church St. TORONTO, ONT.

Wedding Invitations, Wedding Announcements, Visiting Cards.

Latest styles. Latest type. Prompt attention to mail orders.

The London Printing & Litho. Co. 144 Carling St., London, Ont.



WEDDING stationery. Young ladies who are interested in what is proper in the matter of stationery for weddings, should send for our booklet. Free for the asking. Latest type faces. Best imported stock. Lynn Side Press, Dept. 5, Simcoe, Ontario.

\$12 WOMAN'S SUITS \$4.50

Suits to \$15. Silk jackets, raincoats, skirts, waists, and linen suits at manufacturers' prices. Send for samples and fashion. Southcott Suit Co., Dept. 27, London, Can. Send for our catalogue, which lists everything you use wholesale.

surprising in one whose physical bulk moved with such extreme deliberation.

"Well, now, 'twouldn't be the strongest thing in the world," she declared. "Everybody knew that Elkah Sutton wanted Lyddy badly enough, but she wouldn't leave her mother. And now his wife has been dead two years—or is it three?"

"'Twill be two and a half years come the eighteenth of January," Mrs. Warren replied accurately. The two women glanced significantly at each other; there was a feeling that it was hardly decorous to talk of love under the shadow of that fluttering ribbon across the road, but the subject would not quite be suppressed. Little Jessie from her corner looked up with a sudden light in her blue eyes. In a girl's hero-worshipping world she had for years admired Lydia Duroe.

Mrs. Bale struggled heavily to her feet. "Well, I must be getting along," she said; "I've set longer now than I had any idea of doing. I s'pose I'll see you at the funeral to-morrow?"

"I'm going over early to help Lyddy," Mrs. Warren returned. "There ain't much to do, but it didn't seem right for her to be all alone, and I'm her nearest neighbor. I wish you didn't have to hurry, Mrs. Bale."

"There was jest my shawl and nubia, Jessie," Mrs. Bale called after the girl, who was going for her wraps. "Well, I'm sure I don't think I've been in any hurry, Mrs. Warren. Somehow when I get over here I allus do have a piece of work getting started again. That's so—'tis forlorn for Lyddy. Hasn't she any kin at all?"

"I've heard there are some of her father's folks still living, but there isn't anybody on her mother's side nearer than second cousins; and when you want folks, second cousins ain't apt to be satisfying, Mrs. Bale."

"No more they ain't," Mrs. Bale agreed, backing clumsily around as she stood on the doorstep. "Well, Providence has a way of surprising folks sometimes. Ef nothing else turns up for Lyddy, she'll discover a new relation. Don't you be standing at the door in this wind, Mrs. Warren. Come over when you can."

The wind whipped the last words out of her mouth almost before they were spoken. For a moment Mrs. Bale stood struggling to catch her breath against it; then she plodded heavily down the road, her broad bulk looming impressively against the bare road.

Over in the other house Lydia Duroe watched her pass. She was a tall woman, with clear gray eyes still full of the spirit of youth. There was unquenchable youth too in the splendid ease and vigor of all her movements. Sitting behind the closed blinds, she looked down at her idle hands with a curious expression, as if they had suddenly become unfamiliar to her; as a matter of fact, she could not remember when before she had sat for an afternoon so. The gloom of the room depressed her; she was almost pagan in her worship of light; when her mother and father had died, she had refused to have the blinds closed.

"I dunno when I'll ever need to let in all the heaven I can more'n now," she had said. But the very fact that the little, still figure down below had claimed pity rather than love made her, in an odd fashion that she did not try to explain, carefully scrupulous.

"I want to do everything the way she'd like it," she had told Mrs. Warren. "She didn't have much in her life when you think about it. I like to think that she's proud about this, if she knows."

So through the long afternoon she sat in the shadowed silence. It seemed to her as if the world had stopped. Vaguely she realized that it was going to be strange to have no one needing her any more; she had not yet caught the flavor of liberty in the cup that had come to her; she tasted only its loneliness.

Just at dusk a man pushed open her gate. He was tall and delicate-looking, and stepped with a certain nervous eagerness. Lydia rose quickly and met him at the door.

"I don't s'pose there's anything I can do, Lyddy," he said, "but I wanted you to know that I was ready. There ain't anything you could ask me that I wouldn't be glad to do."

"I know that, Elkah," she answered, quietly. "No, there ain't anything, but 'tain't because I wouldn't ask you if there was."

He looked hesitatingly beyond here into the house.

"I thought mebbe I'd come over a little while to-morrow evening," he suggested. But she answered, with something almost like alarm in her voice, "Not to-morrow, Elkah."

He stared at her blankly. She recovered herself instantly.

"It's just some more of my queer-ness," she said, laughing a little uncertainly. "You know you always said that I was queer. And to-morrow night—such a few hours after poor Betsy has been laid away—I'd rather not see people for a little while."

An expression of relief lightened the dejection of his face.

"Jest as you say, of course, Lyddy," he responded, stiffly.

Lydia's grave face flashed into a smile full of all good-will and fellowship.

"I know 'tis, Elkah," she returned. "Folks have to fix things for themselves the best way they know how. There's no shirking that—we've both found that out, as I guess everybody does sooner or later."

From the dark room she watched him down to the road. He shuffled a little as he walked, she noticed. There was a gentle inefficiency about the whole man that pleaded eloquently for a woman's care. Lydia's lips were compressed with sudden pain.

"I guess everything's too late for me," she said, bitterly. "There's been flowers and birds and sunshine, weeks and weeks of it, and I'd have loved it just as well as anybody, but I couldn't stop to look at them. And now it's November and there ain't nothing left."

It was a mood of bitterness rare for her, but the sudden knowledge that her lie had carried her irrevocably beyond this man found her all unprepared.

The next day came and passed. There was a large funeral; everybody came for Lydia's sake. Lydia caught herself once counting the carriages, thinking how pleased Betsy would be. Then she went back to the empty house and waited for morning. She did not know exactly what she was going to do except that she was going to walk and walk. She was starving for light and the wide liberty of open fields. Once she stopped aghast in her thinking—if it should rain to-morrow! It seemed to her thought a calamity outweighing any power of words.

But it did not rain. Lydia, up early for first tidings of her day, stood awestruck before the glory of the sunrise—gold that flooded the whole sky and burned for breathless moments of ecstasy, vanishing finally in long, shimmering silver reaches and trailing clouds of rose like the memory of all the beauty of summer-time. She accepted the omen with the passion of one to whom life and death rest in the decision of a day. "I ain't never seen a finer sunrise than that in June," she thought, exultantly. So much, at least, had blessed her November forever.

She had not thought herself hungry, but she ate a good breakfast, and then set her house in order. No loose ends anywhere should spoil the fair order of her day. Besides, each moment the sun was climbing higher, and the world, numb and stiff from the November night, was relaxing in its warmth. As she went about her work she was conscious of enticing colors without. She would not turn her eyes to them, but she smiled as one who has heard a secret word of joy.

It was half-past nine when she locked her door and dropped the key in her pocket. She stood upon the door-stone a moment, her face lifted to the sky. It was a wonderful day, with the tenderness and color of Indian summer, yet with a crisp edge that enticed one to deeds, not dreams. She turned happily up the road, her eyes a-holidaying like happy children.

The road stretched away in idle, solitary fashion, with no house for quite a distance. Sometimes there were trees, sometimes only open fields; but there were hedge-rows always. Lydia noticed wonderingly how the few, thin leaves left fluttering there glowed like gems. "I'd most think they was flowers," she said to herself.

Little troops of dry leaves started up under her feet and drifted along before her; they seemed wood-spirits in-tinct with life and motion. Lydia walked faster and faster to keep them company—so fast that she did not hear any more

Rekindles Life in the Nerve Cells

AND BY INCREASING NERVE FORCE RESTORES VITALITY TO EVERY ORGAN OF THE BODY.

Dr. Chase's Nerve Food.

Suicide, insanity, falling sickness, paralysis: These are some of the results of worn-out nerves. No one would neglect a disease so dreadful in its results as nervous exhaustion if the danger were only realized with the first symptoms.

The time to begin the restoration of the nerves by the use of Dr. Chase's Nerve Food is when you find yourself unable to sleep at nights, suffering from headaches or neuralgic pains, indigestion or weak heart action.

Loss of flesh and weight, growing weakness and debility, a tendency to neglect the duties of the day, gloomy forebodings for the future, are other indications of depleted nerves.

You cannot liken Dr. Chase's Nerve Food to any medicine you ever used. It is a nerve vitalizer and tissue-builder of exceptional power.

Naturally and gradually it rekindles life in the nerve cells and forms new red corpuscles in the blood—the only way to thoroughly cure nervous disorders.

Dr. Chase's Nerve Food; 50 cents, at all dealers, or Edmanson, Bates & Co., Toronto.

Dispersal Sale

OF THE RUSHTON FARM Jerseys, Cheviots, Dorset Horned, Poland-Chinas, and Buff Orpingtons,

AT COOKSHIRE,

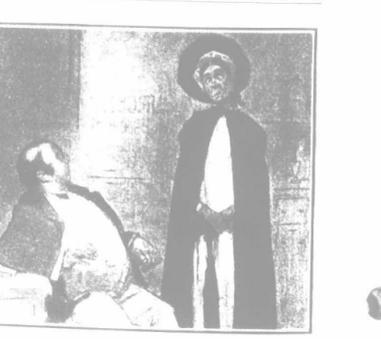
Wednesday, July 11th

CATALOGUES READY ABOUT JULY 1ST.

F. S. Wetherall, Cookshire, Que.

H. E. Taylor & Co., Auctioneers, Scotstown, Que.

IS INVALUABLE TO SUFFERING WOMEN— It is a Grand Remedy, having brought health and happiness to thousands of ladies all over the world. It will cure you, too. A free sample will be sent by addressing, with stamp, MRS. F. V. CURRAH, Windsor, Ont.



Elderly Spinster: "You know, Doctor, I'm always thinking that a man is following me." Do you think I suffer from hallucinations?"

To her: "Absolutely certain you do, from a sketch."

You who can smash the idols, do so with a good courage, but do not be too hard with the idolaters—they worship the thing they know.—Thackeray.

EATON'S MIDSUMMER SALE

For Mail Order Customers from all Parts of the Dominion



For this Sale—July 2nd to August 15th—we have prepared a

SPECIAL CATALOGUE OF SPECIAL GOODS AT SPECIAL PRICES

For months we have been preparing for this Great Sale, and immense purchases have been made. As the goods are all made specially and sold at special prices, it is advisable to order early. Our staff of experts handling Mail Orders will give you prompt and careful attention. If you have not received this Catalogue send us a post card and we will mail to your address. Prompt Shipments, Large Assortments, Splendid Values and Satisfaction Guaranteed are our attractions for this Sale.

Write for this Special Sale Catalogue. It's Your Opportunity. You Cannot Afford to Miss It

Prompt and Satisfactory Service

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

Cash and One Price to All

behind her till a panting voice reached her consciousness.

"Miss Lydia—oh, Miss Lydia—"
She turned, bewildered. Jessie Warren was running after her, her little, dark face full of excitement. She looked with pleading eagerness at Lydia.

"Oh Miss Lydia, I saw you starting out, and you looked as if you were going to have such a good time, and I wondered—would you let me come too? Would I bother?"

(Continued on page 1047.)

Recipes.

Croffers.—Two cups sugar, 1 cup milk, 4 eggs, 6 spoons lard, 2 teaspoons cream tartar, 1 teaspoon soda; Five Roses flour to make stiff enough to roll. Fry in boiling lard. Spice to suit taste.

Cocoa-nut Cookies.—Two cups sugar, 1 cup butter, 2 cups grated cocoanut, 2 eggs, 1 teaspoon baking powder, enough Five Roses flour to make a dough. Roll thin.

"I never knew a man die of love certainly, but I have known a two-ye—some man go down to nine stone five under a disappointed passion, so that pretty nearly a quarter of him may be said to have perished; and that is no small portion. He has come back to his old size, subsequently—perhaps is bigger than ever; very likely some new affection has closed round his heart and ribs and made them comfortable, and young Pen is a man who will console himself like the rest of us."—Thackeray, in Pen-and-ink.

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 must be enclosed.

Miscellaneous.

FENCING A LANE.

A owns 200 acres. He sells 70 acres to C, but reserves a lane off north side for use of land back of seventy acres to get to town line, which is nearest and best road to market. All this land has been resold. F owns 30 acres and uses lane.

1. Who has the right to fence this lane, C and A, or has F a right to fence half?

2. How long is a link?
The lane in C's deed is said to be so many links wide.

Ans.—1. Every one of the adjoining owners you mention should do his just proportion of the building and maintaining of the required fence. They should endeavor to agree upon such proportion, but if they cannot agree, then any of them may call in the local fence-viewers and have the matter disposed of by their award.

2. About 8 inches, or, to be exact, 7.92.

CALVES SUCK EACH OTHER.

Two valuable heifers, pure-bred, have been sucking each other, and on examination I find their little udders are quite hard, as though caked. I have separated them. Will they eventually get all right, and what should I do for the trouble?

G. W. A.

Ans.—They will probably come all right. It would be well to rub them well daily with sweet oil, goose oil, or melted lard. If the hardness does not disappear with this, apply iodine ointment.

CHICKEN CHOLERA.

Our hens are dying rapidly. We had about two hundred in April, and now we have only about fifty living. We have about twenty-five sick this morning. Some will droop for about six hours and then die, while others will droop for a few minutes and then die. Just as soon as we give them anything, they die in a minute. Their combs sometimes turn rather dark, and their droppings are green with a yellow cast. We fed them barley, and quit feeding barley, and fed them oats, and sometimes some small wheat.

(MRS.) A. H.

Ans.—The short description given points to cholera, and since the disease has taken such a hold, it will, in all probability, take the whole flock. I have seen similar cases, though probably not so severe, where the disease has been eradicated by the following: Isolate all affected birds at once—kill the worst—and in each caillon of drinking water put a teaspoonful of sulpho-carbonate of zinc; burn all dead birds; remove all from present quarters, and thoroughly disinfect. Give the well ones the same remedy for

several days. It may be some will be saved, but the greatest care must be exercised. Filth is very often the cause of cholera, though it may have originated in some other yard. Do not attempt to put fowl on the same place again, until it has been most thoroughly cleaned and disinfected.

F. C. E.

DESCRIPTION OF SIMPLE ICE HOUSE.

Some time ago I saw in your valued columns a description of an easily-constructed ice house. The copy of the paper was mislaid. I should feel very grateful if you would send me the number in question, I wish to build such an ice house next autumn.

S. R.

Ans.—The description our correspondent probably refers to appeared last winter. We repeat it for the benefit of others, who, like himself, may desire to build this fall. Plant cedar posts firmly in the ground so as to form a square of, say, ten feet, three posts on each side of square, and extending up to plate, ten feet from ground. Line up inside, not outside, of posts with rough inch lumber. Roof over as desired, being careful not to have the pitch toward the sun, and to have openings around the eaves for ventilation. Pack ice solidly, having a foot of sawdust on all sides, and on bottom and top.

BEST KIND OF BELT.

Whether will a canvas, rubber or leather belt grip the best on an iron pulley?

E. R.

Ans.—For inside usage, no one of the three belt materials named surpass leather in gripping and transmitting power, but a threshing engine man, to whom this question was referred, favored rubber for outside purposes.

SASKATOON and SASKATCHEWAN

Choice Prairie Land along new branch of Canadian Pacific Railway and Grand Trunk Pacific, on crop payments. Free from stone, scrub or alkaline.

J. C. DRINKLE & COMPANY
SASKATOON, SASK., CANADA.



Advertisements will be inserted under this heading, such as Farm Properties, Help and Situations Wanted, Pet Stock, and miscellaneous advertising.

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.

AGENT WANTED to introduce sheep dip to Canadian farmers. One coming into constant personal contact preferred. Address: Box C, *Farmer's Advocate*, London, Ont.

ALBERTA FARMS—I sell good ones. Write me. A. E. Keast, Innisfail.

FOR SALE—Improved farms in Muskoka. Address: D. T. Hodgson, Bracebridge, Ont.

FARM FOR SALE—400 acres, lots 16 and 17, concession 2, West Luther, on leading road, 6 miles from Grand Valley and Arthur. On lot 16 is a new frame house, 18 x 28, with kitchen 18 x 24, and a new bank barn, 60 x 80, finished basement, and fish pond of an acre. On lot 17 is a brick house, 24 x 33, with kitchen 18 x 21, summer kitchen and woodshed attached; bank barn 60 x 84, finished basement. Whole is in first-class condition, tile drained; never-falling wells at both houses, and spring creek runs across both places. Will be sold together or separately. Acre of orchard on each farm. Post office 1 1/2 miles; telephone, church and school within one mile. One of the best properties in Wellington. Satisfactory reasons for selling. Easy terms. Apply on premises, or to M. G. Varcoe, Grand Valley, or to owner, James Park, Grand Valley.

FOR SALE—175 acres in Mara, Ontario, situated on shores of Lake Simcoe; eight-roomed new frame house, good outbuildings; near Gamebridge G. T. B. station. Fine stock and grain farm. Apply D. D. Grierson, Barrister, 103 Bay St., Toronto.

GOOD experienced farm hand wanted. State wages. Apply Mc, *Farmer's Advocate*, London.

HERDSMAN—Situation wanted by experienced man. Would accept temporary work either to help or take charge of herd for the Provincial shows. Address: Herdsman, care of *Farmer's Advocate*, London, Ont.

IMPROVED farms for sale in the Edmonton district. Candy & Co., Edmonton, Altp.

ROUGH-COATED collie puppies. Sure winners and workers. Also one-year-old bitch. John E. Pearce, Wallaceburg, Ont.

SPECIAL SNAPS—Alberta lands. Easy terms and prices. Write: Central Alberta Land Co., Innisfail, Alta.

SOME best farms in best part Parry Sound District. Bargains. Send for list. Jno. Carter, Sundridge, Ont.

TRY our King Edward hay and stock rack and cement block machine. John McCormick, Lawrence, Ont.

WANTED—Married man to work on farm, or would let farm on shares. One of the best farms in Oxford Co., containing 160 acres. Best dairy section in Ontario. Good place for right party. John C. Shaw, Norwich P. O., Ont.

Grow Mushrooms in spare time. A crop all year round. Anyone can grow them from our special spawn. Immense profit. Undersigned will buy your crop. For directions write to-day. Fungus Co., Tecumseh, London, Ont.

Farm for Sale!

Lot 19, Con. 10, Tp. of Markham, Ont.

Consisting of 150 acres of choice land in a high state of cultivation, situated 1 1/2 miles from P. O. and school, 2 1/2 miles from Locust Hill station and creamery on C. P. R., and 4 miles from Markham on G. T. R. This farm was the home of the late John Miller, of Markham, and has produced a number of prize Shorthorn cattle and Southdown sheep, as well as the famous Banner oats that did so much for the oat growers of Ontario a few years ago. On the place is a small herd of pure-bred Shorthorns and flock of registered Southdown sheep, besides various other stock. As I have decided to reside permanently in Texas, where I have spent the past five years, I will sell farm, stock, crop, implements, etc., complete, or will sell separately.

George Miller, Markham, Ont.

POULTRY AND EGGS

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

FOR SALE—Buff Orpingtons—25 yearling hens and 1 cockerel, Massie strain. An extra fine lot. \$25.00 takes them. Here is a bargain that you can't get every day. W. H. Biggar, Trafalgar, Ont.

CHANCE—S. C. White Leghorns. Layers Eggs two settings, \$1. E. E. Flindall, Smithfield, Ont.

FOR SALE—At the Grey County hatchery. Day-old single-comb White and Brown Leghorn chicks at the following prices: 15c each, \$3 per 25, \$5 50 per 50, \$10 per 100. Dead chicks on arrival replaced. Order at least two weeks before wanted. W. H. Fischer, Prop., Ayton, Ont.

S. C. W. LEGHORNS. Layers. Big payers. 15 eggs, \$1; 100, \$4. E.C.Apps, Brantford.

Barred Rocks EGGS for hatching from a pen of E. B. Thompson's strain; headed by a prize-winning cockerel. One of the best we ever owned. \$1 per setting.

C. & J. GARRUTHERS, Cobourg.

ATTENTION! POULTRYMEN.

The choicest prizewinning birds from the best strains of any variety of Wyandottes. Only high-class birds for sale. Address: JAMES HOULTON, GREAT MALVERN, ENGLAND or S. HOULTON, CALGARY, Canadian Representative.

Berkshires and Shorthorns—Choice young pigs of both sexes, sired by Polgate Doctor (Imp.), and from industrial prizewinning stock; also a few excellent Shorthorn cattle. We invite your inspection. McDONALD BROS., Woodstock, Ont.

GOSSIP.

At the combination sale of Hereford cattle by the T. F. B. Sotham Co., at Kankakee, Ill., June 15, the top price for a cow was \$500, and the top price for a bull was \$325. The bulls sold at an average of \$152.50, and females at about \$133. The general average for the 45 head sold was \$138.

At the annual sale, on June 13th, of Shorthorns from the herd of Bellows Bros., Maryville, Mo., the 51 animals sold made an average price of \$277.65, only one selling as low as \$100. The top price, \$1,025, was realized for the yearling bull, Royal Hampton, purchased by A. F. Graves, and the highest price for a female was \$1,000 for Victoria Hampton, taken by F. O. Lowden, of Illinois.

At the Hood Farm annual sale of Jerseys, at Lowell, Mass., last week, the nine-months-old bull calf, son of Hood Farm Pogis 9th and Toona 9th, brought the highest price, \$1,075, going to Hartman Stock Farm, Columbus, Ohio. Sixty-five head were sold at an average of \$215. There were five bull calves under a year that sold for an average of \$440. Eight of the get of Hood Farm Pogis 9th, son of the St. Louis Fair Champion cow, Figgis, made an average of \$415. Five of these were calves.

QUESTIONS AND ANSWERS. Veterinary.

HORSE RUBBING ITS TAIL.

1. Please give a remedy to stop a horse from rubbing its tail while in the stall.

2. Give a cure for horse eczema.

Ans.—1. Wash tail thoroughly with castile soap and warm water, rinse all soap suds out, then apply bicarbonate of potash 1/4 ounce to a pint of water twice daily. See that all around anus is kept clean.

2. Give laxative diet (grass), also 1 ounce Fowler's solution of arsenic once a day and Epsom salts, 1 tablespoonful once a day. Apply corrosive sublimate, 8 grains to a pint of water, every second or third day.

PARTIAL PARALYSIS

Sow farrowed last February. The litter was weaned in six weeks. About a month later, the sow was bred again. Three weeks later, she lost power of her hind quarters and has remained in this condition. She can move her limbs, but cannot stand. She has been fed on two parts ground oats, one part ground barley, one part corn chop, with skim milk and swill. She weighs about 200 lbs.

Ans.—It is doubtful if she will recover. Purge her with 4 ounces Epsom salt, and keep her bowels working freely by giving daily a little of a mixture of equal parts Epsom salt, sulphur and charcoal. Give, three times daily, 20 grains nuxvomica. Feed on bran, milk and grass. Feed no grain.

INVERSION OF UTERUS.

I have a good young cow which inverted the uterus, May, 1905, it being her second calf a retainer and stitches being used. I let her go farrow till Jan., 1906. She has grown considerable since and looks stronger. Will it be safe to breed her in October. I would like to keep her. My neighbors say I will lose her. I am without experience, and the cow is desirable. What shall I do?

Ans.—It does not necessarily follow that she will invert again, but it is well to take a few precautions, such as having her kept, immediately after calving, with her hind end well elevated. If much straining persists, give tr. opii, 3 ounces, or chloral hydrate, 1 1/2 ounces.

LAME MARE.

About two months ago my mare went lame in off fore leg, and a lump appeared on outside of leg just above the knee. I put some stuff on, but it did no good. She is stiff, and stumbles when she trots.

Ans.—Some of the bones of the joint are diseased, and the lump mentioned is a bony enlargement. This will be hard and tedious to treat. It would be better to get a veterinarian to fire and blister it; but repeated blistering would probably effect a cure. Take 2 drams each biiodide of mercury and cantharides, and mix with two ounces vaseline. Clip the hair off; tie so that she cannot bite the parts; rub well with the blister once daily for 2 days; on the third day wash off and apply sweet oil. Let her head loose now, and oil every day. As soon as the scale comes off, blister again, and, if necessary, again in about four weeks. She should be rested during treatment.

INDIGESTION.

1. About three weeks ago my four-year-old cow, about 1,000 lbs., became bloated. I gave 1 1/2 lbs. Epsom salts, and followed up with salts and oil. He keeps rifting a lot of wind. He is on grass.

2. Same bull appeared hard and sore in the skin when pinched behind the shoulder last night, but was all right this morning.

Ans.—1. This is a form of indigestion. Give him, three times daily in a pint of cold water as a drench, 2 drams each powdered gentian and powdered ginger, and 4 drams bicarbonate of soda, and add to his drinking water one-sixth of its bulk of lime water. It will be better to keep him in the stable and cut grass for him for a few days, and allow him to take exercise in the yard. The amount of food should be limited until his digestion improves. If necessary, give him another dose of Epsom salts.

2. The hardness of the skin could not have been well marked, as it disappeared so quickly. You need not be alarmed about this, it is not serious.

SWOLLEN KNEES.

I have a cow which has large swellings on both knees of fore legs—large as a pint bowl or larger. They do not appear to be very hard. Would it be a form of tuberculosis? Is milk fit for use? Cow seems to be healthy as far as I can see.

Ans.—We have known many similar cases, and, when the cows are apparently healthy, there is no probability that it is due to tuberculosis. It is sometimes caused by hard floors. As long as it does not produce lameness there is no need of treatment, and it is better to leave it alone.

Miscellaneous.

DISEASED MEAT.

Who has to stand the loss in case an animal has been pronounced by the inspector to be diseased and unfit for food and ordered to be destroyed? I know of a case where the matter has been traced back to the producer of the animal, and he has been asked to return the money the drover paid him for the animal when delivered at the shipping point along with other animals, fed in the same stable, and apparently as healthy and well finished as any in the bunch, and they were what the drover called a good bunch. This case was on the Montreal market, and on the following week, when the drover returned to market with another load, he was served with papers, claimed to be official, and asked to return the price of the animal, which he did, and got a receipt for the same, and told to go back and collect it from the former owner. The drover, before paying back the money, and before he could be convinced that there was something wrong with the animal, went and saw the parties to whom he sold, and they produced the hide, and he examined it carefully, and was satisfied, after he saw the private mark on the hide (which he says he puts on every animal), that it belonged to him. He brought this back to the former owner and asked him to stand the whole loss. Did he do right in trying to settle the matter in this way?

Ans.—It is impossible to tell without knowing all the circumstances, and especially what representations, if any, were made in respect of the animal upon sale of same. In the particular case you mention the drover was quite justified, so far as we can see, in taking the course he did; but whether he could legally compel payment by the party who sold the diseased animal to him would depend as above intimated, upon the circumstances which attended the sale.

DITCHING.

Will you kindly advise me regarding draining my land? I purpose running open ditch to road, as there is a big run of water.

1. Can I compel council to open ditch all the way along front, and to what depth?

2. In doing so, what course should I take?

Ans.—1 and 2. Probably not, but you may be entitled to have it opened at your own expense. You should apply to the council for what you want done, and, if possible, arrange the matter with them. But if you find yourself unable, after diligent effort, to come to some reasonable agreement with the council, you may, of course, then would be to lay the matter before the municipal engineer of the town and have him adjust it.

VETERINARY.

1. Can a man holding a veterinary license, after graduation from a correspondence school, have a sign with V. S. to his name?

2. Does the Ontario Government recognize a diploma from a school of that name?

Ans.—1. No. 2. No.

Medical News, Woodstock, Ont., advertising this paper up-to-date Berkshire and prize-winning Shorthorn cattle. Write for particulars and prices.

The Emancipation of Lydia Duroe.

(Continued from our "Home Magazine" department.)

Lydia's face flashed into brightness. Something warm and vital had suddenly blossomed in her day—something that she might have missed and never known that she had missed.

"I don't know where I'm going," she said. "I'm just going to walk till I get tired."

Blue sparks danced in the girl's eyes. She clapped her hands impulsively.

"I never did anything in my life without knowing what it was going to be," she cried. "I've wanted to do so often!"

"And I'm not good company," Lydia insisted. "I ain't any talker."

"I don't want any talker," the girl sang back. She smiled at Lydia with frank boldness. "I'm coming," she declared. "I'm here. You needn't pay any attention to me, but I'm in the day with the sky and the shadows and those little, dancing leaves. You needn't pay any attention to me, but you can't turn me out."

Lydia smiled back at her. "I haven't said I wanted to turn you out, have I?" she retorted.

"Oh, well!" replied the girl. She threw up her arms and dashed into a heap of dry leaves, scattering them in a fragrant, brown spray about her. "I feel like that!" she cried. Then she puffed out her thin cheeks and mimicked the wind. "And like that," she added. Even as she spoke, a little footpath caught her notice, and she slipped into it, peering back through the brown branches at Lydia.

"Good-bye!" she called. Somewhere, farther on, you'll stumble upon me." The branches swung to; for several moments there was a soft commotion in their tips, but the girl did not reappear.

Lydia walked on, smiling to herself. Half a mile farther on she found her. She was sitting on a stone wall, her chin in her hands, staring into a tangle of raspberry-bushes whose vivid lavender stems shone like pale violet flames against the brown hillside. She did not turn as Lydia stopped beside her.

"It's all amethyst," she said, dreamily. "I can't clear my eyes of it to-day. It haunts the woods—I feel it just beyond my sight—and the hills—and the sky—even the stones."

"I hadn't ever noticed before," Lydia returned, wonderingly.

The girl shook off her mood and leaped down lightly. "You couldn't," she explained with gravity. "You see the rest, but not that. It goes with my queer eyes, Miss Lydia."

They walked on then side by side, stopping often, and taking occasionally, yet generally silent. The beauty of the day deepened as they went on. The long sweeps of the fields—brown and gold and palest yellow—across which the cloud-shadows moved in silent procession; the exquisite harmonies of the woods, whose soft tips brushed the sky; the note of the little brook, singing contentedly to itself, though its ways were bare of bird and blossom—these things spoke with more intimate counselling than any words of human speech. Lydia's heart drank them in with the eagerness of one long athirst. The girl who could see had not lived long enough to understand the voices; her wild spirits folded their wings, and she walked in wondering silence—for a long time, that is; then she spoke with a humility which her eyes belied.

"Do you ever—eat anything at home?" she questioned.

Lydia started and looked around in dismay.

"Well, there, dear, how careless of me!" she said. "I never thought to bring a thing! And you must be hungry, and it's so far from home!"

"But not far from a store," Jessie assured her. "a nice little store at the cross-roads. You can buy crackers there and peppermint sticks and maybe cheese, though I won't promise that—I've never seen anything else except blue socks, and they're hardly digestible. Can you eat crackers and peppermint sticks?"

"Try me," Lydia responded eagerly.

The girl nodded. "You can wait—or go on," she said. "I'll find you. I may be some time, because they may have to make the crackers while I wait."

She darted up the road. Lydia sat down on a log and waited. It was good to have time to get the flavor of her great wealth to find that there were days like this in November—that the youth which was at the heart of all such days claimed her as comrade.

"And I've been thinking everything had gone by!" she cried upon herself in reproach. "Just as if the Lord had forgotten how to make glad things since I'd grown up!" She turned her happy eyes to the world lying golden beneath the noontide sun. "Oh my soul, there's everything left," she cried, exultantly.

She did not know that Jessie was gone a long time, though her words, when she returned, made such inference possible.

"There wasn't any cheese," she reported, opening her bundle and spreading its contents upon a flat-topped rock, "nor any candy. But I could have eggs if I could wait for the chickens to be hatched and grow up and lay them. So I waited. Are you starving, Miss Lydia?"

"I thought it was you," Lydia replied.

"I guess maybe it is," Jessie returned with undisturbed gravity. "Anyway, here's eggs—I know they're fresh for the reasons aforesaid—and salt and crackers—and a brook. And these will have to do you till you get home again."

They ate their simple dinner, and found it a banquet, full of delicate ministrations to soul as well as body. Then they wandered on again and on. It was mid-afternoon before they thought of turning back. It was Jessie who spoke first after a long silence.

"When we get to that bank where the ferns are," she said. "I'm going to dig one up—a little green memory to keep all winter. I'm going to get one for you, too, Miss Lydia."

But Lydia did not hear her; she had turned suddenly aside and broken a spray of ruddy oak leaves and buried her face in them. When she looked up her eyes were shining solemnly.

"I'd almost forgotten," she said, "but it's there just the same."

"What?" asked Jessie, in a hushed voice.

Lydia held out the spray. As the girl bent to it she caught a faint, delicate fragrance, like the dream of spring. "It's like lilies," she cried. "Why, Miss Lydia, I never knew that oak leaves were like that."

"Some of 'em are," Lydia replied; but her voice was dreamy and her eyes saw something far away. Little Jessie looked at her with a thrill of awe and delight in her girlish heart.

"She's thinking of him," she thought, exultantly. "Oh, it's all coming right now."

Then they walked on together.

A week later, Mrs. Warren and Jessie "ran over" to Lydia's in the afternoon. An old man with a mild, white-whiskered face was pottering about the yard. He stopped and started at the visitors with an interest that seemed to hold something proprietary in its composure.

"For the land's sake!" Mrs. Warren muttered under her breath.

Jessie glanced quickly at her mother, but there was no chance for question, for Mrs. Warren had darted forward with a vehemence evidently inspired by some strong emotion; she dispensed with the ceremony of knocking, and burst into the sitting-room like a March wind.

"Lydia Duroe," she cried, "I want to know who that is out in your yard."

Lydia had risen at their entrance; she stood quietly facing them, with a large composure not untouched with humor.

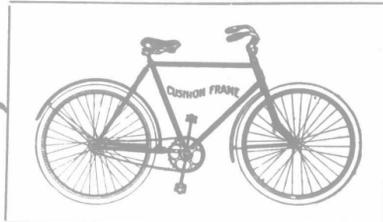
"That's Uncle Si Duroe," she answered, "father's oldest brother."

"Lydia Duroe, you don't mean to say you've gone and taken him on your hands after all the years you've been tied up?"

"I don't know why not," Lydia replied. "He's been with one of his sisters for years, but she's old and sick—I could better than anybody else. I guess I've got sort o' used to taking care of people—it don't seem natural without I've got somebody to do for."

Across Mrs. Warren's agitated shoulder she caught a glimpse of Jessie's disappointed young face. She hesitated a moment and then added a sentence for her.

"There's so many things left," she said—Mabel Nelson Thurston, in Lippincott's.



The Making of a Bicycle

WHEN YOU BUY A

CLEVELAND

You get a bicycle built in a factory that makes all its own parts with the latest up-to-date machinery, from the best material that money can buy.

Result: A wheel that is one harmonious whole, each one of its parts made in proper relation to all the others.

This means a perfect-fitting, smooth and easy running bicycle, giving lasting satisfaction and pleasure to the owner.

Think of the advantage over a bicycle put up in a shop where chains are brought from one place, sprockets from another, frames from another, and so on throughout the whole construction of the wheel.

Do Not Experiment, Buy a

CLEVELAND

Made in Cushion Frame and Rigid Frame Models.

Prices: \$60 \$50 \$40

WRITE FOR FREE CATALOGUE

CANADA CYCLE & MOTOR CO., Limited
"Makers of the World's Best Bicycles." TORONTO JUNCTION.



GRAHAM BROS.

"Cairnbrogie," CLAREMONT,

IMPORTERS OF

HACKNEYS and CLYDESDALES

Established 30 years, and winners at all large shows in Canada and United States. Best of stock always on hand for sale. New importation of Royal winners just arrived.



Graham & Renfrew's

CLYDESDALES and HACKNEYS

Our Clydes now on hand are all prizewinners, their breeding is gilt-edged. Our Hackneys, both stallions and mares, are an exceedingly high-class lot. We also have a few high-steppers and carriage horses. Yonge Street cars pass the door every hour. Phone North 4488.

GRAHAM & RENFREW, BEDFORD PARK, ONT.

HUNTING A TURKEY'S NEST.

Your heart jumps quick as you spy her,
Trotting along down the hill,
For you know it's a nest she is seeking,
Though she suddenly stops stock still.

You tremble for-fear she has spied you,
You stand like a reed in the wind,
And you feel you are losing your
patience
And wish that you never had been

Foolish enough to commence,
Without breakfast, hat or a shawl,
Then you hear your big sister calling,
"Breakfast is ready for all."

You think that your job is quite lengthy,
As you look for a comfortable seat,
And watch that old turkey a scratching
Like she was bent on something to eat.

She heads for the old brier thicket,
Where skeeters are thicker than peas,
And there stands listening at something,
It must be the low hum of bees.

You watch her slow poking actions
Till she finds on an old rotten log,
And you find you are stuck in a mud-
hole
As you put your bare foot on a frog.

Brother Jim at the gate is smiling,
I could tell by the curl of his lip,
As he said in a voice that was shaky,
"It's too bad, she gave you the slip."

—L. M. Wade, in Green's Fruit-grower.

A Methodist negro exhorter shouted:
"Come up en jine de army ob de Lohd."
"Ise done jined," replied one of the
congregation.
"Whar'd yoh jine?" asked the ex-
horter.
"In de Baptis' Chu'ch."
"Why, chile," said the exhorter, "yoh
ain't in the army; yoh's in de navy."

"My people have always moved in good
society. My father and grandfather were
often asked to the most exclusive
houses."
He didn't look like a boastful person.
"Yes," he continued, "they moved
more pianos than anybody, and built up
a fine trucking business that's mine
now."
As she was a practical girl, he made
just the impression he had desired.

An old man leaving work got into a
car. He had not gone far before the
conductor asked him for twopence. The
man said it was one penny for the dis-
tance he was going. The conductor said,
sharply, to him:
"Shut up, and pay twopence." So he
paid it.
The next morning the conductor re-
ceived a letter without a stamp, which
was surcharged as usual. When he
opened it, he was surprised to see writ-
ten on paper, "Shut up, and pay two-
pence."

HORSE OWNERS! USE

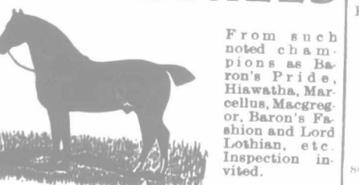


CAUSTIC BALSAM.
A safe, speedy and positive cure for the most stubborn and dangerous cases of **BLISTER** ever used. Removes all blanches from horses. Impossible to produce scar or blemish. Send for descriptive circulars.
THE LAWRENCE-WILLIAMS CO., Toronto, Can.

The Repository
BURNS & SHEPPARD, Props.

Gen. Simcoe and Nelson Sts., Toronto
Auction Sales of
Horses, Carriages, Buggies, Harness, etc., every Tuesday and Friday, at 11 o'clock.
Special Sales of Thoroughbred Stock conducted
Consignments solicited. Correspondence will receive prompt attention.
This is the best market in Canada for either buyer or seller. Nearly two hundred horses sold each week.

HACKNEYS and CLYDESDALES



From such noted champions as Baron's Pride, Hiawatha, Marcellus, Macgregor, Baron's Fashion and Lord Lothian, etc. Inspection invited.
For fuller description and prices, write
T. H. HASSARD, Millbrook, Ont.
CLYDESDALES
Imp. Stallions and Fillies. The get of such notables as Baron's Pride, Prince Alexander, Moncrieffe Marquis, The Dean, Montrave Mac and Battle Axe; they combine size and quality; their breeding is unsurpassed and I will sell them cheap.
GEO. G. STEWART, Howick, Que.
Long-Distance Phone.

CLAYFIELD STOCK FARM
Now offers at reduced prices, for next 60 days.

CLYDESDALES
(8 head) mares and fillies; also one stallion, coming 3 years old. These are a first-class lot, some of which are winners at some of the best fairs in America. Also young **Shorthorn** cows and heifers, and two bulls, age 9 to 14 months.
J. C. ROSS, Prop., Jarvis, Ontario.

J. M. Gardhouse, Weston P.O., Ont.
Breeder of **Clyde and Shire Horses, Shorthorn Cattle, Leicester Sheep.** Imported and home-bred. Stock for sale. My motto: "The best is none too good." **C.P.R., G.T.R., and Street Railway, 10 miles west Toronto. Telephone at House and Farm.**

DR. McGAHEY'S HEAVE CURE
for Broken-winded Horses. The only medicine in the world that will stop heaves in three days, but for a permanent cure it requires from one-half to one bottle used according to directions. Price, \$1.50 per bottle. The Dr. McGahey Medicine Co., Kempville, Ontario.

No more blind horses—For Specific Ophthalmia, Moon Blindness and other sore eyes. **BARRY CO., Iowa City, Iowa, have sure cure**

QUESTIONS AND ANSWERS
Miscellaneous.

TREE THAT STOCK WILL NOT GNAW—FALSE SCIENS FOR GRAFTING.
1. Is there any kind of tree that stock will not damage by gnawing or eating the twigs?
2. Can one get tree seeds or scions for grafting from the experimental farms free of charge?
SUBSCRIBER'S SON.
Ans.—1. Stock delights in rubbing against nearly all kinds of trees, and in eating at the young twigs. The thorn is less liable to be injured from this cause than any other tree or shrub that we know of.
2. Tree seeds and scions in limited quantities have been distributed from the experimental farms. Whether such can be obtained there now can be easily ascertained by writing to the farm from which you wish to secure seed.

Dad's Retrospect.

Jerusalem: "Dad" was a wonderful chap. Before I was around to see: He used to perform most wonderful feats. When he was a shaver like me.
He used to get up before daylight and make the fire, and then he would go way out to the stable and do all the chores.
Before there was a track in the snow, He'd split up the kindling and bring in the wood.
Without either grumble or frown, Oh! "Dad" was a ripper at doing odd jobs;
But never since I've been around, And, too, in the springtime he'd rake up the yard.
And dig in the garden all day, Without ever thinking of playing at ball, Or looking for flowers in May.
He never went fishing when he was a boy.
Nor chased around after a kite, And always was ready to scamper to bed Without being ordered at night.
Dad never went bathing down to the pond, Like Jimmy and Teddy and me, Well, that I believe, 'cause he ain't had a bath Since I've been around to see.
Yes, Dad's fifty something, and I'm only ten, But I think he'd been younger if he Had spent a few hours in flying a kite, When he was a shaver like me.
—Kerry O'Byrne.

POINTED ARROWS.

Tact protects us from one another.
"I will" goes further than "I'll try."
An idle mind is an incubator of scandal.
Do not make a fretting factory of your home.
Twisted truths are the most dangerous of lies.
Take things as they come—providing they're yours.
Don't dread disagreeable jobs—go at them.
Feet that never stumble never carry their owners far.
A word of kindness now is better than a floral emblem afterwards.
Life favors most those of her children who laugh.
Exile the calamitist to the wilds of the uncut timber.
Jealousy is begotten of Vanity and born of Selfishness.
Its to wealth and health—the new lands of the Northwest.
Wishing and hoping are the childless twin sisters of Failure.
It is better to wear than to rust, but it is unwise to do either.
Some men are really killing time when they think they are thinking.
If you stub your toe twice on the same nail do not blame the nail.
To be laughed at will eventually help you more than to be cried over.
The mean suspicious mirrored in others lie buried in our own hearts.
Woman lace themselves tight and men drink themselves into the same condition.
Every man has the right to do as he pleases—but he is foolish if he does.
"Man is but of a few days and full of trouble"—and he usually provides the trouble.
Where indoor plants grow too vigorously, pinch the end buds off of vigorous shoots.
Unfriendly criticism is a dart which generally strikes some vital truth, and we do well to bear the sting and profit by it.
There's gold enough in the land to make all the world rich, but too many are waiting for the other fellow to dig it.
A man like a machine will go until he is worn out. Are you trying to make a machine of your hired man to be worn out like one?
You must first strain all sentiment out of your business before you get down to hard facts and a paying basis. If you permit yourself to be influenced wholly by the dictates of your heart instead of the cold hard measures that should be adopted for the betterment and maintenance of your affairs, you will wind up in the failure that ultimately awaits you.
—Successful Farming.

COSSIP.

A young lady of the law defended an old convict on the charge of burglary. The rules of the court (it was in Massachusetts) allowed each side one hour in which to address the jury.
The young lawyer, just before his turn came, consulted a veteran member of the bar who was in the court-room.
"How much time do you think I should take in addressing the jury?" he asked.
"You ought to take the full hour."
"The full hour! Why, I was only going to take ten minutes."
"You ought to take the full hour," reiterated the old lawyer.
"But why?"
"Because: the longer you talk, the longer you will keep your client out of jail."
Sysonly, J. R. Keene's grand four-year-old, considered by race-horse men the greatest Thoroughbred ever uncovered in America, died recently from blood poisoning at Sheepshead Bay, the trouble having, it is said, originated in a badly-bruised frog in the right fore foot. Sysonly had won for his owner in stakes alone \$178,673 in less than two years. Mr. Keene had many offers for the horse, the last being from a wealthy Englishman, whose trainer offered 40,000 guineas (over \$200,000) for Sysonly last winter. He was insured for \$100,000. He was a son of the noted English sire, Melton, and his dam, Optime, was by Orme. Mr. Keene bought the mare when in foal, brought her to America and placed her in his Castleton Stud, near Lexington, Ky., where Sysonly was born.

Messrs. John McFarlane & W. H. Ford, Dutton, Ont., report sales of young Shorthorn bulls to the following: Mr. Kelly, Redney, Mr. James Campbell, Fingal, Mr. Matthew Gilbert, St. Thomas. We have on hand a choice lot of young bulls, including two eighteen-months old, red, out of imported dams, and by imported Royal Prince and Imp. Abbotsford Star, also two ten months old, red and red-and-white, and one nine months old; also a number of richly-bred cows and heifers in call to the imported bulls, Royal Prince and Abbotsford Star. This last-mentioned is a very handsome, three-year-old imported bull, and will be sold very reasonably to any person in need of such. In sheep, we have Oxford Down ewes and lambs, also Leicester ewes and lambs, both flocks being highly bred. Have Berkshires of both sexes, also a few Barred Rock fowl. We will be pleased to correspond with intending purchasers, or have them visit Greenock Stock Farm, two miles east of Dutton, on M. C. R. and P. M. railways.

A worthy feature of Mr. Primrose McConnell's excellent paper, "How to Improve Dairy Cattle," read at the last British Dairy Conference, is the tabulated results of the milk-testing system adopted on a number of farms by the Highland Agricultural Society. In one set of trials, 443 tons were tested on eighteen farms, and Mr. McConnell has worked out the figures from 10 per cent. of the best and 10 per cent. of the worst cows. The best lot averaged 915 gallons in a season, and the worst only 563 gallons; the percentage of fat in the milk of the former averaged 3.89, and that of the latter, 3.61; and the value of the milk of the former at 5d. per gallon came out at £24 7s. 6d. per cow for the season, as compared with £14 2s. 1d. Here we have a difference of £10 5s. 5d. in the returns from equal numbers of cows, though one lot probably cost as much to keep as the other. In the other set of twelve farms, and 372 cows, the corresponding comparison was £17 1s. 2d. for only part of a season (thirty-four weeks), against £10 19s. 2d., showing a difference of £6 2s. The results of the weeding out of herds as suggested by these great differences are shown for these farms. The gradual rises in milk and butter yields obtained by weeding out the worst cows for five years are sufficiently remarkable. In the most striking case there were average increases per cow in the herd of 146 gallons of milk per annum and 824 lbs. of butter.

AN INFLAMED TENDON NEEDS COOLING. ABSORBINE

Will do it and restore the circulation, assist nature to repair strained, ruptured ligaments more successfully than Firing. No blister, no hair gone, and you can use the horse. \$2.00 per bottle, delivered. Book 2-C Free.
ABSORBINE, JR., for mankind, \$1.00 bottle. Cures Strained Torn Ligaments, Varicose Veins, Varicocele, Hydrocele, enlarged Glands and Ulcers. Always pain quickly.
W. F. Young, P. D. F., 78 Monmouth St., Springfield, Mass., Canadian Agents, Lyman, Sons & Co., Montreal.

THE HAYES BULLETIN
DEVOTED TO ASTHMA & HAY-FEVER.

Issued quarterly, containing short articles on the origin and cause, and the principles involved in the successful treatment of Asthma and Hay-Fever. Special Hay-Fever and Summer Asthma number ready July 15th.
Free on request.
DR. HAYES, Dept. D. D., Buffalo, N. Y.

DURHAM CATTLE FOR SALE

have for sale two young bulls, 8 months old, sired by Imp. Rustic Chief = 40419- (79877); also a few females, among them a young cow fit for any show-ring.
HUGH THOMSON, Box 558, St. Mary's, Ont.

ABERDEEN ANGUS CATTLE

For sale: a few good females of all ages, by imp. bull. Will sell right.
WALTER HALL, Washington, Ontario, Drumbo Station.

ONTARIO'S LARGEST AND FINEST HERD OF HEREFORDS.

We sell our beauties to breeders all over Canada, because we sell our stock at much below their value. Come with the rest and get some of the bargains in 25 bulls a year old and over, 25 heifers and 30 cows, or write to have us save you some. Farm inside the corporation of the town of A. S. HUNTER, Durham, Ont.

BROXWOOD HEREFORDS.

A few choice bull calves from my imported stock.
R. J. PENHALL, NOBER P. O., ONT.

FIVE NICE, SMOOTH HEREFORD BULLS FOR SALE.

Two about 16 months and three from 8 to 10 months old. Priced right to do business.
W. BENNETT, Box 428, Chatham, Ont.

THE SUNNYSIDE HEREFORDS

Twelve high-class bull calves and 4 yearling and 3-year-old bull, we will place at a price that will move them quick. Some choice cows and heifers are yet left for sale.
Address: **A. F. O'NEIL, Maple Grove P. O. or M. H. O'NEIL, Southgate P. O. or L. H. & B., Lenoax Sta., G. T.**

FOREST VIEW FARM HEREFORDS

Four bulls from 8 to 12 months old; 3 yearlings and from prizewinning stock. Several heifers bred on the same lines; choice individuals, for sale.
JOHN A. GOVENLOCK, Forest Sta. and P. O.

HEREFORDS—We are now offering a few number of females—a smooth young bulls and lot. If in want of something extra good, correspond with us. We can please you.
J. A. LOVERING, Coldwater P. O. and Sta.

Aberdeen-Angus bull for sale, Black Diamond, No. 826, 3 years old this spring. A good individual and extra stock-getter; has never been beaten in showing. Price reasonable. Also one Chester White boar, old enough for service.
A. C. SPAFFORD, Compton, Que.

PERSPECT STOCK FARM, For sale: 4 Bulls, including Gold Mine (imp. in dam), also some choice young females. Stations: Cooksville and Streetsville, C.P.R.; Brampton, G.T.R. Write to F. A. Gardner, Britannia, Ont.

High-class Shorthorns—We are now offering 5 young bulls and 3 heifers, two, three and four years of age. Marigolds, the eldest, a daughter of Imp. Royal Member, has a calf at foot by Sailor Champion. This is an extra good lot.
TROS. REDMOND, Millbrook P. O. and Stn.

FOR SALE—A few young bulls from a few heifers all ages, one bull (calved in May) with Imp. British Statesman and Imp. Diamond Jubilee on top of pedigree; also Loyal Duke = 55026 = (imp.)
FITZGERALD BROS., Mount St. Louis, ELMVALE STATION, G. T. R.

ROSEDALE SHORTHORNS

Do you want a profitable cow with calf at foot, and bred again; also heifers bred and heifer calves from imported stock. Choice milk strains.
Walter A. M. SHAVER, Ancaster, Ont.

TENDON
ING.
BINE

circulation,
trained, sup-
cessfully than
air gone, and
00 per bottle,
ankind, \$1.00
n Ligaments,
rocele, en-
pain quickly
ingPa, Mass.,
Montreal.

ly, containing
on the origin
the principles
successful
asthma and Hay-
ical Hay Fever
asthma number

est.
Dept. D. D.,
Buffalo, N. Y.

R SALE

3 months
=40419=
ng them
Z.

ry's, Ont.

CATTLE

all ages.

. Ontario.

HERD OF

We sell our
irs all over
we sell our
elov their
he rest and
rgains in 25
nd over, 25
or write to
me (Farm
S. HUNTER,
o

OD
S.

my

. ONT.

LLS

en 8 to 10
ss.

m, Ont.

RDS

as bull
and 2-
l place at
ove them
cows and
for sale.

rove P.O.
ngste P.O.
T.

ORDS

Prize-win-
eral heif-
ividuals,
CK,
nd P.O.

g a few
ulls and
n, beefy
d, corre-

nd Stn.

ack Dia-
ars old
a stock-
ow-ring,
e boar,

Que.

ale: 4
thorn
m), also
Cook-
G.T.R.
Ont. s

w offer-
ulls and
of age.
Royal
mpion.

d Stn.

a few
ws and
) with
ille on
(imp.)

ouis.

RNS

t foot,
heifer
trains.
Ont.

The Very Latest Treatment for Milk Fever.

George F. Weston, of North Carolina, contributes the following narrative to the Jersey Bulletin:

Driving by the house of a small neighboring farmer the other day, I noticed frantic signals from his better-half—evidently of distress, so I stopped, although on my way to take a train.

Her cow—a good one—was sick, and they did not know what was the matter, although they thought she "might have eat something." It was a plain but not very severe attack of milk fever, and inquiry as to past treatment brought the information that they had done "everything," and everything here consisted of the following, administered internally, between 11 and 11.45 a. m.:

- One quart melted lard.
- One "dose" turpentine.
- One-half of one black draught (?).
- One pound Epsom salts.
- One-half dozen raw eggs.
- One quart linsed oil (did not know if boiled or raw).

Tongue scraped, and "you never saw such a lot of black-headed worms as I got."

External application of turpentine along spine.

There was fight in the old cow's eyes; nothing to use to give air treatment; and I had to catch the train; so I told them to give her a rest, keep her warm through the night, and she would probably recover.

Driving back that evening I stopped out of curiosity, and found a smile on the good lady's face. She was not nearly as anxious to talk cow, and I saw that my standing as a "cow doc" was down with this party. She was finally so kind as to tell me what really was the matter with Bossie, and the information was given in a manner which plainly forbade any further discussion of the case. Her manner was very kind, though; evidently I had meant well and was disposed to render any neighborly help, but this information would set me straight.

It was simply the old and well-known disease, hollow horn and hollow tail. They had just cut her horns off, and they were hollow; and they had split her tail up to the bone for six inches.

Both were very happy as the result of good deeds well done. (I refer to the man and his wife, not the cow.) "If I hadn't gone out and nussed that cow like a child, she'd a died right then."

Now, the question comes up: Should the cow have an attack of milk fever again, what will it be? It can not be hollow horn, for horns she has not. However, at the rate of six inches to the split she should be good for several more attacks of hollow tail.

Now, this happened not three miles as the crow flies from the Biltmore estate. But thirty years before the formation of this, there were scattered around here well-kept agricultural estates of southern planters, with thoroughbred herds under the care of good managers. I was farming, preaching and practicing for we had a live farmers' club here during nearly all the 80's) at home here for ten years, and yet "hollow horn" still runs its course.

CARRYING A JOKE TOO FAR.

A farmer, who was a lover of nature, and also a keeper of sheep, was walking through a pasture lot and stooped down to pluck a tender flower. As the agriculturist stooped to cull the blossom, a large and vicious ram, allured by the prospect, took a running shoot, and hitting the farmer near the base of the spine, turned him a somersault and also propelled him about two rods through the atmosphere. For an hour or two after that, the ram had considerable fun talking the thing over with the crowd of sheep, and describing the manner in which he knocked out the agriculturist. But on the following day, the farmer returned with a gun and killed the ram and dressed him and sold his carcass to the uninformed for lamb chops. And as one of the ram's companions saw the farmer carrying away the remains of her former consort, she said to an alecky lamb that was taking some gymnastic exercises nearby: "My son, I observe that you show a disposition to be unduly gay. Take warning from the fate of your father, and remember that there is such a thing as carrying a joke too far."

GOSSIP.

The law of the universe is the law of change, but man struggles to make things "stay put." He formulates doctrines and principles and what not, but things keep right on changing just the same. Change means growth.

Mr. E. Dymont, Gilead's Spring Farm, Copetown, Ont., writes: "My Dorset sheep now number fifty-eight head. I have to offer this year the best lot of lambs I have yet had. As I am making a specialty of breeding in wool-producing strains, parties wishing to improve their Dorsets in that particular point may do so by breeding from some of the rams I am offering this season. I have in the flock some ewes which clipped this year between eight and nine pounds of the very best quality of washed wool, which at the market price this year figures up to about \$2.50 per head, a fair return without considering the increase in lambs in the flock. The stock I offered for sale last year all went very early in the season. Moral: order early."

USING THE KNIFE ON LAMBS.

Whenever sheep market values are raided, as is frequently the case, there is a class of stuff that is invariably punished with maximum severity. That it is merited punishment marketmen are convinced, and much of it could be avoided by judicious use of the knife.

There is a radical difference between native and western sheep and lambs which gives the latter a decided superiority in market circles. The average native lamb is coarse and undesirable. Most of the stuff raised by farmers never felt the refining influence of the knife, and when a half-dollar break occurs, it is untrimmed stock that bears the brunt of it. A coarse lamb is always at the height of unpopularity when the market is oversupplied.

Western sheep-raisers invariably trim their lambs, sending them to market well moulded and in the best practical condition. The few natives that are similarly prepared usually outsell westerns, but their number is smaller. It is large enough, however, to demonstrate that the aggregate value of the native lamb crop could be vastly increased, and its quality made more acceptable both to killer and consumer by using the knife.—[U. S. exchange.

MONEY IN MUTTON.

A demand for pure-bred mutton classes of sheep that has seldom before had a parallel in the history of agricultural affairs in this country, and ready outlet at good prices for all breeding ewes that show any degree of merit or usefulness that come to market, show plainly that farmers of the corn-producing regions have discovered that they have been overlooking one of the most productive sources of revenue on their farms. Grain farmers who for years regarded the flock of sheep as too troublesome to bother with are now eager to stock-up, and orders from them are more numerous than from any other source.

Higher prices for wool than have been paid for many years are one inducement, and this, coupled with about as high prices for dressed mutton at eastern points and all the big markets of the country as have ever been known, puts an especially attractive coloring on the situation.

Prices for mutton in recent years have held at such good range that the flock maintained for the lamb crop to turn off was a paying proposition, and the wool crop has added a big bonus of profit at a time of year when a bunch of money is most appreciated by the farmer.

Any good farmer of the corn belt can make a flock of sheep pay a profit from the mutton-making standpoint alone, if the value of the fertilization of land and their usefulness in the cleaning up of the farm weeds and utilizing products that would otherwise be wasted be taken into account. This leaves the wool crop of the breeding flock clear profit.

The process of mutton-making at a profit can, of course, be carried on only with the mutton grades of sheep, and that stands as the reason for the unprecedented demand for the pure-bred stock of mutton blood, and that the demand for breeding ewes at market turns to the black-face or long-wooled varieties.—[Chicago Live-stock World.

ARE YOU A SUCCESS

AT SOLICITING NEW SUBSCRIBERS?

We want a good, hustling representative in your locality. Why can't you do it? You never know what you can do until you try. If you should prove to be

THE RIGHT MAN

then we have a splendid proposition to present to you.

It is worth your while to try.

Write to-day and ask us for full particulars regarding an agency. A post card will do it.

Address:

The Wm. Weld Co., Ltd., London, Ont.



Tudhope Carriages

When a man buys a Tudhope Carriage, he knows he has gotten a full money's worth. He knows he has bought the best materials—put together by Tudhopes who have been born and raised in the business. The very name Tudhope means money to every man who buys Carriages.

TUDHOPE No. 52

is daily adding fame to the Tudhope Carriage Makers. Corning body. Side spring gear—double reach with full length steel plates. Bell collar steel axles. Dayton fifth wheel. Quick shifters. Double bar dash rail, seat handles, and hubcaps nickel plated on brass. Write for free illustrated catalogue.

THE TUDHOPE CARRIAGE CO., Ltd.

ORILLIA, Ont.

Established 1842.

FREE! FREE!! FREE!!! ABSOLUTELY FREE. \$100,000 PRIZES GIVEN AWAY FREE.

As an advertisement we give you absolutely free a ladies' or gents' size silvered gold-filled or gun-metal watch, guaranteed for 10 years, and keeps correct time to a second, or a sterling silver handle umbrella, silvered clock, a real diamond solid gold Government hall-marked stamped Ring, Cutlery, Leather Goods, Musical Instruments, Mechanical Toys, Blue Fox Collarlette, besides hundreds of other useful or fancy articles which you can select from our grand 1906 list. We give any of these articles free to any person selling 20 packets of Beautiful, Up-to-date, Artistic Pictorial Postcards at 10 cents a packet (5 magnificent 10-colored cards to a packet). Our Pictorial cards are world-renowned, and we send you every card different, no two alike. Views of dear old England, Historical Views, Latest Comics, facsimile of Death-warrant of King Charles I., England's Most Beautiful Actresses, etc., etc. It need not cost you one cent of your own money. We pay all postage and duty, and deliver cards and present free to your address. Send us at once your name and address (postage is 3 cents). Don't delay. Write immediately to ACTE & COMPANY (Dept. F. A.), 85 Fleet St., London, E. C., England.



SCOTCH SHORTHORNS

9 heifers, yearlings. 4 bulls, yearlings.
29 heifers, calves. 27 bulls, calves.

All out of imported sires and dams. Prices easy. Catalogue.

JOHN GLANCY, Manager.

H. CARGILL & SON, Cargill, Ont.

Maple Shade Shropshires AND CRUICKSHANK SHORTHORNS.

We offer about thirty extra good yearling rams of our own breeding, among them some ideal flock headers; also a few home-bred yearling ewes. Twenty imported yearling rams and thirty imported ewes the same age. Bred by Buttar, Farmer and other breeders of note in England. All are for sale at moderate prices.

JOHN DRYDEN & SON,

Brooklin, Ont.

Stations: Brooklin, G.T.R. Myrtle, C.P.R. Long-distance telephone.

Sharples TUBULAR CREAM SEPARATORS

Demand a Look Inside

DAIRY TUBULAR BOWL—All Apart

"Bucket bowl" separator makers falsely claim to make separators with light, simple, easy-to-wash bowls. We are the only makers who dare show a picture of our bowl—all others refuse. There are secret difficulties about other bowls the makers want to hide. Pictures would betray them. Other makers fear pictures. Our handsome Catalog Z. 198 tells these secrets. Write for it today.

Toronto, Can.

THE SHARPLES SEPARATOR CO.

WEST CHESTER, PA.

Chicago, Ill.

SCOTCH Shorthorns

A fine lot of imported cows with calves at foot, from first-class imp. sires. Also a fine lot of one and two year old heifers. Three high-class young bulls of the best quality and breeding at easy prices. Am taking orders for any breed of cattle, sheep or swine to be imported in time for the exhibitions the coming season.

H. J. DAVIS,
Importer and breeder of Shorthorns and Yorkshires.
WOODSTOCK, ONT.
C. P. R. and G. T. R. Main Lines.

Spring Grove Stock Farm

Shorthorn Cattle and Lincoln Sheep

First herd prize and sweepstakes Toronto Exhibition, 9 years in succession. Herd headed by the imported Dutch-bred bull, *Rosy Morning*, and White Hall Ramadon. Present crop of calves sired by Imp. Prince Sunbeam 1st, Toronto, 1908.

High-class Shorthorns of all ages for sale. Also prize-winning Lincolns. Apply to
T. E. ROBSON, Ilderton, Ont.

Wm. Grainger & Son

Hawthorn herd of deep-milking Shorthorns. Aberdeen Hero (imp.) at head of herd. Three grand young bulls, also females, all ages. Prices reasonable.
Londesboro Station and P. O.

ELM GROVE SHORTHORNS

We have for sale some good young cows and heifers of the Fashion and Belle Forest families, in calf to Scottish Rex (imp.) or Village Earl (imp.), our present herd bull. For prices and particulars address
W. G. SANDERS & SON,
Box 1133, St. Thomas, Ont.

For Sale: Two Young Shorthorn Bulls

Also Cows and Heifers, and one good Imp. York. Sow, also a good Yorkshire Boar one year old. Good breeding and good animals

DAVID MILNE, ETHEL, ONT.

SHORTHORNS & CLYDESDALES FOR SALE
Bull in service: Scotland's Fame = 47897 =, by Nonpareil Archer (imp.) (51778) = 45202 =, dam Flora 51st (imp.), (Vol. 19.) Present offerings: Two heifers rising 1 year old, two bulls rising 1 year old; also young cows and heifers of good quality and breeding, mostly well gone with calf. Also stallion rising 1 year old, sired by the well-known Macqueen, dam from imported sire and dam, and one filly rising one year, sired by King's Crest (imp.). Will sell at a bargain if taken soon.
JOHN FORGIE, Claremont P.O. & Sta.

SHORTHORNS AND BERKSHIRES.

For sale: 2 very fine pure Scotch bulls fit for service; also 2 boars of bacon type fit for service, and grand young sows bred to imp. boar. 25 males and females (Berks.) 2 and 3 months old.
S. J. PEARSON, SON & CO., MEADOWVALE, ONT.
Stations: Streetsville and Meadowvale, C. P. R.

Glen Gow Shorthorns—Our present offering is 9 bulls, from 6 to 14 months of age, sired by Imp. Ben Loman and Imp. Joy of Morning, and out of imp. and Canadian-bred cows. Also a number of very choice heifers. No fancy prices asked. Long-distance telephone. **WM. SMITH, Columbus, P.O., Brooklyn and Myrtle Sts.**

SPRING VALLEY SHORTHORNS.
Herd headed by Imp. Bapten Chancellor = 40859 = (78286). A choice lot of females, mostly with calves at foot or safe in calf. Also a good six-month-old bull calf. Inspection and correspondence invited.
KYLE BROS., Ayr P.O., Ayr, C. P. R., Paris, G. T. R.

For Sale: 1 Choice young bull seventeen months old. Dark roan, by Queenston Archer = 48898 =.
SELL BROS., The "Cedars" Stock Farm, Bradford, Ont.

E. Jeffs & Son, BOND HEAD, ONT., breeders of Shorthorns, Leicesters, Berkshires, and Buff Orpington Fowl. Eggs per setting (15), \$1.00. Choice young stock for sale. Write for prices or come and see.

SUNNYSIDE STOCK FARM.
For sale: The two-year-old show bull, Blyth-some Ruler = 52236 =. Also cows and heifers in calf.
James Gibb, Brookdale, Ont.

GOSSIP.

Two ministers were crossing a lake in a storm. When matters become most critical someone cried out, "The two ministers must pray!" "Na, na, said the boatman; the little one can pray if he likes, but the big one maun tak' an oar."

Gibbon, Noah Webster, George Bancroft, George Stevenson and James Watt may have been talented. Nature may have bestowed gifts upon them superior to their fellows, and yet these years of struggle, of painstaking effort, of partial failure, would have scattered that brilliancy to the four winds of heaven, had there not been in each of these lives a large background of patience, a quality of mind stuff that held them close to their work in storm or sunshine, amid good or bad report. The world's history bears witness that progress of the best character, either in individual life or in the life of society, is invariably slow. This is according to every known law. Great results are never achieved in a moment; such may seem to be the case in certain instances, but when it is not an illusion, it is always an exception to the general run of human affairs.—Dr. W. A. Colledge.

MAPLE HILL HOLSTEINS.

Maple Hill Stock Farm, the home of Mr. G. W. Clemons, the well-known breeder of high-class Holstein cattle, lies in Brant Co., Ont., three miles from Brantford Station, and 5 miles from St. George Station, G. T. R. No man associated with the breeding of Holstein cattle in Canada is better or more favorably known than Mr. Clemons, from the fact that for upwards of 20 years the Maple Hill herd has maintained its position as one of the very best in the country, not only as a show herd, where they have always been in the front rank, but also as producers of a very high order, and also from the fact that Mr. Clemons, for some years, has held the position of Secretary and Registrar of the Canadian Holstein Breeders' Association, a position he is eminently qualified to fill, from his thorough and familiar knowledge of Holstein lore, and his courteous and gentlemanly bearing and willingness at all times to use his best endeavors for the furtherance of the Holstein interests. At the present time the herd is somewhat reduced, owing to the active demand for breeding stock, and the almost unprecedented number of sales during the last few months. Still there are a number of choice ones left. A number of the females are the descendants—daughters, granddaughters, and great-granddaughters—of that great cow, Imp. Kaatje De Boer. A word or two about a few of the cows will not be amiss. Princess Pledge De Kol, winner of first at the Pan-American, gave 14,000 lbs. of milk in 11½ months, has a four-months-old bull calf, by the stock bull, that is a rare good one. Kaatje De Boer 3rd, one of the best types of the breed alive, at three years old, gave 10.33 lbs. of butter-fat in 7 days, and at four years gave 13.197 lbs. of butter-fat in 7 days. Kate Claxton gave 48½ lbs. of milk a day as a two-year-old, and her mother, in breeding nine calves, was only dry twice. Queen De Kol 2nd, as a two-year-old, gave 53 lbs. a day, and afterwards won the Provincial dairy test; also, 120 days after calving, made 10½ lbs. of butter in 7 days. Victoria Teake gave 70 lbs. of milk a day, and 13.96 lbs. of butter-fat in 7 days. These are only a sample of the herd, but space forbids further mention. The stock bull is Sir Mercedes Teake, winner of 2nd at Toronto last fall in the aged class, and was not three years of age. His grandam, Daisy Teake's Queen, at a test on a show-ground, gave 2.62 lbs. of butter-fat a day, and 90 lbs. of milk. His dam, Flosetta Teake, gave 70 lbs. of milk a day, but was never tested. His sire was Chief Mercedes De Kol, whose dam, Daisy A. Mercedes, has a record of 19 lbs. 7 ozs. His grandsire, De Kol 2nd's Paul De Kol, No. 2, has a full sister, May Hartog Pauline De Kol, who has a four-year-old record of 29 lbs. 4 ozs. On hand for sale are a few females and three young bulls from 4 to 8 months of age, out of high-class producers, and by the stock bull, that show exceptionally good form, and should make prizewinners as well as great sires.

Youth—What do I have to pay for a marriage license?

Clerk—Well, you get it on the installment plan.

Youth—How's that?

Clerk—One dollar down, and your entire salary each month for the rest of your life.

A BUSINESS MAN'S ENDEAVOR.

To be joyous in my work, moderate in my pleasures, chary in my confidences, faithful in my friendships; to be energetic but not excitable, enthusiastic but not fanatical; loyal to the truth as I see it, but ever open-minded to the newer light; to abhor gush as I would profanity, and to hate cant as I would a lie; to be careful in my promises, punctual in my engagements, candid with myself and frank with others; to discourage shams and rejoice in all that is beautiful and true; to do my work and live my life so that neither shall require defence nor apology; to honor no one simply because rich or famous, and despise no one because humble or poor; to be gentle and considerate toward the weak, respectful yet self-respecting toward the great, courteous to all, obsequious to none; to seek wisdom from great books and inspiration from good men; to invigorate my mind with noble thoughts as I do my body with sunshine and fresh air; to prize all sweet human friendships and seek to make at least one home happy; to have charity for the erring, sympathy for the sorrowing, cheer for the despondent, to be indifferent to none, helpful to some, friendly with all; to leave the world a little better off because of me; and to leave it when I must, bravely and cheerfully, with faith in God and good will to all my fellow men—this shall be my endeavor.—J. H. Tewksbury, in The Worcester Magazine.

FAIRVIEW SHORTHORNS AND SHROPSHIRE.

Fairview Stock Farm, the beautiful home of Mr. John Campbell, the well-known importer of Shropshire sheep, lies in Victoria County, Ont., about three miles from Woodville Station, G. T. R. This is one of the most beautiful and best-appointed farm homes in Ontario. Mr. Campbell seems to have left nothing undone that would tend to the beauty and comfort of his home, and the genial whole-hearted welcome that greets the visitor, forces him to the conclusion that Mr. Campbell and his worthy life partner are truly at peace with the world. Twenty-one years ago Mr. Campbell received his first importation of Shropshire sheep. Since then, almost yearly importations have been made. No flock of Shropshires on this continent have received more or greater honors at all the leading exhibitions of both Canada and the United States, including the World's Fairs at Chicago and St. Louis, the Pan-American at Buffalo, and the International at Chicago, as the scores of first-prize and championship ribbons to be seen tastefully displayed in his cosy office testify. At the World's Fair in St. Louis this Shropshire flock won three times as much money as any other flock exhibited, including the breeders' and exhibitors' premiums of honor. At present, the flock numbers about 150 head. This season's crop of lambs are the get of the imported Mansell-bred ram, Fair Star Rose, whose get at the International at Chicago, in a pen of four lambs the get of one ram, have won the honors three years out of four exhibited, and Imp. Belvoir Sirdar, the grand champion at St. Louis, and the first-prize and silver-medal winner at Toronto. He is a Mills-bred ram. There will be 75 head for sale of both sexes this fall. The Shorthorns all belong to the fashionable Strathallan strain. They are an exceptionally choice lot, being thick, level, and straight-lined. At present, Mr. Campbell has sold all he can spare. In the splendid stables may be seen a few choice Clydesdales, among them a two-year-old stallion, by Pioneer (imp.), by Sir Arthur, by Sirdar, by Darnley, dam Fairview Queen 2656, by Imp. Queen's Own, a son of the great Prince of Wales. It will thus be seen that this colt carries the blood of two of Scotland's greatest sires—Darnley and Prince of Wales. He is a big, quality colt, with grand bone, and acts well, and should develop into a horse of more than ordinary size, style and quality.

Bog Spavin

Cure the lameness and remove the bunch without scarring the horse—have the part looking just as it did before the blemish came.
Fleming's Spavin Cure (Liquid) is a special remedy for soft and semi-solid blemishes—Bog Spavin, Thoroughpin, Splint, Curb, Capped Hock, etc. It is neither a liniment nor a simple blister, but a remedy unlike any other—doesn't irritate and can't be limited. Easy to use, only a little required, and your money back if it ever fails.
Fleming's Vest-Pocket Veterinary Adviser describes and illustrates all kinds of blemishes, and gives you the information you ought to have before ordering or buying any kind of a remedy. Mailed free if you write.
FLEMING BROS., Chemists,
45 Church Street, Toronto, Ontario

PURE SCOTCH SHORTHORNS

Herd bulls: Imp. Prime Favorite = 45214 =, a Marr Princess Royal.
Imp. Scottish Pride = 36106 =, a Marr Roan Lady.
Present offering:
2 imported bulls.
15 young bulls.
10 imported cows with heifer calves at foot and bred again.
20 one- and two-year-old heifers.
Visitors welcome. New catalogue just issued.

W. G. PETTIT & SONS, Freeman, Ont.
Burlington Jct. Sta. Long-distance telephone in residence.

JOHN GARDHOUSE & SONS, Highfield P.O., Ont.
Breeders of
Scotch and Scotch-topped Shorthorns, Lincoln and Leicester Sheep and Shire Horses.

A good selection of young stock of both sexes always on hand for sale. Scottish Prince (imp.), Vol. 49, at head of herd. Royal Albert (imp.) 20367, at head of stud. Farms 9½ miles from Weston, G. T. R. and C. P. R., and electric cars from Toronto.

BELMAR PARO SHORTHORNS

10 bull calves.
16 heifers under two years.
All of the choicest breeding and practically all of show-yard quality. You can buy anything in the herd at a reasonable figure.
JOHN DOUGLAS, PETER WHITE, JR.,
Manager, Pembroke, Ont.

SHORTHORN BULLS and HEIFERS

Sired by the Scotch Bull, Scottish Lad 45061
FOR SALE.
S. DYMENT, Barrie, Ontario.

Glover Lea Stock Farm SHORTHORNS

FOR SALE: Choice bull calves by Golden Cross (imp.). All dark roans. Some from imported sire and dam. Visitors met at Ripley station.

R. H. REID, PINE RIVER, ONT.
Ripley Station, G. T. R.

GEO. D. FLETCHER,

Breeder of Scotch Shorthorn Cattle, Yorkshire Pigs, and S-C White Leghorn fowl. Herd headed by the Dutch-bred bull (imp.) Joy of Morning 33770, winner of first prize at Dominion Exhibition, Toronto, 1903. Young stock for sale. Eggs for hatching 75c. per setting.
Binkham P. O., Ont. Erin Station and Telegraph

PLEASANT VALLEY SHORTHORNS

Herd headed by imp. Old Lancaster = 50068 =. Grand champion, Toronto, 1905, and consisting of females of the leading Scotch families; can spare a few young cows bred to imp. Old Lancaster.
GEO. AMOS & SON, Moffat Stn. and P.O., C.P.R.

Pine Grove Stock Farm.

Breeders of
High-class Scotch Shorthorns,
Choice Shropshire Sheep, Clydesdale and Hackney Horses.
Herd catalogue on application. Address:
JAMES SMITH, Supt., Rockland, Ont.
W. C. EDWARDS & Co., Limited Props. ont

Maple Lodge Stock Farm

I am offering an excellent dark roan imported bull, nearly three years old, for sale. Also one yearling bull, and a few choice heifers of milking strains.
A. W. Smith, Maple Lodge P. O., Ont.

Burdock BLOOD BITTERS

CURES
Dyspepsia, Boils, Pimples, Headaches, Constipation, Loss of Appetite, Salt Rheum, Erysipelas, Scrofula, and all troubles arising from the Stomach, Liver, Bowels or Blood.

Burdock BLOOD BITTERS

Mrs. A. Lethbridge, of Ballyduff, Ont., writes: "I believe I would have been in my grave long ago had it not been for Burdock Blood Bitters. I was run down to such an extent that I could scarcely move about the house. I was subject to severe headaches, backaches and dizziness; my appetite was gone and I was unable to do my housework. After using two bottles of B. B. B. I found my health fully restored. I warmly recommend it to all tired and worn out women."

Burdock BLOOD BITTERS

GREENGILL HERD
of high-class
SHORTHORNS

We offer ten young bulls ready for service, a number of them from imported sire and dam; also high-class females, all sires, either imported or Canadian-bred. The herd is headed by (Imp.) Lord Reeberry.

R. MITCHELL & SONS,
Felson P.O., Ont.; Burlington Junc. Sta.

MAPLE GROVE SHORTHORNS

Imp. and Canadian-bred.
Males and females, as good types as the breed produces. With breeding unsurpassed.

C. D. Wager,
Enterprise Stn. & P.O., Addington Co.

GLENAYON STOCK FARM
Shorthorns and Berkshires

I have 5 Berkshire boars ready to wean, will sell them at \$6, delivered to any station in Ontario; and a Shorthorn bull calf, which I will sell cheap.

W. B. ROBERTS, Sparta P.O.
Station: St. Thomas, C.P.R., M.C.R., G.T.R.

R. A. & J. A. Watt, Salem, Ont.
Home of the first and third prize aged herds, Canadian National, Toronto, 1905, Mayflower grand champion Toronto and Winnipeg, 1904-05; Olga Stamford, grand champion New York State Fair, 1905; Gem of Ballechin, grand champion Toronto, 1903; Tiny Maude, reserve senior champion Toronto and Winnipeg, 1905; Mildred's Royal and other leading winners. A choice number on hand to make your selection from at all times.

KENWOOD STOCK FARM.
SHORTHORNS.

Headed by (Imp.) Jilt Victor—45157—, 10 grand young bulls; also heifers; from imp. and home-bred cows, for sale. Choice Lincoln sheep; Berkshire and Tamworth hogs offered.

HAINING BROS., Highgate, Ont. Kent Co.
SHORTHORN BULLS
FOR SALE

1 roan calf, 15 months old, of the Duchess of Gloster family.
1 roan, two years old, from imp. sire and dam. Also a number of good registered Clyde mares.

JOHN MILLER, Brougham, Ont.
Glenoro Stock Farm
SHORTHORNS AND LINCOLNS.

Imp. Marr Roan Ladies, Misses, Broadhooks and Miss Ramsdens. Three choice young bulls for sale. 100 Head of Dudding-bred Lincolns. Grand crop of ram and ewe lambs. Twelve choice yearling rams for sale.

A. D. McGugan, Rodney, Ont.
LAKEVIEW SHORTHORNS.

Spicy King (Imp.) at head of herd. Young bulls for sale reasonably. For prices, etc., apply to OTHOS. ALLIN & BROS., Oshawa, Ont.

GOSSIP.

At the Nottingham, England, County Show, June 5 and 6, the Lincoln sheep section was a good one, the flocks represented being those of Messrs. Wright, Dudding, T. Caswell, and S. E. Dean & Sons, each making a very good entry. The winners for yearling rams, in the order given, were Messrs. Wright, Dudding, T. Caswell, Dudding, and in yearling ewes, Messrs. Dudding, Dean & Sons, Wright, Dean & Sons. The Shropshire entry was small, but good. Sir Richard Cooper won first in both classes, and the Exors. of Mr. P. L. Mills occupied the second place in each class, leaving third and r. n. for yearling rams to Mr. B. Wall.

The competition in the pig classes was very keen indeed, and it is thought there will not be a keener competition in any show this season for the Large White breed.

First honors for young boars, and for boars over one and not exceeding two years, went to Messrs. S. Spencer & Sons, the last winner taking the medal for the best boar of this breed. The Exors. of P. L. Mills, the Nottingham Corporation and Sir Gilbert Greenall were the other winners.

In the older boar class, Sir Gilbert won with Walton Paul, a grand stud boar. He also won first in the sow class with Lindsay A, and took the medal for the best female of the section, with this grand sow. Mr. R. M. Knowles was second in this class with a first-class sow, and Messrs. Duckering were first in the old boar class. Messrs. W. E. Measures and John Neaverson were first and second in the classes for young gilts.

The Berkshire classes were good. Mr. J. Jefferson won for young boars, and Sir A. Henderson was second.

Mr. G. T. Inman was first for the two older classes of boars with Highmore Helzac and Highmore Mikado. The latter was considered the best boar of its breed, and the judge, Mr. A. Hiscox, Jr., said he was prepared to pay 200 guineas for him. The Duchess of Devonshire was first in both sow classes, and the Exors. of P. L. Mills, L. Currie and J. Jefferson were also winners.

A MOTHER BIRD'S STRATAGEM.

While strolling on the banks of French Creek, near Clayton, in company with my wife and a friend, we started a woodcock, which feigned being wounded, and gave utterance to the most plaintive squeaks, from which we inferred the nest must be near.

A short search discovered it among small bushes on the ground in a comparatively exposed position. The nest contained three eggs, which we, of course, did not disturb. Leaving the nest for over an hour, I cautiously returned, and getting on my hands and knees crept within ten feet of it without disturbing the old bird. After watching her for about ten minutes I saw her stand up in the nest and with her bill and one foot change the position of two of the eggs, after which she settled back on the nest. She then evidently saw me, for she gave a sudden twist sideways with her head, and then slowly and cautiously stretched out as flat as possible, her bill resting flat on the ground. She remained thus for fully five minutes. Presently I arose from my position and stepped forward, when the bird quietly sneaked away from the nest seeming to crouch as near the ground as possible, until about twenty feet away, when she arose with the usual cry, but immediately fell to the ground, fluttered up and down, and finally turned over on her back, fluttering her wings as if in the last agony, but as I approached she scrambled away, dragging one wing on the ground until she had led me fully two hundred yards from the nest, when suddenly she bade me au revoir, and darted away like a rocket.

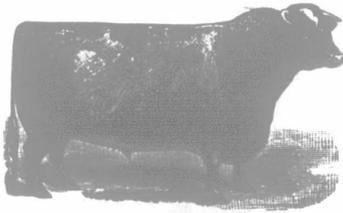
Secreting myself some distance from the nest, in fourteen minutes I was surprised to see her sitting on it as before being disturbed, but how she reached there I am unable to say, as I did not see her approach, and half a minute before her appearance on the nest nothing was to be seen or heard. As the woods were open I had an excellent opportunity of watching her interesting manoeuvres, and had hoped to be able to note the manner in which the return would be made.

MAPLE GROVE SHORTHORNS.

Maple Grove Stock Farm lies in Waterloo Co., Ont., about 5 miles from Elmira Station, G. T. R., and half a mile from Wallenstein Station, C. P. R., and is the property of Mr. L. B. Powell, whose splendid herd of about 20 head of Shorthorns, just in prime condition, represent the Flora, Amaranth and Pretty Lady families, and several others, tracing to Imp. Beauty, an exceptionally large, well-balanced lot, with broad, level backs and splendid udders. The stock bull, until lately, in service was Capt. Mayfly 2nd 49532, by Imp. Capt. Mayfly, dam Lady Annie Fillpail 39195, a cow that has more than a local fame as a prizewinner, she by Capt. Watt 26141, an extra thick, well-balanced bull, and that seemed to nick exactly right with the cows, as the produce are an extra choice lot. Two heifers now in the herd, one a red yearling, the other 8 months old, are a rare, good pair, and could easily be put in shape to win; also there are another yearling—no mean one, either—and several younger ones coming on. The present stock bull is Lord Mysie 59627, bred by H. Cargill & Son, sired by Imp. Lord Mistletoe, dam Imp. Beauty 20th, by Golden Gift, grandam by Baron Sunray. He is a bull choke-full of quality, and a very thick, even-fleshed youngster, and should mate about right with the herd. Roan Daisy, Vol. 19, a very large, thick cow, is the dam of the eight-months-old heifer that is an extra good one. Lassie's Jean, Vol. 20, is the dam of the yearling heifer that is hard to beat, and now she has a rare good four-months-old bull calf. Victoria, Vol. 21, is a Seraphina-bred cow, and is the dam of a nice yearling heifer. Red Lady, Vol. 15, is the dam of a six-months-old bull calf that looks like a coming winner. Mr. Powell reports trade as exceptionally brisk, and sales satisfactory. His stock is right, and his prices are right. The heifers and young bulls on hand are good ones, and should soon go at the prices asked. Mr. Powell's post-office address is Wallenstein, Ont.

WILLOW BANK SHORTHORNS.

Willow Bank Stock Farm, the property of Mr. James Douglas, the well-known Shorthorn breeder, lies a short distance from Caledonia, G. T. R., and a few miles south of Hamilton. The Willow Bank herd is one of the oldest-established in Canada. For over 50 years, Mr. Douglas, and his father preceding him, have kept this great herd together, representatives of which can be found in every Province of Canada and many States of the Union. Many of the great Canadian and United States show cattle were bred here, great care having always been exercised in the selection of stock bulls used, with the result that the herd is made up of exceptionally heavy-fleshed animals, many of them weighing 1,800 lbs., and built on ideal lines. A number of the younger things are the get of Imp. Sir Christopher, a bull that has left as many good ones behind him as any ever used on the herd. The females belong to the Crimson Flower, Nonpareil, Roan Lady and other leading families, several of them being imported. The present stock bull is Imp. Rosicrucian of Dalmeny, bred by the Earl of Rosebery, sired by the Village-bred bull Villager, dam Regina 6th, by the Flora-bred bull, Goldfinder's Heir. He is a show bull all round, a roan, five years old very heavily fleshed, remarkably even, a very mellow handler, and one of the best sires in the country, exceedingly quiet to handle, sure, and right in every particular. Owing to so many of his heifers now coming of breeding age, Mr. Douglas has decided to part with him, and anyone wanting an imported bull, gilt-edged in breeding and individuality, should look after him, as bulls of his stamp are scarce. There are also about 20 young bulls from three months to one year of age—a rarely good lot—prizewinners of the future among them, all sired by Rosicrucian and Imp. Nonpareil Duke, and out of extra good dams. Also, several two-year-old heifers can still be spared. For nearly the same length of time this noted farm has been the home of a grand flock of Leicester sheep, which has produced very many high-class winners. This season's crop of lambs are showing phenomenal growth, and will turn out a number of winners sure. Write Mr. Douglas to Caledonia P. O. for further information.



ARTHUR JOHNSTON
Greenwood, Ont.

Offers for sale, at moderate prices,
12 high-class BULLS
yearling

All sired by imported bulls, and most of them from imported dams.

Also imported and home-bred cows and heifers of all ages.

CEDARDALE SHORTHORNS

For immediate sale: Four young bulls and a few heifers, a nice thick, well-put-up lot, and bred on heavy-milking lines. Will be sold cheap.

DR. T. S. SPROULE, M.P.
Markdale, Ont.

Shorthorn Cattle and Lincoln Sheep

Shorthorn bulls, cows and heifers for sale at greatly reduced prices for the next 60 days.

T. GIBSON, Denfield, Ont.

Hillhurst Shorthorns

Registered bull calves for sale, by Broad Scotch—46315—, from imported English and home-bred dams of good milking strains.

JAS. A. COCHRANE, Compton, P. Q.

SHORTHORNS AND LINCOLNS.

Present offerings: 4 choice young bulls 9 to 14 months; also a few good heifers, Lincolns, descended from the best English stocks.

JOHN LEE & SONS,
Highgate, Ont.
40 miles west St. Thomas, on
O. M.C.R. & P.M. Ry.

SHORTHORNS

Imp. Keith Baron 36050. Six young bulls from 10 to 18 months old. A lot of 2-year-old heifers in calf and a few young cows. A bunch of heifer calves, cheap.

GLYDESDALES

Just now: One pair of matched geldings 5 and 6 years old; show team.

JAS. McARTHUR, Goble's, Ont.

Riverview Shorthorns and Oxfords

Shorthorns represent Crimson Flowers, Athelstanes, Lady James and Roses.

We have for sale three yearling bulls and some spring calves, also a few females. A thick, straight, mossy lot. Also some Oxford Down ram lambs.

Peter Cochran, Almonte P. O. and Station.

Queenston Heights SHORTHORNS

I am offering extra value in yearling and two-year-old heifers. Bull calves that will make high-class sires.

Straight Scotch.

HUDSON USHER, Queenston, Ont.

High-class Shorthorns

The well-known Duthie-bred bull, Scottish Beau (Imp.) (36099), by the great Silver Plate, formerly at head of R. A. & J. A. Watt's herd, now heads my herd. Young stock usually on hand for sale.

N. S. ROBERTSON, ARNPRIOR, ONT.

SCOTCH-TOPPED SHORTHORNS

Three young bulls, from nine to thirteen months old; also several young heifers by Scottish Baron (Imp.) for sale. Prices reasonable.

H. GOLDING & SONS, Thamesford, Ont.
Stations, Thamesford, C.P.R.; Ingersoll, G.T.R.

Brown Lee Shorthorns—Present offering is 3 young bulls from 9 to 15 months old, a nice straight, good-doing lot, sired by Blenheim Stamp; also females of all ages, daughters of Imp. Sir Christopher and Imp. Beaucamp. Prices very reasonable.

DOUGLAS BROWN, Ayr P.O. and Station.

A. EDWARD MEYER,
Box 378, Guelph, Ont.
Scotch Shorthorns.

The Sunny Slope herd comprises Cruickshank Bellonas, Mysies, Villages, Brawith Buds, Broadhooks, Bruce Augustas, Mayflowers, Campbell Hessies, Urys, Minas, (Larets, Kilblean Beautys. Herd bulls: Scottish Hero (imp.) (90066), a Sheth-in Rosemary, and Chief Ramsden - 62548 - a Miss Ramsden. Correspondence solicited. Visitors welcome. Long-distance phone in house.

WILLOW BANK STOCK FARM

Established 1855. Will offer imported Rosicrucian of Dalmaty - 45240 - Recorded in both Dominion and American herdbooks. Also young stock of either sex. "Shorthorns," James Douglas, Caledonia, Ontario.

Oak Grove Shorthorns—Present offering: Several imp. cows, heifers and young bulls, all sired by Imp. Nonpareil Duke and out of imp. dams; also the stock bull, Imp. Nonpareil Duke, a choice offering. Prices right. W. J. ISAAC, Cobourg Station, Harwood P. O.

Porter's Gold and Silver Fawn
St. Lambert Jersey Herd

I am still breeding and selling those St. Lambert beauties, and still have some of both sexes for sale. No better blood. No better cream and butter producers, and no better lookers.

T. PORTER, Carleton West, Ont.

Toronto (Dundas St.) cars come out within half a mile of the farm.

Pine Ridge Jerseys—Present offering: Some good young cows and a choice lot of heifers, all ages, from 4 months up; also some good Cotswold sheep (registered).

WILLIAM WILLIS, Newmarket, Ont.

HIGHGROVE JERSEY HERD.
Our present offering is: a few choice heifer calves from 2 to 8 months old, which, considering quality, will be sold reasonable.

ROBT. TUFTS & SON, Tweed P.O. & Sta.

Brampton Jersey Herd—We have now for immediate sale 10 bulls, from 6 to 18 months old, descended from St. Lambert or imported stock; also females of all ages. In order to reduce our stock, we are making a special offer. For full particulars, address, B. H. BULL & SON, Brampton, Ont. Phone 68.

A FEW HOLSTEIN BULLS

fit for service, for sale at reasonable prices. Choice females, all ages. If you are willing to pay good prices for good stuff, write me.

G. W. CLEMONS, St. George, Ont.

Glenwood Stock Farm—Holsteins and Yorkshires. Holsteins all sold out. Have a few young Yorkshires sows, about 2 months old, for sale cheap. True to type and first-class. Bred from imported stock. THOS. B. CARLAW & SON, Warkworth P.O. Cambellford Stn.

Holsteins, Tamworths, Oxford & Dorset SHEEP FOR SALE.
At present we have 1 young bull, 8 Oxford ram lambs, Dorsets, 1 yearling and 1 aged ram. Tamworths, both sexes.

HOLSTEINS AND YORKSHIRES

R. HONEY, Brickley,
offers for sale a choice lot of young boars fit for service; also sows ready to mate.

HILTON STOCK FARM—Holsteins, Cotswolds and Tamworths—Present offering: Some young cows; a nice lot of young pigs; few hours six months old, and sows in pig. R. O. MORROW & SON, Hilton P. O., Brighton Tel. and Stn.

IMPERIAL STOCK FARM HOLSTEINS

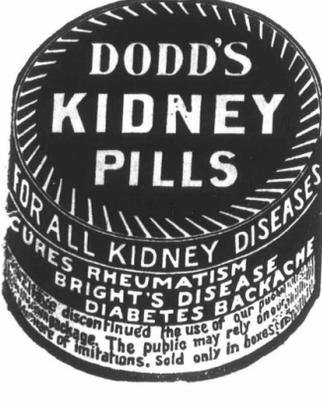
A prizewinning herd of imported, officially tested stock. Bulls of all ages for sale, also a few cows. W. H. SIMMONS, New Durham, Ontario.

"GLENARCHY" HOLSTEINS

We have for immediate sale several young bulls and a number of young females, that for ideal type and superior quality, backed up by gilt-edged breeding, are unsurpassed.

G. MACINTYRE, Renfrew P. O. and Stn.

When Bishop Phillips Brooks was in England, he was "commanded," as the phrase goes, to preach before the Queen. Someone asked him if he was not afraid? "No," he replied, smiling, "I have preached before my mother."



QUESTIONS AND ANSWERS.
Veterinary.

CHRONIC COUGH—SPAVIN.

1. Ten-year-old horse coughs occasionally, probably once in two or three days.
2. Mare, nine years old, gets stiff in near hind leg when standing, but after driving a few rods she goes sound.

W. H.

Ans.—1. Chronic coughs are very hard to treat, and I do not consider it serious for a horse to cough once in two or three days. You will probably be able to check it by giving each morning a ball composed of 1½ drams gum opium, 2 drams solid extract of belladonna, 15 grains digitalis, and 1 dram gum camphor, mixed with sufficient oil of tar to make it plastic. Roll in tissue paper and administer.
2. The symptoms indicate bone spavin. Get your veterinarian to fire and blister it.

Miscellaneous.

LINE FENCES.

1. If a farmer has a hedge as line fence, is he forced to keep it trimmed, or can he let it grow over his neighbor's side?
2. Is a hedge a lawful line fence?

W. K.

Ans.—1. He must keep it trimmed, if otherwise it would project over the neighbor's land.
2. Not unless made so by by-law of the local municipality, and it is improbable that there is such a by-law.

LOSS OF SCALES.

A gave his order for a pair of scales. After they were received, they would not work. Agent examined them, and found them to be broken, but said they would make them all right. Before it was done, A's barn was burnt, and the scales were destroyed. Can the company make A pay for the scales, he not having given any settlement for them?
S. C. B.

Ontario.

Ans.—We think not, as apparently there had not been a legal acceptance by A of the scales, and, accordingly, the property in them had not passed from the company to A.

EXPENSE OF TILE DRAINING.

A has opened ditch running through his farm, which he wishes to drain. B, C and D have a number of tile drains emptying into same. If a 6-inch tile would carry A's water, would B, C and D be compelled to pay their share for the tile large enough for their water too? The farm below A, where open ditch empties, is tiled.

A WELL-SATISFIED SUBSCRIBER, Ontario.

Ans.—They are liable to bear their just proportion of the expense, and if you cannot agree with them as to what that should be taken to be, then, having made an earnest effort to arrive at such an agreement, it would be in order for you to call in the municipal engineer and have him dispose of the matter.

COWS FAILING TO BREED.

I have two or three cows that fail to get with calf. They appear healthy and come around regularly, but do not catch. Two were bred for about a year some time ago, and would not catch, so I changed bulls, and now they are all right, but this bull has no effect on the last three, one being a heifer. I fancy they have contagious abortion, as once in a while, or more correctly, a few times in the winter, I noticed a little thick blood come from the vagina, and soon they would be around again. I saw reference in "The Farmer's Advocate" some time ago to being salt and carbolic acid. Is this safe, and what proportions would be necessary?
R. H. M.

Ans.—If the cows come in heat regularly in eighteen to twenty-one days, it is not likely that contagious abortion exists; but if they cease for some months to show oestrus and then come in heat, the probability is that there has been abortion, and it may be of the contagious class. Carbolic acid is quite safe if given in quantities of 50 drops daily, in two doses, in water, mixed with food, or given as a drench, or may be given well mixed with salt at the rate of four ounces of undiluted carbolic acid to twelve quarts of salt placed under cover where the cows may have constant access to it.

CROSSING HOLSTEINS AND AYRSHIRES.

Which would be the best cross, to breed an Ayrshire cow to a Holstein or a Shorthorn bull, all being registered?
D. A. W.

Ans.—We would not advise crossing pure-breds for dairy purposes, better keep the breeds pure, selecting the best performing females, and using sires bred from deep-milking dams and grandams. If a dual-purpose class of stock is desired by our correspondent, we should advise using the Shorthorn bull.

LOST DOG—HIRED MAN QUITTING.

1. I have lost a valuable collie dog; he has been missing since May 28th. About one month previous to that time, the wife of one of my neighbors sent word that if my dog chased her hens any more, she would have him killed. Although the dog never did chase the hens, I suspect that she may have had him killed, as I cannot find any trace of him, although I have tried very hard to do so. Would you kindly advise me the best way I can get a trace of dog, or could I take legal proceedings against party for making such threat?
2. When engaging a man by the month, can he pack up and get out any time, without giving you any notice, and collect for the time that he has worked?

Ans.—1. It would seem to be a case calling for the employment of a detective. His report on it might be such as to warrant legal action being taken.
2. No; at all events, not in full.

COST OF RAPE SEED, ETC.

Please let me know what rape costs per pound, and give me all particulars about it. How much does it take for an acre of ground, and how is it sown? What time should it be cut? How much would a certain quantity cost to be sent here? Can it be got in Montreal?
D. A.

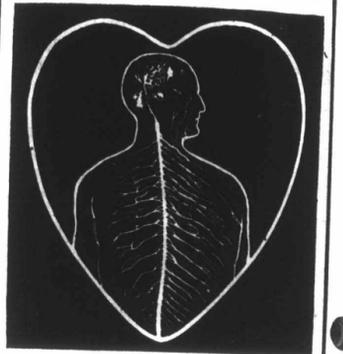
Ans.—Rape seed is usually sold at 8c. to 10c. per pound, retail, in small lots, and as low as 5c. in lots of 50 to 100 pounds. It does best sown in drills, either ridged or flat, 24 to 26 inches apart, sown like turnip seed, which it closely resembles, with a drill, two pounds of seed per acre, and cultivated with a horse hoe between the drills. But in clean, rich land may be sown broadcast at the rate of four or five pounds per acre with good success. Rape closely resembles turnip tops, and is generally grown only for pasture, though, when from ten to twenty inches high, it may be cut and fed green, but cannot be cured like clover or grass to be stored away. It may be sown as late as any time in July or August, but the earlier in June or July the better. And it is ready to turn stock into when about ten inches high, which, under favorable weather conditions, it should be in six to eight weeks after sowing. The seed may be purchased from seedsmen in Montreal or Toronto, or through your seedman, and the cost of carriage is the ordinary rate by express, which you can learn at your express office.

C. P. R. DOMINION DAY RATES.

Excursion tickets between all points on line of the Canadian Pacific Railway, and from C. P. R. stations to nearly all points on connecting Canadian lines, will be on sale June 29 to July 2, inclusive, at the rate of single fare for the round trip. Tickets good for return until and on Tuesday, July 3. This gives five days of low rates at a most delightful time for summer trips. Tickets and further information from any Can. Pac. Agent.

John A. Govenlock, breeder of Hereford and Shorthorn cattle, Forest, Ont., writes: "I have won the silver medal for two years hand running for best herd of cattle, any breed, at Sarnia, and the sweepstakes at Brigiden. I feel that I owe a great deal to your Zenoleum for helping me win these prizes, as in the winter the use of it kept my stock from any kind of ice or ringworm. Therefore the cattle were not tortured by itching and rubbing. In the summer time it is a splendid preventive of flies and mosquitoes. To all who intend keeping stock, I would say, by all means don't prefer to make a success of it without keeping Zenoleum for the benefit of your animals."

MILBURN'S
Heart and Nerve Pills.



Are a specific for all diseases and disorders arising from a run-down condition of the heart or nerve system, such as Palpitation of the Heart, Nervous Prostration, Nervousness, Sleeplessness, Faint and Dizzy Spells, Brain Fog, etc. They are especially beneficial to women troubled with irregular menstruation.
Price 50 cents per box, or 3 for \$1.25.
All dealers, or
THE T. MILBURN CO., LIMITED,
Toronto, Ont.

HOLSTEINS FOR SALE



Four imported and one home-bred bulls, from 8 to 12 months old; also our entire crop of spring bull calves, from week old up, sired by the grandly-bred imp. bull, Sir Howitje B. Pieltje, whose dam record is over 82 lbs. milk in one day, and from great-producing cows of the most fashionable strains. Can spare a few cows and heifers, from one year up; 75 head to select from. Cheese 13c. Don't delay if you want one from this herd.

H. E. GEORGE, Crampton, Ont.

Cows from the
ANNANDALE HOLSTEIN HERD

Have won during the past show season at Ottawa first and sweepstakes on cow, first on 3-year-old, first on 2-year-old class. At Guelph (dairy test) first and sweepstakes on cow, first and second in heifers. At Chicago (National) first and sweepstakes on cow, also second-prize cow, second and third on 1-year-olds, second on 1-year-old heifers, and a host of other prizes (different cows at different shows).
Bull calves, 4 months and under only, for sale from great dams and greatest of sires. Buy young if you want them from Annandale Stock Farm.

GEO. RICE, Tillsonburg, Ont.

WOODBINE HOLSTEINS

Herd headed by Sir Mechthilde Posch, absolutely the best official-backed sire in Canada. Dam lanthe Jewel Mechthilde, 25.8 pounds butter in seven days. Champion cow of Canada over all breeds. Sire's dam, Aaltje Posch 4th, holds the world's largest two-day public test record—8.6 pounds butter. Young bulls of the choicest quality for sale.

A. KENNEDY, Ayr, Ont.

Ayr, C.P.R.; Paris, G.T.R.

Lyndale Holsteins.

For Sale A number of bull calves from one to four months old, out of Record of Merit cows, and sired by Beryl Wayne Paul Concordia, whose four nearest dams have official butter records averaging 22 lbs. 11 ozs. each.
BROWN BROS., LYN, ONT.

Centre and Hill View Holsteins

We have four yearling bulls left which we will sell at reduced price to quick buyers; from good producing strain; our own raising. Sold out of females at present. P. D. EDE, Oxford Centre P. O., Woodstock Station, C. P. R. and G. T. R.

MAPLE GROVE HOLSTEIN-FRIESIANS

For Sale: Three bull calves, sired by Lord Wayne Mechthilde Calamity, and all out of Advanced Registry cows.
Apply

WALBURN RIVERS, Falden's Corners.

Maple Glen Holsteins—Three sons of Sir whose granddam holds world's largest official record for her age, and grand sire has over 60 tested A. R. O. daughters the most by any bull on record. Brother of Auggie Cornucopia. Secure the best.
C. J. GILROY & SON, Glen Buell, Ont.

Grove Hill Holsteins

Herd contains 55 head, a number of which are in the advanced registry. Our stock bulls have all been backed up by high records. Present offering, several young bulls and a few females.
F. R. MALLORY, Frankford P. O. and Sta., C. O. R.

The Selection of Show Sheep.

This is a matter of the greatest importance, which cannot be hurriedly done. It requires many careful inspections, and ought to be done by gradually reducing the first selection by careful drafting down to the required number.

Then selection of yearling sheep, both male and female, requires more care and time, because in most flocks the number from which selection can be made is larger, and maturity and full development have not been reached.

In the case of ewes, it is essential that the select lot should be uniform in color, etc., that will enable thoroughly and well-matured pens to be finally selected for exhibition.

In general terms it may be said that the ruling conditions here are the same as in the selection of the yearling sheep, except that in this age greater notice should be given to the pedigree, because if the individual characteristics of the parents are known this is a good indication in most instances of what the lamb may be expected to develop into.

Lump Jaw



The first remedy to cure Lump Jaw was Fleming's Lump Jaw Cure

and it remains today the standard treatment, with years of success back of it. Don't experiment with substitutes or imitations. Use it, no matter how old or bad the case or what else you may have tried.

FLEMING BROS., Chemists, 45 Church Street, Toronto, Ontario

AYRSHIRES

The famous Reford Herd at St. Anne de Bellevue, Que., now owned by Sir William C. Macdonald.

Several yearling bulls for sale; also a number of bull calves, Quality and appearance extra good, bred from the best milking strains, noted for robust constitution and large teats.

MACDONALD COLLEGE

SPRING BURN STOCK FARM, North Williamsburg, Ont. H. J. WHITEKER & SONS, Proprietors

HIGH-CLASS AYRSHIRE CATTLE Bulls and heifer calves, two to nine months old, cows and heifers all ages.

Select Ayrshire Bulls - A right good one, 18 months old. Four choice last Aug. and Sept. calves.

Wardend Ayrshires We are offering young old; also a choice lot of spring calves from deep-milking dams.

STOCKWOOD AYRSHIRES FOR SALE Have some nice February calves for \$20 each, out of heavy milking dams.

BARREN COW CURE makes animals breed. Abortive Cow Cure prevents animals aborting. Cures guaranteed or money refunded.

his entries, no matter the age or sex, could, with hope of success, compete for a prize for the best collection of the breed, were such a prize offered.

PREPARATION. Many times have I been asked, "When should we begin to prepare our sheep for show?" Almost as soon as the lamb is born.

For lambs, there is but little time, and hence the risk in their preparation is much greater than among older sheep. With an early selection, gradually reduced as time goes on, and the whole lot kept going ahead, those not required for the show-yard will make full value in the market.

Coloring is, fortunately, a practice on the decline, and the sooner it dies out the better. It adds somewhat to the appearance if applied in moderation, but when applied as it still is amongst the Down sheep wools or the Lincolns, in instances it is thoroughly objectionable.

Messrs. Colwill Bros., Newcastle, Ont., ordering a change of advertisement, write: "Business in Tamworths has never been better than during the last 12 months."

The London, England, Live-stock Journal, of June 8th, gives what we presume may be accepted as a correct statement of the breeding and ownership of Spearmin, the 1906 winner of the Derby.

The London, England, Live-stock Journal, of June 8th, gives what we presume may be accepted as a correct statement of the breeding and ownership of Spearmin, the 1906 winner of the Derby.

MEN CURED FIRST THEN THEY PAY.

For years Dr. Goldberg has treated men under his pay when cured plan, during which time weak, debilitated men have come to him without hope of ever being cured, and he has demonstrated to them the value of his treatment before he asked them to pay.



No matter where you live or how serious your case may be, if you will write him all about it, your letter will receive prompt attention, and you will be advised by return mail about how long it will take to cure you and how much the treatment will cost you.

AYRSHIRES - Choice steers of either sex, different ages, for sale. Prices reasonable. For particulars apply to N. DYMMENT, Hickory Hill Stock Farm, Dundas St. & Tel. Clappison, Ont.

AYRSHIRES AND YORKSHIRES We always have on hand choice animals of above breeds, of any desired age. Prices reasonable. Write us before buying.

WOOL

Consignments solicited. Write and get our prices. E. T. CARTER & CO., TORONTO.

COTSWOLD SHEEP

From one of the largest breeders in the home of the breed. We have bred the prizewinners at the leading English shows. Address: W. HOULTON, Broadfield Farm, Northleach, Glos. ENGLAND; or S. HOULTON, Calgary, ALBERTA, Canadian representative.

DORSET HORN SHEEP and SCOTCH SHORTHORNS

The latter representing the Nonpareil, Miss Ramadan, Missie and Glozier families exclusively, and the former comprising more Royal winners and more St. Louis prizewinners than any other flock in the world. Stock for sale always on hand. JOHN A. MCGILLIVRAY, North Toronto, Ontario

SOUTH DOWNS COLLIES

At Stud, Holyrood Clinker, Just imported. Fee \$10.00. Robt. McEwen, Byron, Ont.

Canadian Agents for the Original McDougall's Sheep Dip & Cattle Dressing Imported direct. Price: Imperial pints, 35c.; Imperial half gallon, \$1.35; Imperial gallon, \$2.35

Dorsets. Can supply Dorset sheep of the various ages, of either sex, in pairs not akin, at very reasonable prices. E. DYMMENT, Copetown P. O., Wentworth Co.



Burnside Ayrshires

Imported and Canadian-bred. Prizewinners at all the leading shows. I hold the award of merit given by the Bd. of Dir. of World's Fair, St. Louis, to the breeder of largest number of prizewinning Ayrshires at said Exposition.

R. R. NESS, JR., HOWICK, QUE., P.O. AND STATION.

THE NEW QUICK WAY TO CURE RUPTURE Is Without Operation, No Pain, No Danger, No Loss of time From Daily Work. This Remarkable Simple NEW WAY TO CURE RUPTURE has opened up a new era in the treating of this terrible dangerous, dreaded, hitherto considered incurable malady, Rupture.

RN'S ve Pills. Four imported and one home-bred bulls, from 8 to 12 months old; also our entire crop of spring bull calves, 1 to 3 weeks old up.

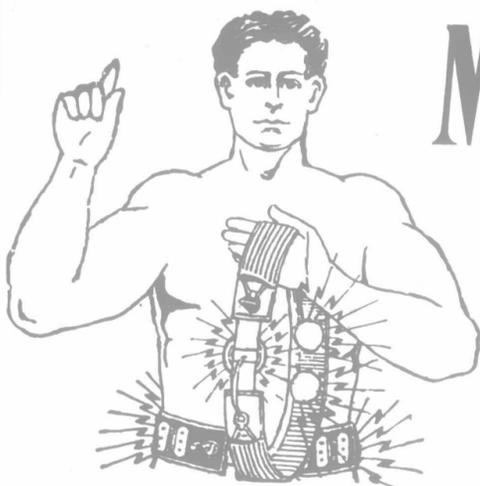
For sale. Four imported and one home-bred bulls, from 8 to 12 months old; also our entire crop of spring bull calves, 1 to 3 weeks old up.

Wardend Ayrshires. We are offering young old; also a choice lot of spring calves from deep-milking dams.

STOCKWOOD AYRSHIRES FOR SALE. Have some nice February calves for \$20 each, out of heavy milking dams.

BARREN COW CURE. makes animals breed. Abortive Cow Cure prevents animals aborting. Cures guaranteed or money refunded.

STOCKWOOD AYRSHIRES FOR SALE. Have some nice February calves for \$20 each, out of heavy milking dams.



Men, It's Free

Any Weak, Puny Man Can Have My Electric Belt Free, Without the Payment of One Cent.

I make this offer to weak men, particularly those men who have spent their earnings for years on dope (the drugs that make them feel like a young colt one day, and like an old, broken-down hack the day after), those men who have tried so many things that they are tired of fooling and want a cure. Those are the men I appeal to, and I am willing to give my Electric Belt free, without a cent of cost to you.

Men with small flabby muscles, thin-chested, dull-eyed, short of breath, without endurance, courage, ambition, and grit in their make-up, are WEAK MEN, if they were not born weak I can make physical giants of them.

How do I do it? By filling the blood, the nerves, the organs and muscles with electric energy—that is what Nature gave them at first—that is what they have lost when they break down.

My Belt is easy to use; put it on when you go to bed; you feel the glowing heat from it (no sting or burn, as in old-style belts), and you feel the nerves tingling with the new life flowing into them. You get up in the morning feeling like a two-year-old.

Wherever you are, I think I can give you the name of a man in your town that I have cured. Just send me your address and let me try. This is my twenty-fourth year in the business of pumping new vim into worn-out humanity, and I've got cures in nearly every town on the map.

If you will come and see me I'll fix you up. If you can't call let me send you my book full of the things a man finds inspiring to strength and courage. Free if you send this coupon. Office Hours, 9 a.m. to 6 p.m. Wed. and Sat. till 9 p.m. Consultation free.

There's nothing surer than the word of an honest man, and when such men as these admit that I cured them, you know that I can cure you.

HERE IS PROOF OF MY ARGUMENTS :

G. Duval, Grand Mere, Que., says: "Your Belt is a wonderful appliance for the relief of poor suffering humanity. I found a permanent cure in its use for Rheumatism and weakness. Yes, the Belt cures."

F. A. Ouellet, Springfield, N. S., writes: "I now feel like a new man every way, and wish you all the success that you deserve in your endeavor to relieve suffering humanity."

W. H. Belding, Chance Harbor, N.B., has this to say: "After 32 days' use of your Belt, I feel twice as strong as I did. My stomach is much better, and I have improved in every way. Have gained in weight and sleep better than I have for 10 years."

Fred. J. Cutterbuck, Brookville, Ont., writes me, saying: "I have worn your Belt for 32 days, and feel better than I have for years. My stomach is better and my appetite has improved wonderfully. I feel like a new man entirely."

I have cured thousands of men who have squandered the savings of years in useless doctoring.

Dr. M. S. McLaughlin,
112 Yonge Street, Toronto, Canada.

Please send me your book, free.

NAME

ADDRESS

Shropshire & Gotswold Sheep

SCOTCH SHORTHORNS and



CLYDESDALES

Choice man and ewe lambs. Also 50 shearing ewes for sale. Apply to

JOHN BRIGHT,
Myrtle Station, Ontario.

I Have Imported

more prizewinning and high-class breeding sheep in the past twenty years than all other importers combined.

I WILL IMPORT anything you may need this year in cattle or sheep. Will leave for England on the 18th May. My address there will be: Care of Alfred Mansell & Co., Shrewsbury, Eng.

Robt. Miller, Stouffville, Ont.

FAIRVIEW SHROPSHIRE

Have the world's record for the largest per head winnings at the greatest of world's fairs—St. Louis.

Also have the record for their 22 years in the leading showings, including three world's fairs, of winning more first and champion prizes than all competitors combined.

Do you need a few real good ewes? Or a choice ram to head your flock? If so, write for circular and quotations to

JOHN CAMPBELL, Fairview Farm, Woodville, Ont.

BROAD LEA OXFORDS.

Present offerings are 28 ranch shearing rams, seven shearing ewes, one show ewe four years old. Will also book orders for ewe and ram lambs from imported ram.

Correspondence promptly answered. Visitors always welcome.

E. E. Stations: Midway, G. T. R. **W. H. ARKELL,** Teeswater, C.P.R. Teeswater, Ont.

Mount Pleasant Herd of Tamworths and Holsteins. A large herd of choice pigs of all ages on hand. Mount Pleasant type of hogs are profitable breeders and ideal bacon hogs. Pairs not akin. Herd headed by Colwill's Choice No. 1343. Won sweepstakes and silver medal at Toronto, 1901-2-3. Also a few bulls. **Bertram Hoskin, The Gully**

BERKSHIRES

Imported and Canadian-bred
H. M. VANDERLIP, Cainsville,
on T. H. & B. and B. & G. division of Grand Trunk. Telephone and telegraph, Cainsville, Ont.

HILLCREST HERD OF ENGLISH BERKSHIRES

For Sale: A lot of very choice young things of various ages. We prepay express charges and guarantee satisfaction. Enquiries promptly answered. Vine Sta., G. T. R., near Barrie. **JOHN LAHMER, Vine P.O., Ont.**

NEWCASTLE HERD OF TAMWORTHS and Shorthorns.

We have for immediate sale several choice boars ready for service, and sows bred and ready to breed, together with a lot of beautiful pigs from two to four months old. Also a few choice heifers in calf to Donald of Hillhurst No. 44690, and a few nice bull calves and heifer calves. All correspondence answered promptly. Daily mail at our door, and prices right. **Colwill Bros., Newcastle.**

Glenhodson Yorkshires.

Sows bred to farrow in July, August and September. Young pigs from three to six months old. Pairs not akin. Satisfaction guaranteed.

GLENHODSON COMPANY, Myrtle Station, Ont. Long-distance phone at farm. **Lorne Foster, Mgr.**

For Sale—Ohio Improved Chester Whites, the largest strain, oldest established registered herd in Canada; young sows in farrow; choice young pigs, six weeks to six months old; pairs not akin; express charges prepaid; pedigree and safe delivery guaranteed. Address: **E. D. GEORGE, Putnam, Ont.**

YORKSHIRES

Two grand (imp. in dam) sows, bred to farrow in June, to a show boar; also a young litter ready to ship in April. Orders booked ahead and satisfaction guaranteed.

L. MOONEY, P.O. Box 10, Fossil Falls Station.

Elmfield Yorkshires

Have still a few choice young boars from Summer Hill Chester, some young sows from imp. sire and dam; also a fine lot of suckers coming on. A few sows 7 months old, bred again. **G. B. MUMA, Ayr P.O., Ayr and Paris stations.**

Rosebank Berkshires

FOR SALE: Young stock from six to eight weeks old, sired by Maple Lodge Doctor and Concord Professor. Some choice sows bred and ready to breed. Express prepaid.

JOHN BOYES, JR., CHURCHILL P. O., Lefroy Station, G. T. R.

IMPROVED YORKSHIRES.

LARGE Choice young stock from imported prizewinning stock for sale.

GEO. M. SMITH, HAYSVILLE, ONT.

MONKLAND YORKSHIRES

Imported and Canadian-bred.

We keep 35 brood sows, and have constantly on hand between 100 and 200 to choose from. Can supply pairs and trios not akin. Quality and type unsurpassed. Prices right.

JAS. WILSON & SONS, FERGUS, ONT., G. T. R. and C. P. R. Long-distance Phone

Ohio Improved Chester Whites

100 Pigs to Offer of the long, deep, heavy sort. Breeding stock selected from the most noted families, with a view to size and quality. Booking orders for choice spring pigs; also a few fall pigs for sale. Pairs furnished not akin. Express charges prepaid. Pedigrees and safe arrival guaranteed.

H. E. GEORGE, Crampton, Ont.

RIVER VIEW FARM

ROBERT CLARKE Importer and Breeder of **Chester White Swine** Pigs shipped not akin to each other. For price and particulars, write

41 Cooper Street, OTTAWA, ONT.

Oakdale Berkshires

Of the largest strains. Imported fresh from England. The produce of these and other noted winners for sale reasonable. Let me book your order for a pair or trio not akin.

L. E. MORSE, Milliken Stn. and P. O.

Glenburn Herd of YORKSHIRES

Now on hand, a number of sows, 5 and 8 months old, for spring farrow; also a large number of September sows and boars. Booking orders for spring pigs.

DAVID BARR, JR., Box 3, Renfrew, Ont.

GOSSIP.

Mr. Jas. Gibb, Brookdale, Ont., writes: "I have sold all my young Shorthorn bulls I advertised in 'The Farmer's Advocate.' To Allan F. Oehm, Shakespeare, Ont., went Ythan Choice, a good red bull, his dam being Lady Marquis, a daughter of Imp. Spicy Marquis; to David Peat, Ratho, Ont., a fine roan bull, Ythan's Heir. His dam is also a daughter of Spicy Marquis (imp.). This is one of the best bulls we had this season. To John Forbes, Maplewood, Ont., the red-roan bull, Ythan's First, a good, low-down, even bull. We are offering one of our stock bulls for sale, Blyth-some Ruler, two years old last February. He is a Marr Missie, and will make a good show bull, weighing 1,800 lbs., of good quality. Our young yearling stock bull, Trout Creek Stamp, bred by Mr. W. D. Flatt, Hamilton, is doing fine. He was got by Pride of Windsor, grand-sire Silver Plate of the Royal Farm, his dam being Princess of Pithvie 2nd (imp.). He is a very thick, low-down bull, and a grand handler."

BUTTER TESTS AT BATH AND WEST OF ENGLAND SHOW.

The report of the judge shows that 19 Jerseys and four South Devons competed for the butter-test prizes given by the English Jersey Cattle Society at the above show, June 1-3. The cows were stripped, May 31st at 5 p. m., the milk of the next 24 hours being taken for the test. There were two classes. One for cows, any breed or cross, under 900 lbs. live weight; and the other for cows, any age or cross, over 900 lbs. The first-prize winner in each class was a Jersey, the gold medal and first prize in the first class going to Lady E. F. Smyth for Louisiana Loo, six years old, whose yield of milk, 137 days after calving was 39 lbs. 10 ozs., and of butter, 2 lbs. 9 1/2 ozs.; ratio, lbs. butter to lbs. milk, 15.36. In the second class, D. H. Watney's nine-year-old cow, Lady Siphon, 112 days after calving yielded 38 lbs. 8 ozs. milk, and 2 lbs. 6 ozs. butter; ratio, 16.21, and was awarded first prize.

In the English Guernsey Cattle Society's test at the same show, the first-prize cow, Lady Tichborne's Ithen Lilly 2nd, four years old, won first prize, her yield of milk in the 24 hours, 69 days after calving, being 39 lbs. 10 ozs., and of butter, 2 lbs. 6 1/2 ozs.; ratio, 16.57. The second-prize cow gave, 84 days after calving, 36 lbs. 8 ozs. milk, and 2 lbs. 3 1/2 ozs. butter.

ONONDAGA SHORTHORNS AND LEICESTERS.

Onondaga Stock Farm lies on the banks of the Grand River, about 5 miles from Caledonia, Ont., and about 20 miles south of Hamilton. The owner, Mr. W. A. Douglas, is one of Brant's most progressive farmers and leading pure-bred stock breeders, his specialty being Shorthorns and Leicester sheep. The Shorthorns number about 30 head of Strathallans, Claras, Isabellas, Nonpareils, Millmers, and several others, tracing to Imp. Louisa, Beauty and Lavina, the bulk of them being the get of imported sires, notably Imp. Oxford, Imp. Sir Christopher and Imp. Rosicrucian of Dalmeny. The females are of the low-down, thick-set sort, several of them being exceedingly heavy milkers. In young females for sale are four two-year-olds in calf, two being Strathallans and two Lavinas—an extra nice lot. In young bulls, there are several, one a red yearling, by Scotland's Challenge, imported in dam, and out of a Clara-bred dam, a thick, sappy fellow, the making of a good one. Another is a roan, five months old, by Imp. Rosicrucian, and out of a Strathallan dam—a rare good calf. Another is a red five-months-old, by the same sire, out of a heavy-milking dam, also a nice thick youngster; another, same age, by same sire, out of a Strathallan cow, and a few others bred along the same lines. The Leicesters are an extra choice lot; several of this season's lambs now weighing 100 lbs., and promising to be winners sure, all of which will be for sale, and there are none better. Write Mr. Douglas to Tuscarora P. O., Ont., for prices and particulars.