

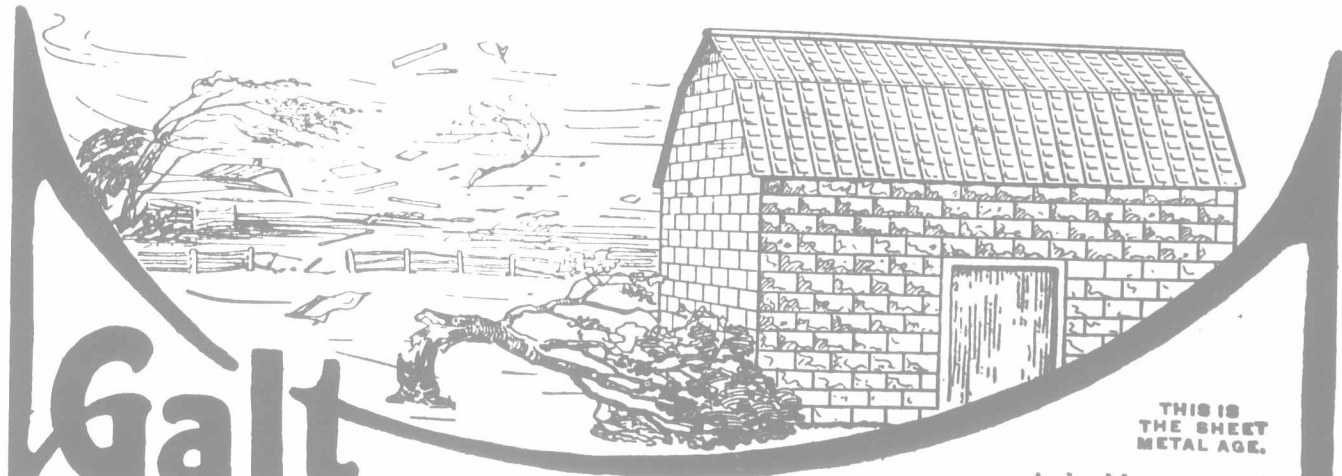
**PAGES
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TRADE TOPICS.

The attention of our readers is directed to the advertisement of the Eureka Planter Co., Limited, of Woodstock, Ont., which appears elsewhere in this issue. Their root cutters, both slicers and shredders, are claimed to be the fastest-cutting, most easily-turned machines on the market. If interested in root cutters, combination racks, or any kind of garden or field tools, their illustrative catalogue will be sent free upon request.

BOVRIL AND THE FASTING MAN.—A recent issue of the Aberdeen Evening Gazette contains a reference to the feat of endurance, the fasting man, M. Victor Beaute, was at that time attempting, and apparently with some good prospect of success. The notice reads: "Although he has been enclosed in his glass prison, at Humber's Waxwork, George Street, for 34 days, M. Victor Beaute is still alive and hearty, although he has subsisted the whole of this time on either soda water or plain water to the extent of one pint daily. Throughout the ordeal, M. Beaute has been always cheerful and ever ready to discuss any subject, besides transacting his own correspondence and keeping himself well in touch with the various topics of the world. Naturally, he has had some curious experiences since he has been cooped up in Aberdeen. Audiences, which have averaged some 2,800 daily, have different moods, according to their varied temperaments. A fairly large proportion of the visitors to the museum have not hesitated to say that the whole thing is a 'fake,' and some of their arguments for this opinion are, to say the least, amusing. As a matter of fact, the mere wasting of a strong, healthy man to the extent of over two stones in four weeks ought to convince the most sceptical among the audience that there is something in it. If this were not required, a glance at the photographs would tell the same tale. Long before the date set for breaking his fast, Mr. Beaute had received over two hundredweights of various styles of patent foods, and was amused at the rush of the various merchants for the sake of advertisement. His first meal, however, took the form of a cup of Bovril and a biscuit."

FACTS ABOUT FEEDING.—New ideas in the care and feeding of farm animals have brought to pass some radical changes in farm methods, greatly to the advantage of the farmer. The "food tonic" is a simple, common-sense proposition that the feeder of live stock will instantly appreciate once it is brought to his attention. Every feeder knows that at some point in the fattening process there may come to the animal a more or less serious digestive breakdown, caused by long-continued heavy feeding. The purpose of the stock "food tonic," then, is to correct and prevent this condition, and as the ounce of prevention is worth the pound of cure it follows that no feeder can afford to wait until the mischief is done, but should keep the digestive apparatus of his fattening cattle in a healthy condition from the start by the use of the tonic. Experiments indicate that a "food tonic" containing the bitter principles which aid digestion, iron for the blood and nitrates which cleanse the system, is especially beneficial in preserving perfect animal health. By acting directly upon the digestive organs, it enables a fattening steer to consume, day after day, large amounts of grain, and, of course, lay on flesh rapidly. To the cow in milk, the result is the same, except that the increased assimilation of food is secreted as milk rather than fat. To horses, the "food tonic" is very valuable. General good condition is always present where it is given, and, in fitting for market, it gives most successful results. Sheep, hogs and lambs grow more rapidly where a very little is given in daily doses, and tip the scale at a better figure when market day comes. These statements go to show how vitally the farmers' interest is associated with the "food tonic" idea. Such men as Professors Winslow, Quitman and Finley Dun indorse its ingredients, and successful men are using it.



Galt Steel Siding

THIS IS THE SHEET METAL AGE.

A building roofed with Galt "Sure-grip" Shingles, and with its sides protected with Galt Steel Siding, will come through a hurricane unharmed, while other buildings will be badly shattered, if not demolished.

Galt "Sure-grip" Shingles are locked together so securely and lie so closely to the roof that they leave no opening for the wind to get under and rip them off.

Galt Steel Sidings are wind-proof, too. They don't shrink; leaving cracks for the wind to sneak in, as does lumber, particularly the unseasoned kind which no gets nowadays.

Warmer than wood—and at no greater cost. Fire, wind, water and frost proof. Galvanized or painted. Handsome as brick or stone.

Complete information in our Free Illustrated Catalogue.

THE GALT ART METAL COMPANY, Limited, Galt, Ontario.

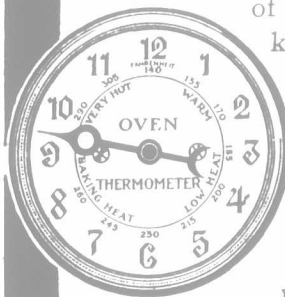


A convenience much appreciated by every owner of a Pandora is the towel rod attached to the range.

As one-third of the rod is made of emery, it makes a splendid knife sharpener, too.

It's always there handy for you. You need waste no time hunting around for the easily misplaced "steel." Bright idea, eh?

An accurate thermometer is a reliable guide to successful baking, while an inaccurate one is a "cheat" of the worst kind.



McClary's

LONDON, TORONTO, MONTREAL,
WINNIPEG, VANCOUVER, ST. JOHN, N. B., HAMILTON

When Writing Advertisers Kindly Mention "The Farmer's Advocate."

Every Pandora thermometer is carefully adjusted and undergoes a practical test by heat—is proven correct before being sent out.

The figures, which show the required degree of heat necessary for the successful baking of bread, cakes, pies, etc., are plainly inscribed in black on a white enamel surface, so that they are easily readable, even when the day is dull.

If your local dealer does not sell the Pandora, write direct for **free booklet.**

INTERESTED IN CANARIES?

People, old and young, are interested in canaries, and will read with pleasure the advertisement of W. Rudd, bird specialist, Norwich, England, elsewhere in this issue. Norwich is reputed as the world's great canary mart, and Mr. Rudd will gladly send our readers illustrated catalogues free, with diary for breeders, if they will but drop him a line, mentioning "The Farmer's Advocate."

BEAUTIFUL 1908 CALENDAR

FREE.—The attention of our readers is directed to a very handsome 1908 calendar, called "Little Miss Zenoleum's Sister." The original painting was prepared upon special order, and is owned by the makers of Zenoleum. The subject is a young lady in a rich red gown, embellished with a magnificent set of ermine furs. She is the handsomest girl of the season. The subject is modest and chaste, and worthy of a place among the pictures of the home. Send for one of these calendars at once. You will be proud of the picture, and the calendar will certainly prove of use for the next twelve months. This calendar will be mailed absolutely free if you will address the Zenner Disinfectant Company, 112 LaFayette Ave., Windsor, Ont. As a limited number only are to be given away, haste is suggested in writing. First come, first served.

A well-known bishop relates that while on a recent visit to the South he was in a small country town, where, owing to the scarcity of good servants, most of the ladies preferred to do their own work.

He was awakened quite early by the tones of a soprano voice singing "Nearer, My God, to Thee." As the bishop lay in bed he meditated upon the piety which his hostess must possess which enabled her to go about her task early in the morning singing such a noble hymn.

At breakfast he spoke to her about it, and told her how pleased he was.

"Oh, law," she replied, "that's the hymn I boil the eggs by; three verses for soft and five for hard."

"Say," asked the house sergeant, "what was the complaint that Boston woman made agin her husband? Drunkenness?"

"Search me," replied the patrolman. "She said he was 'addicted to continuous alcoholic obfuscation.'"

Gerhard Heintzman Pianos

Give the fullest measure of value to the purchaser. Evenness of tone, found only in instruments of the highest grade, is a marked quality in the "Gerhard Heintzman."

Clarity, Sweetness, Volume

together with remarkable sustaining power, stand pre-eminent in the "Gerhard Heintzman," admitting of the most satisfying effects in "tone color" Possesses none of the confusion of sounds so often noticed in pianos of ordinary merit.

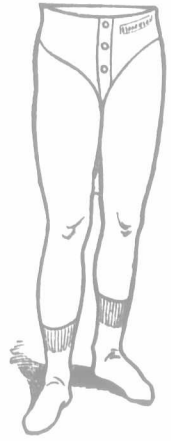
Artistic in design, the "Gerhard Heintzman" is constructed in a manner that assures lasting tone quality.

Write for catalogue and particulars as to easy terms of payment.

Gerhard Heintzman, Limited

97 YONGE STREET, TORONTO.

Hamilton Salesrooms: 127 King Street, East.



Of course you can get your size in Stanfield's Underwear.

Every garment is cut to measure — is accurately tested on models—and its size exactly found.

Stanfield's Underwear comes in all sizes from 22 to 70 inches.

Three weights, too.

Stanfield's Unshrinkable Underwear

145

Eastern Dairy School Kingston, Ont.

Regular courses begin immediately after New Year's.

School will operate as a creamery during December.

TUITION FREE.

For calendar giving full particulars regarding the courses write:

J. W. Mitchell, Supt., Kingston, Ont.

Party having one whole section and another half section of best fall wheat and mixed farming

Land in Alberta

WITHIN FOUR MILES FROM RAILROAD STATION.

Also an improved farm, two dwellings and barn, in Saskatchewan. Must have money, and will sell at a sacrifice if sold within 30 days. One-quarter cash required. For full particulars write:

Ontario & Alberta Land Co., ROOM 6, 18 TORONTO ST., TORONTO.



Hens Will Lay

all the year round—winter as well as summer—if you give them a chance. They must have the right house; they get it when you shelter them with

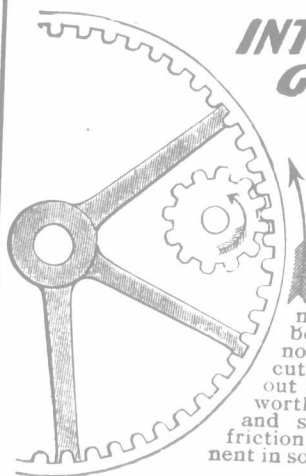
REX FLINTKOTE ROOFING

Proof against the hardest downpour and tight as a brick wall against the biggest blizzard. It can't be blown off. It resists fire. Warm in winter and cool in summer—and strong and durable all the time. Any one can put it on. Roof or sides—everything needed is in the roll except the hammer and the man. "Look for the Boy" trade mark.

WE SEND SAMPLES FREE

that will show you how good it is and a booklet on roofing that you ought to have. "Making Poultry Pay" is a booklet worth many dollars, but we send it to any address for 4 cents.

J. A. & W. BIRD & CO.
20 India Street, Boston, Mass.
Canadian Office:
29 Common Street, Montreal



INTERNAL GEAR

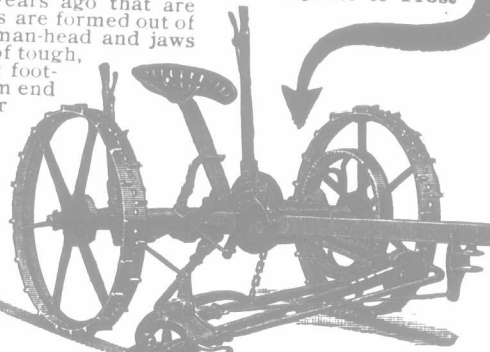
THIS GEAR GIVES INSTANT ACTION TO KNIVES

It starts them going at the same instant the big power-wheel moves; can't help it because the small pinion drives the pitman crank with no lost motion. A mower's value lies in its power to cut grass—and lots of it—quickly and continuously without a break-down. That's where our No. 8 Mower proves its worth. This internal gear works smoothly, transmits firm and steady power to the pitman. It produces almost no friction, and that unpleasant vibration and pounding prominent in some mowers is absent. The

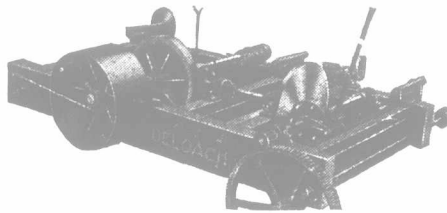
Frost & Wood No. 8 Mower

is provided with ball and roller bearings wherever any wear occurs. So carefully is the No. 8 put together and so rigorously tested at the factory that still it will be remarkable how few the repairs needed. We can point to Frost & Wood Mowers made twenty years ago that are cutting grass now. Our cutter-bars are formed out of the toughest steel procurable. Pitman-head and jaws are forged steel. Pitman is made of tough, seasoned hickory. The convenient foot-lift raises the whole cutter-bar from end to end when passing stones or other obstructions.

Mr. Farmer, this is the mower for you to own—it's economy, wisdom and foresight—an insurance against worry. Send now for our "Farmers' Ready Reckoner" and catalog "F"—both free. Our agent in your vicinity will gladly explain our mower and other farm implements. Be free to ask him any questions.



The Frost & Wood Co., Ltd., Smith's Falls, Canada



THE ORIGINAL DeLOACH SAW MILL

For 25 Years the Standard. Copied by Many. Equalled by None MILL MACHINERY OF ALL KINDS Engines, Boilers and Gasoline Engines We Pay the Freight. DeLoach Mill Mfg. Co., Box 351, Bridgeport, Ala.

When Writing Advertisers Please Mention this Paper.

DON'T BUY GASOLINE ENGINES UNTIL YOU INVESTIGATE "THE MASTERWORKMAN."

alcohol engine, superior to any one-cylinder engine; revolutionizing power. Its weight and bulk are half that of single cylinder engines, with greater durability. Costs Less to Buy—Less to Run. Quickly, easily started. Vibration practically overcome. Cheaply mounted on any wagon. It is a combination portable, stationary or traction engine. SEND FOR CATALOGUE THE TEMPLE PUMP CO., Mrs. Meagher and 15th Sts., Chicago. THIS IS OUR FIFTY-FOURTH YEAR.

Catch 'em and Hold 'em.

THE NEWHOUSE TRAP

is absolutely reliable. Never fails to hold the game. Positive in action, easy to set, will not get out of order.

Made in all sizes to catch anything from a rat to a bear.

Send for Catalogue

ONEIDA COMMUNITY, Ltd.,

Niagara Falls, Ontario



The Farmer's Advocate

and Home Magazine

"Persevere and Succeed."

Established
1866.

Vol. XII.

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1876.
LONDON, ONTARIO, NOVEMBER 14, 1907.

No. 790.

EDITORIAL.

APPROACHING OPPORTUNITIES.

The present may well be regarded as, in many respects, a period of transition in agricultural conditions, in the experience of farmers, from the somewhat easy-going methods of the past, to a more intensive and businesslike management, in which thorough cultivation, economy of time and well-directed labor shall receive greater attention and consideration than has hitherto been the case. The up-to-date farmer must be alert to the changes in the tastes and demands of the people to whom he caters in the branch or branches of the business he has chosen as his specialties. While, as a rule, there is wisdom in adhering to the class or breed of live stock, or of crop production, one has adopted, and seeking to excel in that line, in the belief that, in any specialty in business there is always room at the top or near it, circumstances are liable to occur rendering a change of procedure not only justifiable, but, in view of the circumstances, commendable and wise.

The man who has secured a widespread reputation may retain his hold upon the market fairly well throughout the ups and downs which are liable to come to pass in time in the experience of a breeder or a grower of any special class of product, and may, provided he is endowed with tact, good judgment and ability as a salesman, hold his own through a temporary business depression, come through it safely, and rise with the rebound to even better things than before. But, lacking the advantages and gifts afore mentioned, the average breeder or farmer, when markets, labor and other circumstances indicate the probability of better results financially, by changing, for instance, from beef-raising to dairying, or vice versa, may greatly improve his conditions, as has been the satisfactory experience of many.

The economical utilization of fodder and other classes of feed for stock in a year such as the present, when feed in many districts is scarce and prices ruling high, is a subject that may well engage the attention and consideration of every farmer at the present juncture. To so prepare and dispense the available supply as to make it go the farthest, while keeping up the condition and capacity of the animals for profitable production of meat or milk or work, is, at any time, a study well worthy of mature thought, but especially so under the conditions of scarcity many farmers are facing just now. That a substantial saving may be effected by careful handling, preparation and dispensing of the supply, has been proven by many farmers in a time of scarcity, while, in years of plenty, when it has been dealt out lavishly, little has been left at the end of the winter feeding period.

The winter is a favorable season in which, by reading and study, to obtain an intelligent knowledge of the composition and comparative feeding values of the various stock foods raised on the farm or placed on the market, and of the proportions of each required to constitute a balanced ration, and an economical mixture for feeding to produce the desired results.

To this end, no better school is available than that afforded by the Winter Fairs, at which are provided not only helpful addresses, presented by scientists and practical men, relating their own experience and the results of their methods, but the opportunity is at the same time and place afforded to study the most approved types of animals for profitable production of meat or milk, and also to compare the living animal and its dressed carcass, and to learn the comparative market values of different classes or types. These

Fairs, and the free short courses for farmers provided by the Agricultural Colleges, lasting only two or three weeks, are inexpensive opportunities for gaining information which may be profitably utilized. These, together with the advantages afforded by associations, conventions, and the Farmers' Institute system, for personal discussion, the many good books available, and the regular visits of farm journals, in which practical farmers relate their experience, and scientists who have applied the tests of observation, analysis and experimentation, freely answer questions, giving advice and reasons for their conclusions—all combine to place within reach of the farmer helpful information, some of which may suit his individual conditions and circumstances, and may be turned to profitable account. The time has surely passed when farmers can afford to discount the aid afforded by science, invention and discovery placed before them at so little cost to themselves, and it is gratifying to observe that "book-learning" is no longer despised so generally as formerly, but that, intelligently selected and studied, it is accepted as helpful in the prosecution of the most important of human occupations, the management of a farm.

AMERICAN AGRICULTURE THROUGH SCOTTISH EYES.

From reviews of his standard volume in relation to the farm live stock of Great Britain and other portions of the Empire, published in these columns from time to time, "Farmer's Advocate" readers are tolerably familiar with the name and work of Prof. Robert Wallace, of the Department of Agriculture and Rural Economy in the University of Edinburgh, who, during the past summer, paid Canada and the United States an extended visit. Since his return to the Scottish seat of learning, he has begun to make good use of the stores of agricultural impressions gathered during his journeyings on this continent. In opening what is called the Garton course of lectures on Colonial and Indian Agriculture, he told of his visit to the numerous agricultural colleges and experimental stations in America, and outlined the nature of the educational and research work being carried on. It is gratifying to know that so learned and capable an observer as Professor Wallace has earned the reputation of being, was, on the whole, favorably impressed with the activity and efficiency of the various institutions visited, and, above all, with the generous part which the American Government plays in promoting and assisting agricultural education and investigation. The Agricultural Department at Washington he describes as the greatest government organization of its kind in the world. He does not think that the agricultural resources of America are approaching the limit of development. His version is that a vast amount of uncultivated land exists in almost every State in the Union—land which will grow profitable crops when the pressure of population makes it necessary. Undoubtedly this is true, as was emphasized in our review of the Syracuse, N. Y., speech by Secretary Wilson last week, and we shall see the course of events taking place in Canada. At the same time, Prof. Wallace says that the boundaries of the areas of cultivation are being extended by the efforts of the Irrigation Division of the Department on the one hand, and of the Dry Land Division on the other. Apparently, the farmers in the rainless districts, guided by the pioneer efforts of the State Department, have succeeded in overcoming many of the initial difficulties. By giving special attention to the cultivation of the surface soil, they manage to restrict evaporation,

while, by the enterprise of the Plant Introduction Division of the Agricultural Department, in selecting and improving plants adapted to the conditions, the natural disadvantages under which they labor have been greatly mitigated.

TOO BUSY TO MAKE ROADS!

A special correspondent of the London (Eng.) Times, as a result of a most painstaking tour through the Dominion, reaches the conclusion that nothing in Canada is more striking to a stranger than the attachment of the people, not only to the country itself, but to the particular part of it in which they happen to dwell. He finds it the same from one end of the land to the other, and this national and civic pride he regards as the outstanding characteristic of all Canadians, being one of the best proofs of the confidence which they feel in their country. This confidence is largely due to the remarkable development of industry and agriculture in recent years. As incidental examples of town growth, the Times correspondent cites Port Arthur and Fort William. In 1901 the former had a population of but 3,000, which last year had grown to over 10,000, while Ft. William had expanded from some 4,000 to about 13,000. He describes these towns as well supplied with power from the beautiful Kakabeka Falls and other sources. They are well lighted with electricity, and possess a good system of electric street railways, and appear, in "almost every other respect," to be efficiently equipped. Just here, however, the proverbial fly in the ointment makes its appearance, for the Times correspondent notes, with pain, that, in common with most Canadian localities, these towns are lamentably defective in the matter of roads. He was told that Canadians "had no time to make roads." It may be so, he comments, but when they find time to make so many other civic and municipal improvements, he could not but regard as a serious blemish the state of the public highways in many flourishing centers of population, and, had he visited many rural districts, his impression would not have been any more favorable. The condition of our civic streets and rural roads are confessedly a bad advertisement of the country, and the wonder is that the taxpayers have so long tolerated a system of mismanagement which gives them so little facility and comfort for their money.

THE FOUR-HORSE AGE.

The farm-labor problem is being reduced to a matter of mathematics. Briefly, the question may be epitomized thus: With wages at \$1.50 to \$2.00 per day (counting board), can a farmer afford to have one man following a walking plow drawn by two horses, when experience proves that any reasonably capable man can do twice as much work equally well or better by using four horses on a two-furrow or three-furrow riding plow? Each year an increasing number of Canadian farmers answer this question wisely by investing in the faster-working implement. Time was when Ontario farmers deemed the four-horse plow practicable only on the plains. Necessity has brought us to view the matter differently. By clearing obstructions from the fields and removing cross-fences, we have fitted our farms for the advantageous use of fast-working implements, and, by gradually introducing these into our farm practice as opportunity offers, we are increasing the earning capacity not only of the men we hire, but of the time which we, as employers, spend on our own farms. It has cost us something in money and convenience to make the

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:
37 W. CHAPMAN, Agent, Mowbray House, Norfolk Street,
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- THE FARMER'S ADVOCATE AND HOME MAGAZINE is published every Thursday.
- It is impartial and independent of all cliques or parties, handsomely illustrated with original engravings, and furnishes the most practical, reliable and profitable information for farmers, dairy-men, gardeners, stockmen and home-makers, of any publication in Canada.
- TERMS OF SUBSCRIPTION.—In Canada, England, Ireland and Scotland, \$1.50 per year, in advance; \$2.00 per year when not paid in advance. United States, \$2.50 per year; all other countries 12s.; in advance.
- ADVERTISING RATES.—Single insertion, 25 cents per line, agate. Contract rates furnished on application.
- THE FARMER'S ADVOCATE is sent to subscribers until an explicit order is received for its discontinuance. All payments of arrears must be made as required by law.
- THE LAW IS, that all subscribers to newspapers are held responsible until all arrears are paid and their paper ordered to be discontinued.
- REMITTANCES should be made direct to us, either by Money Order or Registered Letter, which will be at our risk. When made otherwise we will not be responsible.
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- LETTERS intended for publication should be written on one side of the paper only.
- CHANGE OF ADDRESS.—Subscribers when ordering a change of address should give the old as well as the new P. O. address.
- WE INVITE FARMERS to write us on any agricultural topic. We are always pleased to receive practical articles. For such as 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.
- 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.

change from two-horse to four-horse facilities, but the farsighted farmer has not been so very hard pinched, and now that things are becoming more thoroughly adjusted to the newer scales of wages, employers are surprised to find themselves actually better off than before. The labor problem, by hastening the adoption of improved methods, is working out to be a distinct boon to farmers, as well as farm laborers. It is raising the average of accomplishment on the farm, thereby enhancing the wages earned and elevating the level of farm work, farm profits and farm life.

Yet it is surprising how prone we are to make advances piecemeal. One would think the lesson of the past decade had been impressed with sufficient force to make us all anxious to economize labor to the fullest possible extent. One would think every enterprising farmer would desire, at least, to double the earning power of every day's labor applied to the land. But, strange as it appears, many have imposed new handicaps upon themselves by half-way measures, stocking up with implements only a little more efficient than the ones discarded. This means that before long another sacrifice must be made, by discarding these and purchasing others still faster. The day of the two-horse team for ordinary farm operations is rightly regarded as past, but the man who discards two-horse implements, only to take up with the three-horse outfit, is making a costly mistake. This is the four-horse age.

The prices prevailing for farm products of nearly every description at the present time should serve to make farmers wear the smile that stays, and to render them serenely satisfied with their calling and conditions. Surrounded with plenty of the good things of life, and receiving good value for their surplus, they certainly have no reason to envy the dwellers in town who are paying the ruling prices for food supplies.

OUR MARITIME LETTER.

THE SITUATION AS TO FRUIT.

Without any doubt, the past season has been a peculiar one in its relation to many of the products of the soil, but especially as regards fruits. Hopefully, every fruitman in the Dominion saw the trees of his plantation burst into profuse bloom in the spring; less hopefully did he observe the fixing of the fruit itself, and, after infinite pains and a care altogether worthy of better things, were these hopes, long entertained, of a fair return, at least, when the packing season came round, blasted by the September gales, which strewed the country with immature apples, useless for any commercial or culinary purpose, whilst still colder winds and snowfalls encompassed the remnant ultimately in ruin. Apply the disgust and disappointment which must have seized upon the vinters of the Niagara Peninsula, a few weeks ago, when their bountiful crop of grapes was attacked by severe frosts and destroyed in a night, they being helpless to save it, to the fruitmen of Canada, and you have the feeling which is uppermost in most places at the present moment.

And still there are sections which rejoice in a bumper crop. The great Valley of Annapolis, in Nova Scotia, from the days of the gentle Acadian famous for its apple production, this year, while all the rest of Canada is pinched for fruit, rejoices in the best harvest in its history. It is a grand thing to have a big crop any year; it is a doubly satisfactory condition when the whole market is your own, and, as a consequence, prices are at your placing.

"Many of the fruit-growers of Nova Scotia are, this year," writes Chief McNeill to us recently, "netting from one to three hundred dollars per acre off their orchards. This will pay them if they do not have another crop for five years, but the chances are that they will have from fifty to one hundred and fifty dollars per year regularly. I have just returned from a trip through the Valley, and have not visited a single well-kept orchard where the profits are not extraordinarily large. Prince Edward Island can do just as well, and there is no reason why they should not share in this industry."

Well, whilst we are not envious of our sister Province by any means, and whilst we would not throw all the dollars they are pocketing over our shoulder, either, we are not in the fruit circle this year, have not been for several years back, and are perhaps a little cool and unsympathetic on the fruit situation generally. We have no fruit to sell—not enough for ourselves—and, as we are a Province of apple-eaters, we will be forced to inflict even more of our dollars on our friends across the Straits for even what will furnish the requisite sauce for the Christmas goose. What is the matter with us? We don't exactly know. It is only the weather prophets that know it all; and the sort of article they provided this spring, especially in pollination time, was not calculated to inure to the perfecting of fruit. True, in some sheltered places—a proof of the disadvantages of denudation of the forest—there is a good catch of apples reported; but the cold, damp, mist-laden days of May, where such protection failed, blotted out conclusively fruit prospects, so far as the pomifers were concerned, at least. We may do better next season; we must not be cast down. Indeed, Mr. McNeill writes, exhorting us, on the very data above given, to go into great plantings here, as we stand to profit by horticulture more than anything else in sight.

Without doubt, we want co-operation here before fruit-growing can be intelligently and profitably prosecuted. We all know this, but we are not all so completely convinced as to the quality of co-operation we need. Some pooh-pooh the very thought of general co-operation until we get great stretches of fruit trees in bearing, as great as the orange groves of California. We are not of this class. The same tactics obtained when we attempted co-operative dairying. "Oh, let us wait until we improve our herds," the unprogressive cried out at every corner. We made the plunge; it has been decidedly for the better; many have improved their herds under competition who would otherwise never have known what they had. So will it be with the fruit. Let us

only get on to a mutual agreement to raise and sell fruit under the same favoring conditions, and the industry will go ahead with leaps and bounds. We want to equip the whole co-operation circle—buy the stock, plant it, spray it, gather the apples, pack them, ship them, sell them that are fit to sell after ciding, evaporating, and jamming the refuse, and give the money that is in them to whoever owns it. They are doing this everywhere else; Nova Scotia has adopted this plan, and is prospering under it as she deserves.

"Co-operate first," says the Chief, "in buying stock. Get your committees struck at the annual meeting of your association. Take orders for stock, and send them to reliable houses. Get the trees in; the rest will follow." We are not so sure about that. Planting is no doubt commencing at the bottom, and all industries must be well planted; but there is organization needed, to co-ordinate in the produce of what we already have and turn it to some profit, otherwise a proper spirit cannot be breathed into things. If that were done, we believe the planting would quickly look after itself. Then, what of the nursery competition? In any case, the department formally charged with the encouragement and extension of horticulture should take some practical steps to bring about whatever co-operation is deemed requisite in the premises. They did it with dairying; the fruit business is important enough to engage their serious attention now.

The New Brunswick apple crop is small, but of late years they have shown that they can grow good fruit and improve it to a paying basis. The Province is large and the fruit sections widely separated. They want paternal treatment, too. Organized Ontario can do without much direction of the primary sort; indeed, it resents the officiousness of Dominion experts. British Columbia is organized on the American plan, and with American co-operation, whether for woe or for weal. Let the Division devote more time, then, to the Maritime Provinces, where the people look for assistance, and where it is likely to be fraught with great good. The holding of National Councils biennially, at least at Ottawa, and the overseeing of the packing-houses, will be about all the great Provinces will exact federally. This fruit interest is an immense thing; it wants systematizing badly. Let the parties formally intrusted with the work by the nation get busy, and, even in such adverse years as this, Nova Scotia will not alone be gathering in the shekels.

A. E. BURKE.

HORSES.

LAMENESS IN HORSES.

RINGBONE.

Ringbone is a term applied to a bony deposit situated between the fetlock and coffin joints. The deposit may encircle the whole limb, or may be noticeable only on one or both sides, or in front only, but is called ringbone in all cases.

Ringbone is of two kinds, true and false. False ringbone is an exostosis (a bony growth) on the bone between the fetlock and pastern joint, but does not involve either joint, and does not cause lameness except in very rare cases, when it is very large. Some consider that it does not constitute unsoundness, but, as there is a danger of the growth extending and involving the joint, we think a horse affected should be considered unsound.

True ringbone is one in which either the coffin or pastern joint, or both, are involved. When the coffin joint is diseased, it is called low ringbone, and when the pastern is the seat, high ringbone. By involving the articulations, these cause more or less acute, obstinate, and, in some cases, incurable lameness. Ringbones, whether high or low, vary greatly in size, but the degree of lameness is not by any means indicated by the size. An animal with but a small deposit may go very lame, while another with a large growth may show little lameness.

Causes.—In most cases there is an hereditary predisposition, and if the pedigree of the animal affected can be traced back for several generations, it will generally be found that an ancestor more or less remote suffered from the disease. It is usually caused by simple concussion during progression. By this means inflammation is set up in the inner (called the cancellated tissue) structure of the bone. This extends and involves the outer structure (called the compact tissue); an exudate is thrown out which becomes converted

into bone, causing the visible enlargements. When a joint is involved, the cartilage covering the ends of the bones is destroyed, and this causes acute lameness. While it is doubtless possible for a ringbone to result from an external injury, as a kick, blow, etc., it is very seldom such occurs.

Symptoms.—In the majority of cases lameness is irregular, very acute occasionally, not well marked at times, and sometimes entirely absent in the early stages, but as the disease advances and the joint or joints become more thoroughly involved, lameness becomes permanent, and more or less acute. In cases where the coffin joint (which is situated within the hoof) is diseased, lameness is often apparent for considerable time before any enlargement can be noticed, as there is no visible enlargement until it extends up the pastern bone and shows above the hoof. Lameness from this cause is often hard to diagnose, as there is no visible cause; but the enlargement will soon become apparent, when the diagnosis can be confirmed.

The somewhat common idea that ringbone is due to the presence of some abnormal organ or object called "the feeder," and that the removal of this, by cutting into the fetlock pad and dissecting out a small quantity of fat or other tissue, is, of course, totally without foundation. Ringbone is purely a disease of bone; it originates in bone, and, while it involves and in many cases destroys other tissue, it is essentially a bone disease, and should be treated as such.

The inflammatory action continues, and the exudate thrown out becomes ossified (converted into bone). When the articular cartilage of a joint is involved, it becomes destroyed, and, as the process of ossification continues, the bones of the joint become united (this process is called ankylosis), and, of course, ceases to exist as a joint, the bones being united into one. When ankylosis has become complete, inflammation subsides and lameness ceases. There may be faulty action, owing to the stiff joint, but pain is no longer present, and the animal will go practically sound, notwithstanding the absence of the joint.

Treatment.—In treating a case of ringbone, the practitioner aims at curing the lameness only. He does not attempt to remove the enlargement. The enlargement is a growth of bone; the bone is diseased to its innermost parts, and a little consideration will convince an intelligent man that it is impossible to effect a removal of the enlargement. Treatment should be directed to the hastening on of the process of ankylosis, for, so long as this is not complete lameness will be shown. This is done by counter irritation, in the form of blisters or firing, which sets up a superficial irritation, increases the internal inflammation, and thereby hastens the subsidence of the same. In quite young animals repeated blisterings may effect a cure, but in the majority of cases it is better to fire and blister at once. This should be done by a veterinarian. It is often noticed that the patient will continue to go lame for considerable time, sometimes for eight or ten months, or even longer, after the operation, as the process mentioned is often slow. When a recovery has not taken place in ten to twelve months, it is well to fire again, and if this fails to effect a cure, we may decide that the case is incurable, and the only means of removing the lameness is by the operation of neurotomy, which consists in removing the nerve supply to the foot. This operation can be performed only by a veterinarian. It does not cure the disease, but cures the lameness by removing sensation. As the process of decay and repair goes on in the foot after the operation in just the same manner as before the operation, and the animal will not show any symptoms of pain, and hence is liable to become totally useless, from various causes, it is not considered wise to operate except in cases where the animal is practically useless from severe lameness. "WHIP."

CO-OPERATIVE HORSE INSURANCE.

Every season "The Farmer's Advocate" receives numerous requests for the address of a firm who will undertake to insure stallions. While there is an English company with a Canadian agency, which assumes such risks, it is by no means anxious to engage in the business, and declines to push it, in Canada, at least. The lack of any active private enterprise in this direction, suggests the question whether some co-operative scheme for horse insurance might not be devised. In Europe, it is said, associations for the mutual insurance of all kinds of live stock, on co-operative lines, are to be found, organized into federations, thereby strengthening themselves to meet an epidemic of disease in any particular locality. The principles on which such associations are conducted insure great economy, and thereby admit of very low premiums.

In a recent number of the Journal of the Board of Agriculture (British), we were interested to observe a rather full account of a co-operative insurance organization called the Newark Horsekeepers' Insurance Company, Limited, the nineteenth annual report of which had been recently issued. Established about 1840, this undertaking

was successfully carried on as a voluntary association until 1898, when it was reconstructed and incorporated.

The objects are set forth in the prospectus, as follows:

1. To provide veterinary attendance in all cases of illness to animals insured with the company within a radius of eight miles.

2. To pay to the insurers two-thirds of the market value of the animals insured, in case of death by accident or by natural causes.

The rates charged range as follows, according to a definite scale: 2s. 2d. per quarter for an animal valued at £7 10s., £5 payable at death; 5s. 9d. for one valued at £20, £13 6s. 8d. payable at death; 17s. 6d. for one valued at £60, £40 payable at death. For animals of greater value than £60, a special rate is quoted on application. These premiums entitle the insurer to free veterinary attendance and medicine, should such be required, during the period covered, and members are further entitled to the services and advice of the company's veterinary surgeon at a reduced fee of 5s. when purchasing a horse.

The first balance sheet issued, covering the period from 3rd March (the date of incorporation) to 31st December, 1898, shows that the enterprise began well under the new conditions, with a paid-up capital of £410 in £1 shares. The directors were able to write off £32 8s. 6d. from the promotion account, and, after paying over £83 10s. for losses incurred by members, in addition to management expenses, were in a position to declare a dividend of 6 per cent., a rate which has been consistently maintained ever since.

In 1900, a portion of the available balance and the reserve fund was credited to members in a further allotment of shares. In the following year the directors determined to make a final allotment of shares out of the balance of profit, in proportion to the amounts paid in by members, when, all members having a fractional part of £1

horses insured, £1 5s. from entrance and transfer fees, £4 7s. 6d. from sale of carcasses, and £19 19s. 5d. interest from deposit account. In addition to the sums distributed as interest on capital, and in payment of bonuses, £21 was paid in directors' fees, £22 12s. went to the secretary and collector, £2 2s. to the auditor, and £60 11s. 10d. to the veterinary surgeon.

Since the formation of the Association as a company, £41 19s. has been paid as income tax, which would have remained to augment profits had the members in 1898 registered under the Industrial and Provident Societies Act. An association so registered could have continued to increase its capital to any extent, and strengthened its position by placing the sums paid out as bonus to increase the members' share capital. The number of members now stands at 121, the market value of the horses insured at £3,505, and the claimable value at £2,336 15s. 4d.

LIVE STOCK.

NATIONAL LIVE-STOCK ASSOCIATION.

A meeting of the executive committee of the National Live-stock Association of Canada was called for November 7th, to make arrangements for another general meeting of the main organization, to be held in Ottawa, probably during February next. It was mainly through the instrumentality of this body that the present National Record system of Canada was promoted, and, while its control is not vested in this Association, but under a Board directly representing the various breed-record associations, there will doubtless be some review of or allusion made to the workings of the new system. The convention, which will be composed of representatives of the live-stock and other organizations in all the

different Provinces of Canada, will have to deal chiefly with other problems affecting the importation, export, transportation, inspection and quarantining of pure-bred and other stock. Grievances from time to time crop up in connection with the administration of regulations for the preservation of the health of live stock, transportation charges, and the care of animals in transit over the railways. There is also the pressing need for a more rigid and uniform regulation regarding the registration certificates of breeding stock coming into the country duty-free, and for the general adoption of the rule requiring all pure-bred stock competing for prizes to present certificates of registration in the National Records of Canada. It is, therefore, advisable that careful preparation should be made in all the Provinces, not only for the selection of clear-headed and representative delegates, but by careful collation of the facts bearing upon cases to the problems dealt with. A thorough consideration of some of these in advance will facilitate their adjustment upon a more satisfactory basis than when hastily improvised on the eve of a great gathering like the one to be called. If "The Farmer's Advocate" can be of assistance in the ventilation and solution of substantial grievances, our columns are open for that purpose.



Farm Pets. Photo by R. R. Sallows.

to their credit, after allotment of share or shares, were entitled to either pay the difference to make up a full share, or have such fractional sum paid over to them. The paid-up capital thus rose to £647, at which it remains.

In 1902 the directors were able to pay a bonus of 10 per cent. to policy-holders, as a rebate on their premiums. This was repeated for 1903, and was increased to 20 per cent. for 1904 and 1905. At the close of last year, however, owing to the losses being the heaviest so far experienced, the bonus was reduced to 5 per cent.

The losses from year to year have been as follows:

	Average	
	Payments Made.	
	£	s. d.
1898.....Six	13	4 0
1899.....One	15	6 0
1900.....Five	10	0 0
1901.....Six	9	6 0
1902.....Six	10	3 0
1903.....Five	13	0 0
1904.....Four	9	5 0
1905.....Two	9	2 8
1906.....Seven	9	10 0

The balance sheet just issued shows: Assets—£697, cash on deposit in local bank; ditto, on current account, £121 6s. 1d. Liabilities—Capital, £647; reserve fund, £115. Profit and loss account, £56 6s. 1d. During the year £208 5s. 7d. was received in premiums on account of 183

tion by exhibition associations of the rule requiring all pure-bred stock competing for prizes to present certificates of registration in the National Records of Canada. It is, therefore, advisable that careful preparation should be made in all the Provinces, not only for the selection of clear-headed and representative delegates, but by careful collation of the facts bearing upon cases to the problems dealt with. A thorough consideration of some of these in advance will facilitate their adjustment upon a more satisfactory basis than when hastily improvised on the eve of a great gathering like the one to be called. If "The Farmer's Advocate" can be of assistance in the ventilation and solution of substantial grievances, our columns are open for that purpose.

A SATISFACTORY SHEEP-RACK.

Editor "The Farmer's Advocate":

I herewith send a sketch of a sheep-rack which I have used for years, and never found a better. Take two inch boards, 12 in. by 12 ft. long; nail them together to form a half square. Take two blocks, one for each end of rack. Put the boards on the blocks open side down, then lay a board 10 or 12 inches wide alongside the others, with a narrow strip nailed on the outside edges; then you have the bottom. Take a piece of board, put on a cross-piece in the form of a T. Cut a notch near the ends of cross-piece, about 1/4 inch deep and four inches wide, to keep the racks from sliding off. Then cut two notches five or six

inches from center of cross-piece. Nail these (the T's) on the blocks at the ends of the boards. Then take four pieces of scantling, 2 by 4 in., for your racks. Make the rails of 1-in. hard wood. Bore the place for them in the scantlings with a $\frac{1}{4}$ -in. bit. Put the spaces 4 or 4 $\frac{1}{2}$ in. wide, or just wide enough to prevent the sheep putting their heads through. Make the rack 2 $\frac{1}{2}$ or 3 ft. deep. Now hang your racks on the crosspieces of the T's. Draw the racks out to the outside notches, then put in the feed. Push the top of the racks into the inside notches. Then, the racks close in as the sheep eat the feed, and the grain drops into the troughs below. The sheep have no trouble getting the feed, as the racks keep closing in as the sheep eat the feed. We feed our sheep in the morning on unthreshed peas—the best way to feed them grain. Place the rack in the pen so the sheep can go round it, and there will be no crowding.

Victoria Co., Ont.

SAWDUST AS BEDDING.

The problem we have to solve this coming winter in our district, as in most of Ontario, is how to provide sufficient feed for stock and find bedding for them as well. Can you or any of your readers give any information as to sawdust for bedding purposes? How will the sawdust act as manure? I have had no experience in this; if the sawdust deteriorates the value of the droppings from the animals, I cannot afford to lose that.

SUBSCRIBER.

Ans.—Sawdust makes a first-class bedding material, and farmers in the neighborhood of sawmills will do well to make liberal use of it this year and save their straw for feeding. In tests of bedding materials at the Maryland Experiment Station, it was found that 11 pounds of sawdust per day kept a cow as clean as 2.4 pounds of uncut wheat straw; that is to say, about the same bulk of each was required. Sawdust was very satisfactory as a bedding material; it kept the cows clean, stayed in place well, and was free from dust. Shavings also gave excellent satisfaction, being preferred to straw. Incidentally, it may be in order to note that in these experiments long straw kept the cattle rather cleaner than cut straw, although the absorptive capacity of each was the same. In other words, if the object were merely to soak up all the liquid, one was as valuable as the other, but where the aim was to keep the animals clean with a minimum of litter, there was a loss, apart from the cost of the work, in cutting.

Our friend need have little fear of the sawdust lessening the value of this manure. While the fertilizing constituents in the sawdust itself are inconsiderable, it is beneficial, in that it absorbs the valuable urine, and thereby helps to conserve the full fertilizing value of the animals' excreta. True, it is sometimes objected that in light, sandy soils the sawdust litter does not decay quickly enough and keeps the soil too loose, but this objection would not be very general. On clay land, the presence of the sawdust might be an advantage, tending to open up the texture somewhat. If one does not require to use sawdust alone, so much the better. Let him get what he needs and use it to supplement the supply of straw.

The daily use of a pint or so of ground rock phosphate in the gutter behind each cow is also advised as a means of increasing the value of the manure by helping to absorb the liquid and adding to the phosphoric-acid content.

FEEDSTUFFS MAY COME DOWN IN PRICE.

Editor "The Farmer's Advocate":

The number of cattle fed in our locality this year will be very many fewer than last year; I should say not over one-half. There are very few good feeders to be had, and these are as high as last year, but poor ones are very cheap. The most economical cattle to buy are those in good condition, well developed at an early age. Buy cattle in good condition, and look for good prices early. Values of beef cattle are expected to range high in the spring.

As preparation for winter feeding, a few try pasturing on rape, which is very good, where good grass cannot be had cheaply. We dehorn our cattle, and feed loose. For bulky food, our main reliance is corn silage, which is getting a great boom this year. We feed 30 to 35 pounds per head per day, mixed with straw cut at threshing time. Use a little meal, and some long hay fed by itself. For carrying steers over winter, our grain ration is an average of about 3 pounds per day of a mixture of oats, barley, goose wheat and millfeeds. For finishing, we start in with two pounds and increase gradually up to nine or ten pounds, making an average of six or seven pounds per head per day. Care should be exercised in buying feedstuffs just now, as, in my opinion, they may come down in price. Frozen wheat will likely be shipped in.

Huron Co., Ont.

THOS. McMILLAN.

GOOD FEEDING STEERS HIGH AND HARD TO GET.

Editor "The Farmer's Advocate":

The number of cattle fed in our locality will be about half as many as last year. Steers of good quality and in good condition are higher and harder to get than last year. Most farmers have about all they can feed of their own. I think the price of feed will make lean cattle next spring. We grow a lot of rape around Guelph to start cattle for stable and to feed lambs. I see some farmers selling their rape to drovers, rather than buy any stock to put on it themselves. Most cattle are fed tied.

For carrying steers over winter, I feed roots and straw or hay night and morning, and chaff and a little meal at noon. And for finishing, I feed meal three times a day, starting out with about half a gallon and increasing to a gallon at a feed. The nearer the finish, the heavier the meal.

Wellington Co., Ont.

J. HENDERSON.

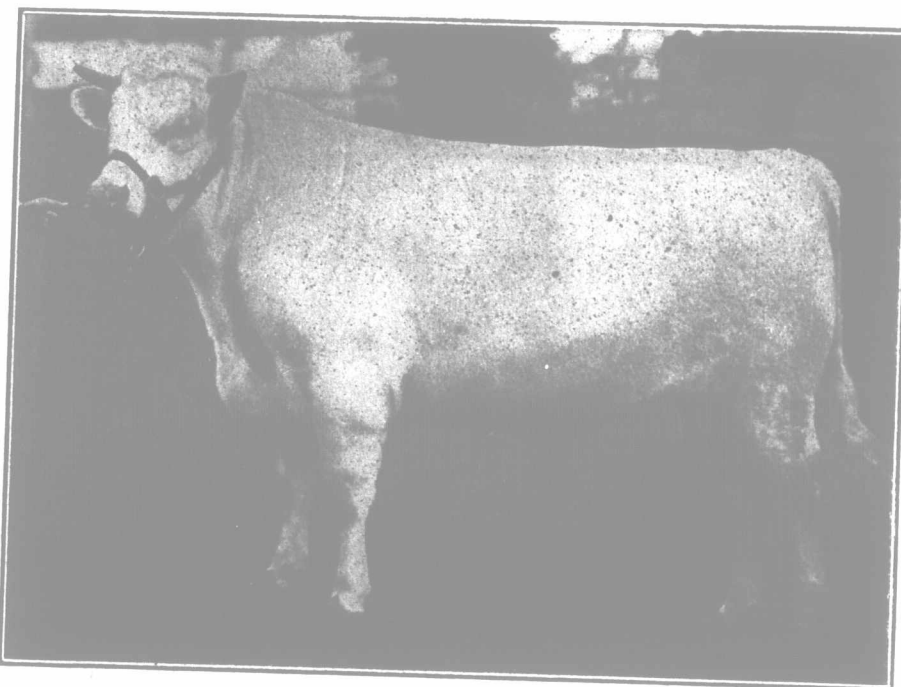
THE FARM.

GROUND ROCK PHOSPHATE AS A STABLE ABSORBENT.

Editor "The Farmer's Advocate":

Your letter, asking for my opinion with reference to the value of ground rock phosphate as an absorbent in stables, etc., has been received.

It seems to be very generally acknowledged that the bone of animals grown in some parts of the Province, and particularly with some classes of animals, is smaller than might be desired. As calcium phosphate forms seven-eighths of the ash of the bone, it is only natural to assume that



Stonecrop.

Two-year-old Shorthorn bull. First and reserve champion, Bath & West Show. Purchased by J. Deane Willis for 200 guineas at Birmingham bull sale, 1907.

possibly these districts do not produce food which is rich enough in these phosphates to produce the quality of bone required. Recent investigations in Germany seem to point to the fact that the lodging of grain is due fully as much to lack of phosphoric acid as to that of potash. If the lodging of grain can be taken as an indication of the deficiency of the soil in phosphoric acid, we must conclude that much of our land in this Province is lacking in this constituent, and that oats and other grains, when badly lodged, will be deficient in phosphoric acid, which is so essential for the formation of bone.

There is no form in which phosphoric acid can be supplied to the soil more cheaply than as ground rock phosphate. It is true that in this form it is insoluble in water, but where the land contains a reasonable quantity of decaying organic matter, there should be no difficulty in bringing the phosphate into solution. In making acid phosphate or superphosphate, the manufacturer adds sulphuric acid, thus diluting the amount of phosphoric acid and increasing the cost of the material. For general farm crops, it is not necessary that the farmer buy this form of the material, but rather that he use the cheaper material and depend upon the acids which are formed by the decomposition of the soil to bring about solution.

As an absorbent in the stable, any material which is ground so finely as these rock phosphates are, must form a fairly good absorbent, and, consequently, I think it may be used there with success. The quantity to use will depend upon the

amount of bedding and the amount of this material which it may be desired to incorporate with the soil.

When applied direct to the field, it would be best to sow it in the fall or in the very early spring. Care should be taken to distribute it as evenly as possible over the soil. It may be scattered on the surface of sod fields or put on the loose surface of a plowed field and harrowed in, but it should not be plowed down. An application of from three hundred to five or six hundred pounds per acre may be made. As a rule, ground rock phosphate will contain at least twice as much phosphoric acid per cwt. as ordinary superphosphate upon the market.

O. A. C., Guelph.

R. HARCOURT.

THE SEASON AND ITS WORK.

The weather conditions of the autumn of this year have so far proven exceptionally favorable to the farmer in nearly every part of this country. The absence of heavy frosts and the frequent occurrence of rains, together with a fair share of mild days, has served to freshen and keep fresh the pastures, so that as yet but little feeding of the fodder stored for winter has been found necessary. This is a distinct advantage in a year like the present, when feed is unusually scarce and dear. Dairy cows have, in consequence of the freshness of the pasturage, kept their milk flow up to a very gratifying extent, and the high prices prevailing for dairy products have made that branch of farming very profitable. Fall wheat has been given a good start, owing to the moisture of the land, and will have secured a strong root-growth, which will serve a good purpose in carrying the crop safely through the ordeal of winter frosts and spring heaving.

Fall plowing has been made easier on men and teams by the frequent rains, and more rapidly accomplished, while the openness of the season has rendered it possible, where the time has been improved, to get all necessary plowing done in good time and well done, while root crops have had time to grow to a good size, and will prove a great help in carrying the cattle and other stock through the winter in good condition.

The continued mildness of the weather is very favorable for tile-draining, of which too little is done, and which, properly done, is one of the most profitable investments that can be made on the farm. Where tile-draining is not needed, or not practicable, much can be done, at little cost of time or labor, to improve the surface drainage, by clearing, and, if necessary, deepening the outlets of water furrows and ditches. A little attention to this matter before winter sets in may render it possible to complete the spring seeding in many places a week or two earlier; and, since the early-sown grain crops are usually much the best, it is important that the watercourses be made free and easy at this season. Slack places where water lies late in spring can, in many cases, be greatly improved by a few hours' work with the plow and scraper, thus facilitating the spring seeding and securing a more even ripening of the crop for the harvest. The necessary repairing of stables and sheds for the comfortable housing of the farm stock, is one of the duties that demand attention at this time of the year, and the hauling of gravel to improve the lanes and the approaches to the house and barn, is a piece of work which can generally be more conveniently attended to at this season than at any other, and the comfort of having clean, dry walks, is well worth the cost in time and labor. These and many other chores that will present themselves as being necessary to the preparation for winter, should be attended to in good time where it is reasonably convenient to prosecute the necessary work.

Mr. John Wagner, Streetsville, Ont., according to a report in a Peel County (Ont.) news item, sold last month, a wagon load of alsike clover seed to Mr. Jones, a local dealer, for \$527.

LOCUST TREES FOR FENCE POSTS.

Thos. Alphon, of Wayne Co., Ind., in a recent issue of the Ohio Farmer, gives an account of growing black locust trees for fence posts and other purposes by a Pennsylvania German, who learned the secret from his father. The locust seeds must be gathered in the fall and kept dry throughout the winter. About the middle of April the seeds should be selected, and those appearing to be good should be placed in a vessel and hot water poured over them. This water must be boiling hot, and the seeds must be stirred constantly while the water remains hot. This should be done in the morning. Let the seeds remain in this water over night, when the water should be poured off and boiling water again poured over them, the stirring process being repeated, as on the first morning. This should be kept up for five or six mornings in succession, when the seeds will appear ready to burst open, and perhaps a tiny sprout will appear protruding from the shell.

After digging a trench in the richest part of the garden, take clean sand and place a layer in the bottom of the trench. Then drill the seeds on the sand and cover with a shallow covering of the same kind of sand, clear and sharp, such as plasterers use. Then, on top of the sand place a shallow layer of dirt. The shoots will appear early in May, and will grow large enough the first year to withstand frost. The following April they should be set out in rows ten feet apart each way, and the ground kept clean and free from weeds until the shoots are well started to growing.

Mr. R. Ellenbarger, who introduced this method in eastern Indiana, planted an acre and a half of thin, rough ground in locusts. The piece of ground was so disposed that it was not fit to cultivate. The trees grew rapidly, and when they were ten years old he sold them for \$300 as they stood.

The trees were taken off close to the ground, and almost immediately shoots began to appear through the soil from the living roots or the stumps. Mr. Ellenbarger took a cutter plow and thoroughly tore up the soil between the stumps, cutting as many of the roots as possible. This caused the roots to send up countless shoots, until the ground was fairly thick with them. All these shoots were allowed to stand without trimming. The second year it was seen that the stronger shoots had crowded out the weaker ones, and finally, within three years, the remaining saplings were disposed over the ground about one to every five feet square. They grew in this way to maturity, or to a size fit for posts, when they were removed, and the root-breaking process repeated. The second crop was sold for a larger sum than the first. Again the shoots appeared, and again the strong smothered out the weak, only the fittest surviving. Mother Nature being allowed to make her own selection. How many times this process can be repeated, there is no way of knowing by anyone in this section of the country. Doubtless as often as desired, however.

The tract described is now covered with a growth of trees, many of which are ten inches in diameter, and tall enough to make eight or ten cuts seven feet long. Most of the lower cuts can be split into four posts each. The single trees will yield from 12 to 25 posts each, and some even more than the last number. These posts sell for 25 cents each in country markets, and doubtless for more in cities or places remote from timber lands.

Thirty years ago Mr. Ellenbarger set several hundred of his own raising. Last summer the fence had to be removed, and Rudolph Hoover, a grandson, found the posts apparently as sound as the day they were set. He believes they are good for another thirty years. At any rate, he considered them good enough to use in a fence that otherwise was new. The wood was firm, and held nails like new stuff. That they will outlast iron posts, is well established.

In view of the practical importance of this subject to Canadian farmers, we submitted the foregoing to Prof. E. J. Zavitz, Forestry Department, at the Ontario Agricultural College, who replies as follows:

"We have been growing black locust from the seed for some time, as described in the article. All such seeds are immersed in boiling water before planting, and then planted in the nursery lines as we would any other seed, this giving good results. Instead of soaking these seeds several times, we simply put them in boiling water once, stirring until cool, and leave them in the water for a few hours.

"Regarding the financial side of black-locust planting, this is a more difficult matter for me to answer. We know that black locust has been grown successfully and with great rapidity, as described in the article, in Indiana, Kansas and other Middle West States. So far as I can learn, most of this planting has been done on what we would call first-class agricultural soil. Another point to be taken into consideration is the fact that in some of these States fencing material is very scarce, and crops of trees for fence posts

would probably bring a much better figure than in Ontario. It is questionable whether it would pay in Ontario at present to use good agricultural soil for such work; in fact, I do not believe many farmers would undertake it.

"We are supplying black locust trees and advising the use of them for waste-land planting, but cannot give definite figures as to rate of growth on such soils. We know one thing; that is, that black locust will thrive comparatively well on very poor soils, and I might add that we are using now a nitro-culture on our seed, so that our nursery stock will have the nitrogen-producing nodules, which we hope will be beneficial both to the waste land and to the tree.

[Note.—The locust belongs to the botanical order Leguminosae, which includes the clovers, alfalfa, peas, beans, etc.]

"Regarding the black locust as a fence post, the black locust, from various records, has proven to be one of the most durable woods in contact with the soil, and I would not consider the life of the post spoken of in the article as being an exaggeration, although these posts may have been in very favorable soil, as regards decay."

THE OXFORD COUNTY ROADS.

The Oxford County Council decided to take advantage of the offer of the Ontario Government to pay one-third of the cost of road machinery and road construction under certain well-defined regulations. But it appears there has been considerable difficulty in realizing just what the regulations were. After several attempts to get the by-law in shape, it has now been fixed up to the satisfaction of the Legislature and the County Council.



Shearling Leicester Rams.

Purchased by the Government of Nova Scotia to be sold at public auction and used for breeding purposes in the Province. Photo taken on Agricultural College Farm, Truro, N. S.

There are about 260 miles of these county or designated roads in the County of Oxford, and this mileage is allotted amongst the different townships, and, for the purpose of being better managed, the County has been divided into two divisions, the north and south. Mr. Louis Kaufman is superintendent or inspector on the northern division, and Mr. John Whitton on the south, both capable men, having considerable experience in road construction. These men are acting under the direction of a committee of the Council.

The committees purchased two steam road-rollers, four stone-crushers, two working engines, and several dump-wagon boxes; besides, they have two engines hired. They have also lately got a hauling traction engine of 30 horse-power and five large cars. These and other small tools have been purchased at a total cost of about \$25,000. When the traction engine is in good working shape, it is expected to effect a saving of from \$12 to \$15 per day on horse-wagons on hauling over three miles, but it is deemed not wise to use it on short hauls. Gravel suitable for making crushed stone was obtained at 35 to 40 cents per cord. There are three stone-crushers at work in one pit, and the north-end teamsters commenced making road about Lot 9, on the old tenth-line gravel road, and have been working south towards Thamesford village. This is a road on which there is a great amount of traffic, and the road-bed was almost worn out, as very little expenditure had been made on it for a number of years. The road-grader was first used to make a depression and leave shoulders at the side to hold the crushed stone in place. This depression was made 10 feet wide, and was filled in with coarse crushed stone to the depth of about 9 inches in the center, with a coating of fine crushed stone on top. The steam roller is kept rolling all the time, with a

sprinkling-wagon going ahead. The grade is from 1 in. to 1½ in. to the foot, so that no water will lie on the road; and it makes an excellent road and leaves nothing to be desired. There are gangs of men, also, putting in tile drains, in many places on both sides of the road. This work, where done on both sides, has cost about \$500 per mile. About three and a half miles of the road has thus been constructed, at a total cost, draining, included, of about \$3,500 per mile. The County Council have decided that it is costing rather too much, and have reduced the roadbed from 10 feet to 8 feet, and from 9 to 7 inches. A part of the work which has not been rolled is not nearly as satisfactory a road. It has been computed that, where the crushed stone has only to be hauled a short distance, the road can be built for from \$1,200 to \$1,500 per mile, as on the long hauls the cost mounts up very fast.

The question may naturally be asked, "Will the road last long?" Of course, this remains to be seen, but, with reasonable care, we think it will be a good road for a very long period. In all probability the road-grader will have to be used in the spring, after the frost has gone out, to smooth it off, to be followed by the steam road-roller. In many of the wettest places the drains will not have the ground thoroughly dried out until they have had two or three seasons to run, but they certainly will help very much to maintain the road.

How is the work to be paid for? The total estimated cost of the 260 miles is \$354,000. Of this, the Provincial Government are to pay \$118,000, leaving \$236,000 to be provided for by the County. This is to be raised in five years, at the rate of \$50,000 for each of the first four years, and \$36,000 for the fifth year. The de-

debentures are to be for 30 years, and will likely be sold so that the annual payment for each debenture will be about \$3,252, on a total assessment in the County of \$28,000,000. Therefore, the taxes to the average 100-acre farm will not be over 64 cents; or, say, for the five years, there would not be over \$3.20 per year added to every 100-acre farmer's taxes, and then, in seven years the debentures for the County Buildings and House of Refuge will expire, which will be quite a relief. A wise man said that money is very much like manure, it is of no use unless it is spread.

When the first settlers came in and cleared the country, they were glad to get up a log house and to build a corduroy road, but those days are past and gone, and now we have fine brick and stone houses, and why should we not have good roads as well? Some are saying these roads are costing too much. Well, we cannot get a good thing without paying for it, and, as we have tried to show, we will not feel the paying very hard. The roads were so bad here last spring that we believe, next spring, when the farmers ride over this county road, they will say it is worth a dollar a trip, in place of travelling over the road as it was last year. The County now has this valuable machinery, and if it were to be thrown aside, it would rust out nearly as fast as it will wear out. By all means, let us keep it going. Of course, we cannot get all the details of the work managed to suit each ratepayer. There is no one perfect, and mistakes will creep in. But we believe, with the experience gained this season, better work will be done another season. The management is in good practical hands, and the County roads will be used by nearly every ratepayer in the County more or less.

The next step will be to improve the roads leading to these finished County roads, and one great step will be to abolish statute labor and have all the cost of maintenance of township roads raised by taxation, as in many instances the statute labor is a mere farce. D. L.

Under the present conditions of American farm practice, one of the most prominent defects in the management appears to be a lack of attention to thorough drainage as a means of diminishing the cost of production and insuring uniformly remunerative returns by increasing the fertility of the soil and avoiding losses from unfavorable seasons.

THE DAIRY.

HIGH PRICES OF FEED INDUCE THRIFT.

Editor "The Farmer's Advocate":

The probabilities are that fewer cows will be milked this winter. The reason will be that hay and oats will command a high price in cash. Hay is scarce, but we have an immense crop of oat straw that can be used to good advantage to help out the roughage part of the ration, and there has been quite a lot of later oats cut green and cured for fodder. There is plenty of feed on the Island to carry through all the stock, but the question is, Will farmers feed grain enough, at 50 cents a bushel, to produce milk in paying quantities through the winter? Some will, but only the most skillful and economical will be able to get a profit, even with butter at about 30 cents per pound.

Instead of feeding all our milking stock through the winter on high-priced foods, it will be better to weed out the poorest producers and prepare them for the block in a month or so, and keep our good cattle up well through the winter.

Economy in feeding can be practiced by mixing the hay and straw together, running them through a cutter, if possible. The best economy in feeding is to feed a full ration, suited to the product you are after, whether beef or butter. Stinginess is always false economy in feeding stock.

As we are dairying, many of us to stay, we must keep the best producers in our herds, at all cost; and, as we have a full crop of oats and a fair crop of roots, some hay, and abundance of straw for roughage, our best plan is to feed a lot of our oats to our best milkers to balance up the ration and keep them producing at a profit during the winter months. We can afford to feed a large part of our oat crop, as the part of it that we sell will bring nearly double per bushel that it often does. Bran is out of the question here on account of its cost. When feed is scarce, or high in price, we are apt to spend more thought on how to feed carefully and economically, and, by so doing, we may be able to get more profit at less cost than when feed is so plentiful as to make us a little careless and a little less skillful in using it.

WALTER SIMPSON,
Queen's Co., P. E. I.

SELL GRAIN AND BUY COTTON-SEED OR OIL CAKE.

Editor "The Farmer's Advocate":

I would say that there will be plenty of feed for winter keep of dairy cows in this vicinity, but, owing to the high prices of grains, there will not be many cows milked here this season. I would recommend selling oats and buying bran and some cotton-seed meal or oil meal. Our usual plan of feeding would be rather expensive this year, at present prices of grains. For the profitable production of winter milk, our plan of feeding has been straw or hay in morning, roots or ensilage after breakfast; about 4 o'clock, roots or silage again, and at night all the hay they will eat without waste. Our meal ration consists of oats and peas with bran—3 parts oats, 3 parts bran, 1 part pea meal, by weight. The meal ration is always fed on the ensilage and roots. We intend selling oats and buying cotton-seed meal or oil meal for our winter ration.

GEORGE CARLAW,
Northumberland Co., Ont.

DISTRICT MEETINGS IN WESTERN ONTARIO.

Dates were decided by the Western Dairymen's Association for the district meetings to be held in Western Ontario as follows:

Watford—Music Hall, November 12th.
Cayuga—Council Chamber, November 14th.
Listowel—McDonald Hall, November 19th.
Simcoe—Council Chamber, November 21st.
Woodstock—Council Chamber, November 22nd.
Tillsonburg—Council Chamber, November 26th.
Dorchester—Town Hall, November 28th.
St. Mary's—Council Chamber, December 3rd.
Guelph—Creamery Meeting, Dairy School, O. A. C., December 12th.

The discussion will not necessarily be confined to the subjects mentioned on the programme. It is expected that the Director of the Dairymen's Association, who may represent the different districts, will be present and occupy the chair. The Chief Dairy Instructor for Western Ontario, Mr. Frank Hems, will attend all these meetings. Everyone interested in dairying will be made welcome.

KEEP THE GOOD COWS MILKING WELL.

Editor "The Farmer's Advocate":

Your questions in regard to the shortage of feed and how to feed, are rather hard ones to solve. Many people are selling off their old and poor cows, which is a good plan, as many cows are being kept to-day that do not pay their way; others are selling young heifers for butcher purposes that should be kept to take the place of cows disposed of. Of course, there are many heifers which make better beef than milkers. People should exercise great care in raising young stock, whether it be for milk or beef. This will tend to reduce the number of cows to be milked another season, but in most cases there are too many cows poorly kept. If fewer cows were kept and handled better, greater returns would be the result.

I believe in economy in feeding at all times. It is possible to overfeed, and thus waste a portion of the food, as well as doing the animal harm; but, on the other hand, it is not wise to let a dairy cow go down in flesh, as it takes more feed to bring her back again than would be required to maintain her in good condition. I would suggest feeding just what is needed to keep the animal in a good healthy and thrifty condition. I have a very heavy stock this season, but, as far as possible, I shall endeavor to carry out my usual plan of feeding, if I do have to buy a little extra feed. For profitable production of winter milk, I do not think it pays to try to keep a cow milking that has been milking heavily all summer, but to have some freshen in the early winter, and feed them liberally so they do not go down in their milk before going to grass.



Post Orbit.

Jersey cow. Winner of gold medal for best performance in butter test, Jersey classes, London, England, Dairy Show, 1907. Owner, J. H. Smith-Barry.

This is my plan of feeding in winter: In the morning, the first thing we do is to milk the cows; then the roots and meal are fed, after which the straw or hay. The water is always before them. At noon we give a feed of cut corn (as I have no silo), a little bran, and a pinch of salt. In the evening, say, five or half-past, we milk again, when the roots and meal are again fed, followed by straw or chaff. This diet is continued until about the first of March, when hay is fed in the place of straw. The meal consists usually of a mixture of barley and oats. When necessary to supplement this, some bran is added, together with something stronger, such as low-grade flour, which brings the mixture up to about the same weight as the straight mixture of barley and oats. The milking cows receive of this about a gallon apiece twice a day. I find that even yet my cows are not fed to their full capacity, and, also, cows give a greater return when freshening in the months of December, January and February, and, if well fed, will give nearly as much milk during the summer as those which freshen in April or May.

For nearly a year we have been keeping milk records, and this has very clearly proven itself to me. Also, I find one cow has given 1,988 pounds of milk in 31 days, under ordinary care. Another cow has given 12,700 pounds of milk, testing 3.8 per cent., already this season. One old cow of 15 years of age has given 11,300 pounds of 3.5 to 3.7 per cent. milk, and is still milking. This plan of testing each cow is the only way to ascertain the real value of each cow.

W. E. THOMSON,
Oxford Co., Ont.

TEMPERATURES RISING.

Editor "The Farmer's Advocate":

Professor H. H. Dean's admission, in your issue of the 31st ultimo, that he "may have a bit of fog" on the transportation question, was the most pertinent statement in his whole letter. "Fog" is certainly a poor substitute for "gray matter," and in future, when the Professor goes off at half-cock and makes one of his customary "breaks," we will have to be charitable and blame it on the "fog," which is probably a mild but chronic condition of brain-storm.

The reference in Weddel's review to refrigeration facilities applied to Canada generally, and, in his comments, Prof. Dean used the following language: "We should like to know where the creamery is located that can ship butter to London in fourteen days. One month would be nearer the time required to land butter in London, Eng." These were the statements to which I took exception, and one would expect the Professor either to defend them or else admit he had written them without consideration. He does neither, however, but in his last effusion characteristically dodges the point by saying he meant the time required to "market" butter in London, and gives dates of several shipments from a creamery in Western Ontario, and the dates on the "account sales" received from London. Could anything be more childish! He doesn't say if the butter was shipped to make close connection with the steamer at Montreal, or was stored there for a few days, or how long the shipment was held in London before it was finally disposed of. I can go the Professor one better, and tell him of account sales from London dated three months after the butter left the creamery in Canada, but the shipment was stored on arrival in London to await a more favorable market. So much for the Professor's "red herring."

The "fog" must have been particularly dense when he wrote his comments about the refrigerator-car service, because we learn from his last letter that his sweeping condemnation of the service in Canada was based on the examination of ONE CAR, which passed through Guelph on July 20th. About fifteen hundred iced butter cars are operated during the season in the Government service alone, besides probably as many more independent cars, and the doughty Professor saw ONE car, which he examined with his little thermometer, at the same time carefully noting the temperatures in his little diary. When he made

the test, the car doors, he says, "were wide open, sun shining directly in the car, and the outside temperature 82 degrees," and, because he found a temperature of about 74 degrees in this one exceptional case, he gravely informs the public that the claim that we have good refrigeration facilities "is largely fiction." I wonder if the Professor's experiments at the O. A. C. are conducted in the same loose way, and if his conclusions are similarly jumped at.

In conclusion, I wish to say that the Dairy & Cold-storage Commissioner's Branch does not and never has claimed that our iced-car service for butter is perfect. We know that there are many deficiencies, but we are doing our best from year to year to overcome them. We expressly invite intelligent criticism, and in our publications have asked shippers to notify us of any complaints, so that we may take them up with the railroad companies. If Prof. Dean was satisfied that the car he saw was not properly handled, and was insufficiently iced, why did he not promptly advise us of the fact? That is what we would expect from a man in his position. Instead, he kept it to himself until the season was over, and then proceeded to knock the whole service in the press. It seems to me that Prof. Dean would be better employed in carrying on some original work in his department at Guelph that would help our butter and cheese makers to solve some of the problems confronting them to-day than to usurp the role of critic and deny the work others are doing for the improvement of the dairy industry.

W. W. MOORE,
Market Division, Department of Agriculture,

CANADIAN CHEESE IN BRITAIN.

I am indebted to one of the largest produce firms in Manchester for the following report: "We are pleased to state that the improvement in Canadian cheese this year has been well maintained, and one of the great difficulties that we had to contend with last year, which was the shipping of cheese in the green state, has been noticeable by its absence this year. The goods have come forward not only in good condition, but the averaging of the same has been fairly well effected."

"We are now nearing the close of one of the most exceptional seasons we have had. The make opened up at the early part of the season very late, and we are going to close the season with a great shortage of cheese on that of last year. Our home make has been exceptionally large, which has filled up the shortage in Canada, and all through the season domestic has been placed on our market within a few shillings of Canadian prices, thus causing a good healthy home demand. It is only within the last two weeks that there has been any noticeable falling off in the make. This week there is a great shortage, and it has dropped off fully 30 per cent. of what it was a month ago."

"The Canadian season, from a financial point of view, has been disappointing, owing to the great speculation of a few who have tried to corner the market, and have evidently realized their object to a great extent. The result of this has caused prices to advance very rapidly during the last two or three weeks. What the future result of this manipulation will be we cannot say, but certainly it is not conducive to a healthy tone of trade from our point of view. There is every prospect of a huge make from New Zealand and Australia; we ourselves having in sight our first consignment, which is quite a month earlier than usual."

"We are looking forward next year to a better Canadian trade, and if only this system of manipulation could be kept out of your market we should have a much healthier tone, and one that would be beneficial to every one on both sides."

P. B. McNAMARA,
"Canadian Commercial Agent."

WEED AND FEED.

Editor "The Farmer's Advocate":

In view of the food supplies available for dairy cows in this locality, and their value, fewer cows will be milked this season than last. Considering the enhanced prices of milk and dairy products, we would advise economy in feeding, weeding out the inferior cows, selling or slaughtering them, as they will not pay for wintering with hay at \$22 per ton. For the profitable production of winter milk, our plan of feeding is to feed all we can make the cows eat of the best food we have or can purchase. We have 150 tons of clover silage in stock which we will feed this winter.

Sardis, B. C. A. C. WELLS & SON.

GARDEN ORCHARD.

AVOID USING READY-MIXED PAINTS ON FRUIT TREES.

In reply to a letter of inquiry as to his past winter's experience in protecting fruit trees from mice, W. T. Macoun, Horticulturist, Central Experimental Farm, Ottawa, writes that he has no changes to suggest in his paper on "The Protection of Fruit Trees," read before the Ontario Fruit-growers' Association last winter, and practically no additional information to offer.

"We have not found any injury from the use of paint, so far," he says, "and the mice have not been bad enough the last two or three winters to say definitely whether it is effectual or not, but no tree with paint has been injured by mice. Considering the good satisfaction obtained from the use of building paper, I hesitate to recommend paint, as an instance has come under my notice where paint caused serious injury in an orchard when used for borers. Ordinary white lead and linseed oil appear to be quite harmless, but when boughen paints are used, made, perhaps, with mineral oils, injury may occur, which was the case in the instance referred to; hence, if paint is suggested as a preventive, caution should be impressed on fruit-growers against using boughen paints."

"Prof. Sears' method of wrapping with paper is good. We prefer leaving the paper as loose as possible, providing it is well tied, in order to afford an air-space between the paper and the tree. However, it cannot be left very loose. The main objection to Prof. Sears' plan is that it takes more paper and is not quite so easily put on. We cut the paper in strips before using, which economizes it very much."

"I am glad to know that you are dealing with this subject in 'The Farmer's Advocate,' as injury from mice in orchards just coming into bearing brings great discouragement, and has been one of the chief if not the greatest reason for reducing the amount of planting done in Easter and Central Ontario, and the Province of Quebec."

HORTICULTURAL PROGRESS.

Prepared for "The Farmer's Advocate" by W. T. Macoun, Horticulturist, Central Experimental Farm, Ottawa.

Annual Report of the Quebec Pomological Society for 1906:

The Quebec Pomological and Fruit-growing Society of the Province of Quebec, is the Provincial Fruit-growers' Association for Quebec Province, and receives a grant from the Provincial Government to aid it in its work. The report for 1906, which was recently received, shows a membership of only 106 persons. This is too small for so great a Province as Quebec, where fruit has been grown as long or longer than in any other part of Canada. It would seem that a determined effort should be made to increase the membership of this Society, which has done so much towards the progress of horticulture in Quebec. The annual report contains 152 pages, in which are printed many valuable papers which were given at the summer meeting of the Society in 1906, at Chateauguay Basin and Como, and at the winter meeting at Knowlton. These papers include, "The Great Fameuse Apple," "Conclusions Reached After Nineteen Years' Experience with Large Fruits at the Central Experimental Farm, Ottawa," "Orchard Drainage," "How to Improve our Old Orchards," "The Preparation of House Plants for Winter," "The Preservation of Fruits for Home Use," "Composition of Soils and Location of Orchards," "Selecting Trees for

Autumn.—Langford Beauty, St. Lawrence, Wealthy, Alexander.
Early Winter.—Fameuse, McIntosh, Wolf River.
Winter.—Canada Red, Scott's Winter, Golden Russet, Baxter, Milwaukee.
From Three Rivers to L'Islet, both included, east and south:
Summer.—Yellow Transparent, Lowland Raspberry, Duchess.
Autumn.—Peach of Montreal, St. Lawrence, Wealthy, Alexander.
Early Winter.—Fameuse, McIntosh, Wolf River.
Winter.—Scott's Winter, Canada Baldwin, Milwaukee, Baxter.
From the extreme north, Kamouraska and Charlevoix, east and north:
Summer and Early Autumn.—Yellow Transparent, Duchess, Charlamoff.
Autumn and Winter.—Wealthy, Patten's Greening, Hibernial, Longfield.
Crab Apples.—Whitney, Martha, Transcendent, Hyslop.

POULTRY.

STARTING A FLOCK.

To persons wanting to begin raising fowls, and to those who are tired of going along slipshod fashion year after year, the best advice is to begin right. Get a good start, and half the battle is over. If you are new at the business, read and study all the things you can about poultry, and that will do no harm if you are tired of unbusinesslike methods and want to make money. The old saying, "Be sure you're right, and then go ahead," is peculiarly fitted to this business. A good start means everything in making a success later.

Several things enter into getting a right start. In the first place, too much money should not be spent; in the second, you must be sure you have time and patience for the work; and third, you must study conditions. It is foolish and useless to introduce a few pure-bred chickens into a mongrel flock and expect them to be the leaven that will leaven the whole lump. Many have tried this plan, and have failed miserably. Neither is it advisable to put pure-bred, or any other kind of fowls, into a filthy house, thinking you will house them there for a short time, and clean up later on. Put off buying your fowls until everything is ready. Clean up the premises thoroughly, and plow under every bit of soil fouled by chickens that have belonged to you or anyone else before starting. Get your yards and coops into good condition, and then go ahead.

Save money on everything but your stock. Make your coops out of old boards, and cover with straw or corn fodder; make coops for little chicks out of store boxes; nest boxes out of cheap boxes; use old dishes for drinking vessels, and in every way economize so as to keep expenses down. Chickens do just as well in a cheap coop as an expensive one, provided it is dry

and warm. Even a framework of poles banked with fodder or straw to be burned the following spring has been known to keep chickens safe and warm all winter, and one successful chicken-raiser always uses the family supply of fire wood, raked up into walls and covered with straw for her fowls. In this way she has a new coop every fall, and thinks the chickens do better. Of course, she has a permanent house too, but she likes the "wood house" for the winter season.

It is poor economy to starve the chickens under the impression that you are economical. Better feed them well and rush them to market than to have a lot of hungry, peeping fowls at your heels whenever you set your feet outdoors. A hen will lay just as fine eggs in an old water-pail filled with straw as in a patent nest box; but she must have her crop well filled with seasonable food to make her worth anything as a layer or for the table. If wheat is very cheap in your locality, do not discard it for expensive corn, but manage to give the fowls plenty of good food, and use a variety. Milk, alfalfa, corn, table scraps, fresh meat and other things will keep the chicks in good condition.

Don't waste money buying a lot of medicines in the start. Just remember that lice and filth are the bottom of most poultry evils, and determine to be without



The Dairymaid. Photo by R. R. Sallows.

a Cold Climate," "Growing Grapes for Home Use," "Perennial Flowers," "Orchard Experiments in Eastern Quebec," "The Manufacture of Maple Syrup and Sugar in Canada in the Past and Present," "Some Methods of Marketing the New England Apple Crop," "Garden and Orchard Insects in Quebec Province in 1906," "Some Lessons in Orchardng from the Field of Practical Experience."

There is much useful information especially applicable to the Province of Quebec in these papers, and the report should be in the hands of every fruit-grower there. The annual membership fee is \$1.00, which will insure getting the report and participating in a plant distribution in the spring. Peter Reid, Chateauguay Basin, Que., is the Secretary of the Association, and is eager to get members.

The Association last winter prepared a list of varieties of apples recommended for different parts of the Province of Quebec, which is printed in the report. It is as follows:

From Three Rivers and Sorel, west and south:
Summer—Yellow Transparent, Lowland Raspberry, Duchess.

both. An occasional dose of some sort of poultry food (and there are many good kinds) will do much toward keeping off diseases, but cleanliness and care will do more than all the medicines in the world. The best way to doctor most sick chickens is to cut off their heads and bury them deep in the earth.

When it comes to buying your first fowls, make up your mind which is the best breed for your peculiar conditions, and then buy of a reliable dealer. If you want an all-around hen select that type; if you live in town, where the range is limited, get some of the big, lazy fowls that do not care to wander, and if there are marked peculiarities in the preferences of the people you expect to be your patrons, keep them in mind when you start. While it would be foolish to spend time consulting all tastes, it would be equally foolish to buy a variety for which there is no demand in your neighborhood. Begin modestly in everything but the grade of the fowls, and work to the top of the ladder. In this way your chicken business will be both pleasant and profitable.—[Farm Poultry.

CEDAR-LOG POULTRY HOUSE.

Editor "The Farmer's Advocate":

We keep from 50 to 75 Plymouth Rock fowls over winter, and raise from 50 to 100 chicks during the summer. Our poultry house is 18 x 28 feet, built with hewed cedar logs, and divided into three compartments, a sleeping and a scratching room and one for the sitting hens, the latter also being used in the fall for fattening the surplus fowls. The floor is plank. The roof is sheeted close, and the shingles laid in mortar. We have all the light possible from the south. A ventilator about 8 inches square inside runs from floor to roof into a small cupola, which works very well.

Although the day of log buildings is about past, I believe one constructed with material such as described would make an ideal poultry house if properly built. The one described is in such a position that it is impossible to get sufficient light from the south. Build 12 ft. wide, 5 ft. high, and long enough to hold what poultry you intend to keep. Have the ends east and west. When five feet high, put a row of windows along south side on top of the last log. Put supports for a plate on top of window frames, then put on plate and lay rafters from plate down to the opposite wall, which will make a shanty roof. Stud the gables, double board, with paper between, and you will have a dry, warm enough poultry house. Divide to meet requirements. J. R. PHILP.

Wellington Co., Ont.

APIARY.

INTERNATIONAL BEEKEEPERS MEET.

An organization now consisting of 2,500 members, and embracing the entire North American Continent, met in the Capitol Buildings, Harrisburg, Pa., on October 30th and 31st.

President L. A. Aspinwall, Jackson, Mich., occupied the chair. The president, in his opening address, said that apiculture, when we consider its relationship to other branches of agriculture, and the various branches with which it was involved, was the greatest of agricultural subjects. A well-equipped beekeeper should not only have a good general education, and know the life-history of the bee, but he should be a botanist and entomologist to a certain extent. He had himself found error upon error in present well-known standard works upon the life-history of the bee.

Rev. L. L. Langstroth had said that beekeeping was the most beautiful science in the whole rural economy.

Hon. A. R. Martin, Director of Institutes, being present, said he felt sure that the large and influential Association meeting in Pennsylvania would bring information of value to the State. He recognized the value of bees and beekeeping to other branches of agriculture, and, even from selfish motives, those interested in the advancement of agriculture would, and he would be pleased, by Institute speakers and demonstrators, to help the industry. They had some eight instructors now upon their staff of speakers, and in almost every district these speakers were being called for, as farmers were awakening to the importance and value of the development of beekeeping.

Prof. H. A. Surface, Tenn. State Entomologist, gave an interesting address, the subject being "Bees and Horticulture" touching upon not only the value of bees in the fertilization of blossoms, but the impression held by some that bees were injurious to farmers and horticulturists. He had been unable to find even the slenderest foundation for such a charge. Nature does not defeat itself, but there is a mighty adaptation in nature which, when studied, compelled us to recognize a Supreme Author. He condemned, as he stated that all State Entomologists did, spraying at any time of any blossom for any pest while in bloom. Such action would be likely to be highly injurious to the development of fruit.

Mr. N. E. France, Wisconsin, who was present,

stated that Mr. Barns, Wapaca, Wis., who was an extensive fruit-grower, and had been president of the State Horticultural Society, has come to the Wisconsin State Beekeepers' Convention and offered free room in his orchards for bees, and had even offered a free house.

Another member gave an instance where a fruit-grower had offered to purchase and equip ten colonies of bees for each of his orchards, and give a beekeeper, not too far away, to look after them, the entire proceeds from the bees for his labor.

PLURALITY OF QUEENS.

The method of having more than one laying queen in a hive, a method which had been advocated in England twenty-five or more years ago, has received added attention through the writing of Alexander, of New York State. The object was to have brood produced faster, and some thought it prevented swarming. After carefully weighing all the testimony offered, it appears that the method of introducing a plurality of queens was to throw the colony into an abnormal condition, such as removing all combs and brood and honey after letting the bees fill themselves with honey, then introduce the number desired. Others said they divided, during the honey flow, the brood-chamber into compartments separated by queen-excluding zinc, introducing a queen to each compartment, and, after introduction, put the queens together in one of the compartments, introducing still another, if desired, and so on, until the number desired was reached. The testimony offered as to the prevention of swarming was not very conclusive. It also appeared that quite often, at the close of the season, all but one queen disappeared or the colony broke into clusters, with a queen for a rallying point. This question has deeply stirred the apicultural pulse, and developments will be watched with interest.

CROWDING THE BROOD CHAMBER WITH HONEY.

Mr. Alexander also advocated keeping the brood chamber fairly free from capped honey during the breeding season, and feeding back the honey.

Mr. Holtermann, Canada, stated that, in his estimation, it was a much more practical thing, and one which would give as good results as a plurality of queens, to see that the brood-chamber of the hive was not clogged with honey during the brooding season. It was particularly true of some strains of Italian bees that they crowded honey about the brood-chamber during a good honey flow. In this way, the cells in which brood could be reared were reduced in number, resulting in less bees for the honey flow, and a proportionately smaller crop of honey. In his estimation, it was also essential that two or more supers should be used. It was astonishing how much less honey would be found in a brood-chamber with two extracting supers than with one. This, and the use of Carniolan blood in the apiary, was a more practical method of enlarging the brood nest. The ordinary queen even did not get credit for the power to lay eggs, providing other conditions were right.

Mr. N. E. Cleaver, Tenn. State, gave a careful account of the difference in profits to be derived from honey production and queen-rearing. Mr. Cleaver found it paid better to produce honey, and, as evidence of his good faith, he has reared queens for sale, but is discontinuing the practice.

QUESTION DRAWER.

In using full sheets of foundation, how shall we prevent the bees from rearing worker combs? C. P. Dadant, Hamilton, Ill., stated that drones may be raised in worker-comb foundation when the cells are larger than worker cells; the cells are sometimes stretched. Comb foundation should be worked out by the stocks less strong; this prevents sagging from the weight and heat of the bees. The foundation should be wired, and the upper wires put nearer the top of the frame than is the general practice. Fine wooden splints inserted at the top of the foundation was still better.

President Aspinwall.—When pressed for drone cells, the bees will cut down the cell wall and enlarge cells to the size of drone.

Are drones raised in worker cells good to fertilize queens?

Dr. Miller, Marengo, Ill.—Yes, but such are not desirable.

If I mix sugar and water, equal parts, how much of this mixture is needed to get 10 pounds of sealed stores for winter?

Mr. N. E. Frances, Platteville, Wis.—The proportion should be 5 pounds of sugar to 2 pounds of water. A recent experience, given to me by a beekeeper of wide experience, was that, when feeding over a hive with the Mason jar, only 2 pounds of gain was secured from the first 12 pounds of syrup fed, 7 1/2 pounds of sugar being used to make 10 pounds of syrup. I, however, think it would take 8 or more pounds of sugar to secure a gain of 10 pounds for winter stores.

Mr. R. F. Holtermann, Bradford, Ont., stated that the right time to feed for winter stores was as soon as the brood had practically all hatched

in the brood chamber. The feeding should occupy the shortest possible time. The syrup should be made of two parts, by weight, of sugar to one of water, with a teaspoonful, flat measure, of tartaric acid added, after dissolving in water, to every 15 pounds of syrup, this latter added to the syrup when boiling. The feed should not be given from above, but from below the brood-chamber. To do all these correctly, would reduce the loss in weight to a minimum.

BEEES SOILING CLOTHING.

Can bees be confined to the hive during wash days in the spring, and is it desirable?

They cannot, without injury to the bees. When the first fly of bees, or subsequent flies, after intervals of prolonged confinement, when the bees may discharge accumulated matter, the beekeeper should warn neighbors, asking them for their kind consideration, and not to hang out clothing on that particular day. People should be spoken to before, not after, damage may be done.

EXTRACTING GREEN HONEY.

Can you get more honey per colony by frequent extracting during the honey flow?

Mr. Holtermann.—Yes, if there is a good flow and only one super is used on a colony; not, however, if two or more supers are used.

A very animated discussion took place, in which almost all condemned extracting honey before it was almost all capped, and a resolution to that effect was passed without a dissenting voice.

Prof. Surface, Tenn. State Entomologist, gave an address upon bee enemies, and also gave the result of putting sound and slightly-injured plums into a hive of bees. The bees worked on the injured fruit, but could not puncture the sound. This and other experiments went to prove that bees worked on the juices of injured fruits, such as grapes, plums, peaches, pears and apples, but not on sound.

A strong resolution was passed, with dissent, that the General Manager of the National Beekeepers' Association, write Federal, State, Dominion and Provincial Departments of Agriculture, asking that beekeeping receive the same encouragement and help given to other lines of agriculture. It was felt that too often incompetent men—men without wide practical training and good education—were appointed in the places of lecturers and investigators in apiculture. Prof. Surface said, create the demand for the men and the men will be found, as it was with entomologists.

A very timely address was given by Professor Phillips, Government Apiarist, Washington, D. C. In it, Dr. Phillips said, only under very exceptional conditions should honey be ripened outside of the hive, but the honey should be left to the bees in the hive. The chemical nature of honey was changed by the bees in the process of ripening. Of some 200 samples of honey analyzed by the Department of Chemistry, Washington, scarcely any were from one kind of blossom only. This was shown by the nature of the pollen in the honey. He pointed out that honey should not be raised to a temperature over 160 degrees F., and better 140 degrees F., and even at that temperature it should not be kept a moment longer than necessary.

LEARNING BEEKEEPING.

Mr. W. Z. Hutchinson, Editor Beekeepers' Review, Flint, Mich., U. S., who has several large apiaries in the raspberry section of northern Michigan, advised anyone wanting to make a business of beekeeping to spend a season with a successful specialist. Many had, however, plodded up to the top with no other help than a small beginning, observation, bee-literature, and an occasional visit to a successful beekeeper.

It is likely that Detroit, Mich., will be the next place of meeting. The Association is really international, and that place will be selected to give Canadians a chance to attend.

The general tidying-up necessary about an apiary at this time of the year, must, of course, be left to the taste of the beekeeper. Some will be content to leave all sorts of odds and ends which have been in use during the summer lying about for months, until the opening of the new year arouses them to activity again. We need scarcely say the appearance of a neglected apiary in winter is wretched in the extreme, and will be but a sorry inducement for an intending beekeeper to make a start in apiculture, while a few hives of bees, well cared for and snugly housed, with all their surroundings in trim condition, is a very pleasant sight to see. We, therefore, urge one and all to set about it—when the hives themselves are completely put in order, to clear away all rubbish, weeds, and everything which will give an appearance of neglect.—[Record (British).

The higher price prevailing for honey will materially help to make up to beekeepers for the lightness of crop this year, owing to an unfavorable summer. The demand for honey is greater than usual, due, largely, to the shortness of some classes of fruit.

THE FARM BULLETIN.

A MARE FOSTER-MOTHER.

HUNTINGDON, P. Q., NOTES.

Yes, November is here again, and we are reminded of the words of Coleridge, when he says:

"The mellow year is hastening to its close;
The little birds have almost sung their last.
Their small notes twitter in the dreary blast—
That shrill-piped harbinger of early snows,
The patient beauty of the scentless rose,
Oft with the morn's hoar crystal quaintly glassed,
Hangs, a pale mourner for the summer past,
And makes a little summer where it grows.
In the chill sunbeam of the faint brief day
The dusky waters shudder as they shine;
The russet leaves obstruct the straggling way
Of oozy brooks, which no deep banks define;
And the gaunt woods, in ragged, scant array,
Wrap their old limbs with sombre ivy twine."

But this is not a month to be poetical, 'tis a time when the farmer must be very practical, as there is much to do getting ready for the coming winter; the stables must be set in order for immediate use, in case a cold rain comes drifting upon us, or perhaps a November snowstorm, for the cows must be housed and protected from the inclement weather, or there is a big drop in the milk flow, as there was in the mining and other stocks a short time ago, but there is this difference that is the drop in stocks many lost their all, while in the drop in the milk flow only the farmer loses directly. Possibly he can afford to lose more than the other fellow, but whether he can or not, let him be careful in housing the stock this month, and feeding them as well, and they will pay him better interest on his investment than many of the stocks floated recently. Then there may be a few touches to ditches, water furrows, fields to finish plowing for next season's crop, roots to get in, and if all the harvest implements are not under cover 'tis a good time to get them in, also, before snow flies.

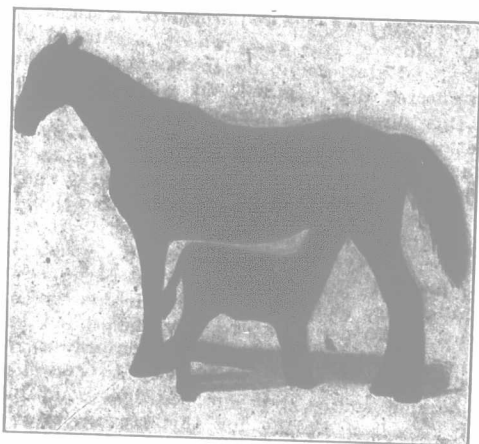
I notice in this section, our farmers are well up in most of these things. Occasionally we notice a rake or mower still out getting a varnish of rust, which is the cheapest paint, but not the most economical, but the excuse is "labor is scarce!" Yes, it is. Most of our farmers are doing too much real hard work because of this fact; but we are not the only neighborhood that is suffering. Much plowing has been done, but there is a lot to be done yet before the season closes. Scarcity of labor is affecting the plowing and ditching too; had we more labor, more of both would be done, which would be an advantage, as fall plowing and drainage are very essential to the production of large crops in this country. Land has worked only fair. Too much rain in the early days of October impacted the land, making it tough to work. Considerable difficulty was experienced in harvesting the corn crop and filling the silo, as just about that time we had a great deluge of rain, making the ground soft, and it was with difficulty the corn harvesters were worked, and the corn hauled. On the whole, the corn crop for silage would average a little more than a three-quarters crop. Many silos are filled, and quite a number about three-quarters full.

The feed question is quite a problem this fall. Quite a number have cut down their herds from fifteen to thirty per cent. A number have sold off most of their stock and feed by auction, realizing good prices for hay, averaging about \$12 per ton in the barn, and oats have sold as high as 69 cents for 40 lbs. Beef has been low, plenty of splendid two-year-old heifers have been sold for \$18 to \$20 per head, and cows due to freshen in the spring have sold all the way from \$7 to \$30. Cows near the freshening have sold from \$35 to \$50; but there is not much demand for fresh cows this fall on account of scarcity of feed. Many of the dairymen engaged in the production of milk for the condensary and city trade are not putting in as many fresh cows as formerly, feeling that even at increased prices for milk there is no money in it for them this winter, owing to the high prices for feeds. Most dairymen have to buy largely of gluten meal, oil cake, bran, etc., as the grain crop is not panning out as was expected. The one crop, while not a large one, that has given good returns was the wheat crop. Many fine samples have been brought to the mill here. A large percentage of it would grade No. 1 Hard; so our old valley can still produce a cereal equal to the richest prairie lands of Saskatchewan.

Few young pigs have been raised this fall, which, I think, is a mistake, as there will be few hogs to market next spring, when, no doubt, high prices will prevail. Hogs have been lower than we expected, touching 5½c. last month, but are on the rise again. Unfortunately, owing to the high prices of mill feeds, many hogs went to the market unfinished; and in the reports of the Montreal markets, we noticed the complaint of too many lights.

A number of the cheeseries and creameries are closed, as nearly all the milk is being taken by the condensary and sent to the city. With butter soaring to over 30c. per lb., farmers are getting good returns. 'Tis too early to say what the factories have averaged per cwt. of milk for the season, but we hope to be able to give this in our next. W. F. S.

The accompanying photograph illustrates a curious case of foster mothership during the past season on the farm of Geo. Mason, London Tp., Middlesex Co., Ont. The mare had lost her foal through joint-ill, and took to a three-weeks-old calf running about. The first advances were made by the mare, and with a little assistance the calf soon learned to extract the requisite nourishment. It received some food as well, and was weaned in three weeks' time.

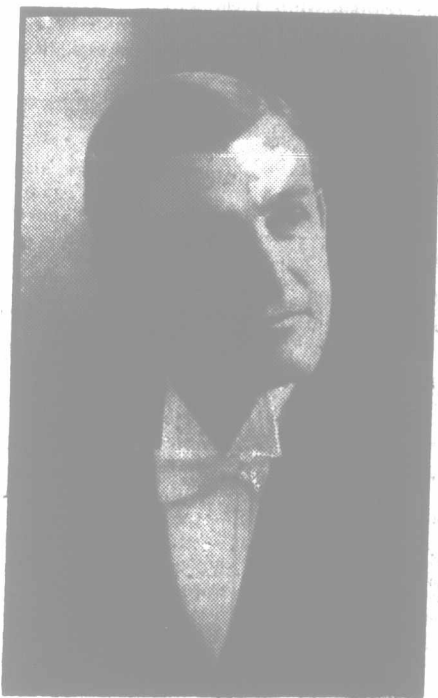


A Wet Nurse.

Mare lost her foal and adopted the calf. On farm of Geo. Mason, London Tp.

SYSTEMATIZING THE CANADA MEAT AND CANNED-FOODS INSPECTION.

Good progress is being made in the establishment and extension of the new meat-inspection system in Canada, initiated in September last. The staff of Canadian Inspectors, specially trained at Chicago, where Government packing-house inspection has been highly developed, have been assigned the various packing-houses at the different cities and towns, and, as a further step, Dr. R. Barnes, who for a time had oversight of the Toronto establishments, has been designated by the Veterinary Director-General and Live-stock Commissioner, Dr. Rutherford, as travelling inspector for the Dominion, with headquarters at Ottawa, in order to greater uniformity and efficiency in regulating the manufacture of meat and canned goods.



Dr. R. Barnes, V. S.
(By courtesy London Advertiser.)

Dr. Barnes, who for some years was a partner in the well-known veterinary firm of Tennant & Barnes, London, Ont., is a fine example of a progressive professional man. Not content with getting his diploma and then settling down into a rut, he continued his studies in pathological and other directions, ever on the alert for what was new and valuable in his work, and solicitous for the advancement of the best interests of the profession. His natural bent as an investigator, early directed his attention to the inevitable introduction of the inspection system in Canada, and marked him for advancement in the new service, which we trust will make the Canadian system second to none, and commend our products to foreign buyers.

We notice that Lord Strathcona, High Commissioner for Canada, with his accustomed energy in promoting Canadian interests, recently addressed a letter to influential organs of public opinion in England like the London Times, calling attention to the fact of the

safeguards which the application of the new Act by the Canadian Government will afford the consuming public of Great Britain. Accompanying his letter is a synopsis of the Act, the full text of which may be consulted at his offices in order to show the rigid care taken before the words "Canada Approved" are stamped upon the food products.

THE FRUIT SHIPPERS AND THE RAILWAYS.

The proverbial "hot time" was not lacking during the session of the Dominion Railway Commission, which met, November 5th, in the City Hall, Toronto, the members of the Commission, Prof. Mills, Judge Killam and Hon. Mr. Bernier, all being present. Mr. Robert James Graham, of Belleville, who had the floor for a considerable time during the session, made out a pretty good case for the fruit shippers in their indictment against the railway companies. Great difficulty has been experienced, he said, in getting cars of any kind to carry the fruit, and when they were obtained, it was almost impossible to keep them at a proper temperature, the doors and ventilators being out of repair in many of them, and the supply of ice inadequate. Difficulty has also been experienced in having a car held over when necessary to examine the shipments for the purpose of taking out damaged fruit. In other cases, in order to avoid long hold-overs, it has been found necessary to send shipments, by very roundabout ways. He himself had been compelled to send fruit for Winnipeg via Chicago, and, while trying to get it through to St. John by the Grand Trunk, had been advised to send it by way of Portland.

The chief grievance, however, was the failure of the railway companies to rush through cars, often urgently needed, for shipment. The delay often amounted to days and weeks, and the companies were not held responsible for the losses occasioned, although they took care that after the arrival of the cars, often without a moment's notice, the shippers should pay for delays of even one hour over the two days allowed for loading. Mr. Graham's own firm had, at a great expense, provided apple-storage houses at St. John, N. B., but now he could not get cars, although he had been waiting for them for weeks.

Graham & Co., Belleville, subsequently handed in a statement, in writing, to the effect that they had over 16,000 barrels of apples awaiting shipment, with no cars to handle them, which would surely freeze if facilities were not speedily provided.

Mr. W. H. Bunting, President of the Ontario Horticultural Society, held that shippers of fruit should have some easy and rapid means of recovering from the railways damages for loss of fruit, and that the railway companies should be held responsible for such fruit as was wasted through their fault.

Mr. E. D. Smith, M. P., of Winona, called attention to the fact that by a circular issued by the railways, no fruit can be shipped partly by rail and partly by water to points west of Port Arthur. There is a proviso that one man may go with each car to look after it; but when a firm sent sixty or seventy cars through, the wages of the sixty or seventy men required proved a very costly item. He thought a fast-freight service to Winnipeg for perishable goods should be established.

In answer to an enquiry from Prof. Mills, Mr. Smith said that conditions of transit have grown steadily worse. The Grand Trunk had done something this summer, but the Canadian Pacific had been very remiss.

MILLERS DISCRIMINATED AGAINST.

Dr. James Mills, a member of the Canadian Railway Commission, has issued a statement to the above effect, thus dissenting from the decision of the two other members of the Board at the Toronto hearing, where a complaint was received from the Dominion Millers' Association in relation to shipments of wheat ordered from the elevator in Owen Sound.

The shippers, Dr. Mills holds, were "unjustly treated and discriminated against, not deliberately or intentionally, but because of the failure of the company to provide such freight-shed accommodation and keep its box cars in such a state of repair as would enable it to make a pro rata or equitable distribution of its cars, and ship wheat from its elevator with as much promptness as it shipped flour from its freight shed." Delays covered periods of a month to six weeks, causing mills to be shut down and flour kept off the market.

FORTHCOMING SHOWS.

- Nov. 30th to Dec. 7th, International, Chicago.
- Dec. 2nd to 5th, Maritime Winter Fair, Amherst, Nova Scotia.
- Dec. 9th to 13th, Ontario Winter Fair, Guelph.
- Jan. 6th to 11th, Eastern Ontario Fat-stock and Poultry Show, Ottawa.
- Feb. 12th to 14th, Ontario Horse-breeders' Show, Toronto.
- Nov. 12th to 16th, Ontario Horticultural Show, Toronto.

[Note.—During the above week, meetings will be held of the Ontario Fruit-growers', Vegetable-growers', Beekeepers' and the Horticultural Associations.]

May 4th to 9th, Canadian National Horse Show, Toronto.

SCALLION ONIONS.

A remarkable instance of scallions, or thick-necks, in onions was investigated last month by Mr. Raynor, the Ontario representative of the Seed Branch, Ottawa. Smart Bros. are an extensive firm of market gardeners, at Collingwood, Ont., who grow vegetables and truck for the Northern trade, having some ninety acres under crop, of which seven acres this year were onions. In purchasing their onion seed this spring, they passed by the firm with which they had been accustomed to deal, and secured some seven pounds from a certain prominent Toronto house, which quoted much lower prices than other firms. One acre, however, was seeded with seed from the old firm, and the other six acres (in two plots of five acres and one acre, respectively) were sown with the Toronto seed. Strange to say, about ninety-seven per cent. of the latter produced scallion onions, while the acre sown with the other firm's seed produced only about three per cent. of scallions. A neighbor, who borrowed the garden drill with which the scallion seed was sown, had a similar experience, as all the land he sowed with the seed remaining in the drill produced nearly all thick-necks, while the remainder of his patch was practically free of them. Other growers in the district had no trouble with scallions this season, and, as the Smart Bros.' onion patch was on underdrained, sandy loam, the conclusion is irresistible that the seed secured from the Toronto house was responsible for the extraordinary proportion of thick-necks on the six acres where it was sown. In this connection, it is of interest to note that of the five-acre block above referred to, half had been top-dressed two years ago with pig manure, at the rate of 200 loads per acre, while the remaining two and a half acres received only seventy-five loads per acre, though this was supplemented by an additional dressing of twenty-five loads per acre this year. On the part most heavily manured, they had onions two years in succession, and here the crop was not nearly so good as on the other part, but about the same proportion of scallions occurred. It is believed that the seed was produced by plants that had not been properly selected. The instance is valuable, as showing the costliness of poor onion seed.

RURAL SCHOOL TEACHING.

The new course of study for Ontario Normal Schools will make provision of special training for teaching by giving them opportunities for observation in rural ungraded schools.

A considerable quantity of Canadian apples are this year going across the boundary; some for local absorption in the United States, others, probably, for export via American ports. The co-operative pack at Simcoe, Forest and St. Catharines is finding its market through American buyers; while a large proportion of Prince Edward County apples will also go that way.

THE WESTERN FARMERS' SEED GRAIN.

The Seed Branch of the Dominion Department of Agriculture is making a quiet investigation of the 1907 grain crop in the West, as regards the vitality of the seed grain for next spring's sowing, and expects by December to be in a position to make a statement as to its value for this purpose. Reports already to hand, from reliable correspondents, indicate that while some sections of Alberta and Saskatchewan have had their wheat and oats pretty badly frosted, still, generally speaking, Seed Commissioner Geo. H. Clark believes they will have enough seed wheat all over these two Provinces to meet the requirements, if the supplies are secured before all the good wheat is shipped out of the country. Enterprising merchants and farmers in the worst-affected districts will do well to make early effort in this direction. Some districts of the West have practically escaped injury to the wheat by frost. Wheat that grades No. 3 Northern, or better, as much of it is doing, is not seriously frosted; and farmers in districts where the wheat grades no lower than this should have good wheat and oats for seed. It will be well, however, for every farmer to test his wheat, and, especially, his oats for germination before he sows a pound next spring; and if the germination is only, say, 70 per cent. or 50 per cent., to sow enough more seed per acre to make up. When the germination is as low as 50 per cent., it would be well to secure seed from an outside source, but for the danger of introducing new weeds. Chiefly for this reason, it is advised in such cases to use the home-grown seed, using enough more pounds per acre to allow for the defective kernels.

WESTERN FAIR SURPLUS.

At a meeting of the Western Fair directors, winding up the business of 1907, the financial statement showed a surplus of \$3,555.71 on this year's exhibition, despite bad weather and local croaking of "failure." A large amount in permanent improvements was spent, and the fair starts out for another year with a total cash balance of \$11,626. A number of plans for future improvement were worked over, which the efficient Secretary, A. M. Hunt, will lay before the new Board. Among other changes proposed will be greater encouragement to amateur fruit-growers.

The Ontario Government has decided to build, through its Power Commission, a pole transmission line for Niagara electrical power from Niagara Falls to Hamilton, with a loop thence touching Guelph, Galt, Stratford, St. Mary's, Woodstock, Brantford, and other points. A special line will run from Hamilton to Toronto. The cost of the lines will be assumed as a private enterprise, the Power Commission counting on being ultimately recouped by the municipalities served. Work on the transmission lines will not be commenced until the formal contracts for power have been voted upon and accepted by the several municipalities interested.

JABEL ROBINSON'S DEATH.

After a comparatively short illness, Jabel Robinson, a widely-known agriculturist of West Elgin, Ont., died on Nov. 9th. The late Mr. Robinson came into public note largely through his identification with the Dominion Grange, of which he was a past president, also representing West Elgin in the Dominion House of Commons for 1900 to 1904, where he was distinguished by his sturdy independence and advocacy of economy and fair play to the farmer. He was born at Lindsay, Buckingham, Eng., Nov. 11th, 1831, and came to Canada in 1856. He was twice married, and is survived by three daughters and four sons: William C., manager of the Electric Light Company, Kakabeka Falls; Charles B., Dean of the Veterinary College, Washington, D. C.; W. Jesse D., Washington, D. C., and Frank J., Deputy Minister of Public Works, Saskatchewan.

THE UNITED STATES CORN CROP.

The Crop-reporting Board of the United States Bureau of Statistics of the Department of Agriculture finds that the reports of the correspondents and agents of the Bureau on the production of corn in 1907 indicate a total yield of about 2,553,732,000 bushels, or an average of 26.0 bushels per acre, as compared with an average yield of 30.3 bushels per acre (2,927,416,000 bushels) as finally estimated in 1906; 28.8 bushels in 1905, and a ten-year average of 25.4 bushels.

WANT CANADIAN SHOW HORSES.

The directors of the International Horse Show, London, Eng., have decided to hold the 1908 show at the Olympia in June. A deputation is leaving for the States and Canada to confer with prominent Canadian and American exhibitors. One of the features of the Lord Mayor's show on Saturday will be a float exhibiting Canadian grains.

THE FEBRUARY LIVE-STOCK CONVENTION.

On a previous page of this issue ("Live Stock" department), reference is made to the meeting of the National Live-stock Association, to be held in Ottawa. The Executive Committee have fixed the dates for Feb. 5th, 6th and 7th, next, and a comprehensive programme of practical subjects is being arranged.

J. A. Hayes, of Sheffington, Que., has been appointed to take charge of the Calgary, Alberta, laboratory of the Seed Branch of the Dominion Department of Agriculture. Mr. Hayes has been connected for some time with the Seed Branch, at Ottawa, and holds an associate diploma of the Ontario Agricultural College. The work at Calgary consists chiefly of tests for germination. The general representative of the Seed Branch in the West is W. E. McKillican, of Glangarry Co., Ont., an O. A. C. graduate of 1905.

Contents of this Issue.

ILLUSTRATIONS.

Farm Pets1777
 Stonecrop1778
 Shearling Leicester Rams1779
 Post Orbit1780
 The Dairymaid1781
 A Wet Nurse1783
 Dr. R. Barnes, V. S.1783

EDITORIAL.

Approaching Opportunities1775
 American Agriculture Through Scottish Eyes1775
 Too Busy to Make Roads!1775
 The Four-horse Age1775
 Our Maritime Letter1776

HORSES.

Lameness in Horses1776
 Co-operative Horse Insurance1777

LIVE STOCK.

National Live-stock Association1777
 A Satisfactory Sheep-rack1777
 Sawdust as Bedding1778
 Feedstuffs May Come Down in Price1778
 Good Feeding Steers High and Hard to Get1778

THE FARM.

Ground Rock Phosphate as a Stable Absorbent1778
 The Season and Its Work1778
 Locust Trees for Fence Posts1779
 The Oxford County Roads1779

THE DAIRY.

High Prices of Feed Induce Thrift1780
 Sell Grain and Buy Cotton-seed or Oil Cake1780
 District Meetings in Western Ontario1780

Keep the Good Cows Milking Well1780
 Temperatures Rising1780
 Canadian Cheese in Britain1781
 Weed and Feed1781

GARDEN AND ORCHARD.

Avoid Using Ready-mixed Paints on Fruit Trees1781
 Horticultural Progress1781

POULTRY.

Starting a Flock1781
 Cedar-log Poultry House1782

APIARY.

International Beekeepers Meet1782

THE FARM BULLETIN.

Huntingdon, P. Q., Notes; A Mare Foster-mother; Systematizing the Canada Meat and Canned-foods Inspection; The Fruit Shippers and the Railways; Millers Discriminated Against; Forthcoming Shows1783
 Rural School Teaching; Western Fair Surplus; The United States Corn Crop; Want Canadian Show Horses; The February Live-stock Convention1784

MARKETS1785

HOME MAGAZINE1786 to 1794

QUESTIONS AND ANSWERS.

Miscellaneous.

Milk, cream and butter yields1795
 Looking for ducks; mulch for strawberry plants; planting orchard on low ground; imperfect chestnuts; chickens dying; small-fruit plantation1796
 Drainage sought; lime fencing—trespassing—ditching1797
 Removing stubs from hen's legs; tuberculosis in fowl; turkeys dying1800
 Cement tank in barn for windmill1803

Veterinary.

Joint ill; mare stalks when standing; chronic cough1795
 Sallanders; abortion; worms—swollen sheath; cattle with cough1803

Out West they tell this story about the East, perhaps by way of retaliation for some of the tall stories about the West that they tell down East:

A young man just graduated from an Eastern institution of learning, went to the West and applied at a large ranch for a job.

"What can you do?" asked the owner.

"Nothing much; but I am willing to work, and can learn," replied the eager applicant.

"Know how to ride a horse?"

"No, I never rode one in my life."

"Rather a slim chance for you to be useful here, I'm afraid."

"What have you for a man to do, if he could ride?"

"Herding sheep."

"I think I could get along at that very well without a horse."

"Young man, I'm afraid you don't know much about this business. I have a large ranch here and some thousands of sheep. A man without a horse would make a pretty poor show."

"Well, I'll tell you; when I was at college I was the champion sprinter of the institution. I believe I could do you some good service. I have a long-distance record, too. I wish you would give me a chance, and let us see what I can do."

With a good-natured but pitying smile, the ranchman said all right, and bade his new man get some supper; turn in, and be ready to go to work early the next morning.

When the employer rose next morning, he saw the new employee coming in from the direction of the sheep quarters. Some-

what surprised at the young fellow's enterprise in getting up so early, he accosted him:

"Well, you're up and ready to go to work, are you?"

"Oh my, yes! I've been at work for two or three hours."

Then the ranchman noted that the tenderfoot was dressed in working clothes, a sweater, and already looked rather flushed. "What have you been doing?" he asked.

"Driving those lambs into the corral."

"What lambs? I have no lambs. This is not the lamb season."

"Well, I chased eighty-five of them in, and I tell you I had a time of it, too!"

The ranchman went with the young tenderfoot to see what the story he told was about. And sure enough, huddled up together, frightened and tired out, were eighty-five wild jackrabbits.

"All right, young man, I think you'll do!" said the ranchman.

The keenness of the Scotsman's grip on siller, says the Glasgow Evening News, is seldom used as a text upon which to base a few remarks, as was done in an exceedingly pawky manner by Mr. Guthrie at the opening of the Springbank U. F. Church bazaar. This well-known banker possesses much of the charming humor that was characteristic of his father, the late Rev. Dr. Guthrie. On one occasion, he related, he was sitting at a coroner's inquest at Liverpool, where an enquiry was taking place into the circumstances attending the death by drowning of a man in the Mersey. The body had been recovered by a Scotsman, and the judge asked him if he did nothing to resuscitate the body. Being a Scotsman, Mr. Guthrie said, the witness at once emitted a stentorian "EH." The question was repeated, and then its purport seemed to dawn on the exile, as he instantly responded, "Aye, I searched his pockets!"

FARMERS

should note the advantages offered in the Savings Department of the

BANK OF TORONTO

Interest is paid on all balances. Money deposited may be withdrawn whenever required. Safety for all money deposited is assured by our large resources.

Capital - \$ 4,000,000
Reserve - 4,400,000
Assets - 36,000,000

BANK OF TORONTO
Incorporated 1855.

MARKETS.

TORONTO.
LIVE STOCK.

Receipts of live stock at the City and Junction markets were not as large last week as for some time past, there being all told, 252 carloads, composed of 4,057 cattle, 3,156 hogs, 5,974 sheep, and 218 calves. The quality of all classes of stock was much the same as for two months past, few well-finished lots, in any class, being on sale. Trade was, if anything, a little better, owing to lighter supplies. Prices for cattle were much the same, while hogs were lower, and sheep, lambs and calves were easy, at about the same prices.

At Toronto Junction on Monday of this week there were received 1,145 cattle; quality medium; trade fair; prices about steady. Exporters, \$4.25 to \$4.85; export bulls, \$3 to \$3.75; choice butchers' cattle, \$4.60 to \$4.70; loads of good, \$4.25 to \$4.50; medium, \$3.50 to \$4; common, \$2.50 to \$3.25; canners, \$1 to \$2, feeders, \$3.25 to \$3.50; milk cows, \$4 to \$6.50; veal calves, \$3 to \$6 per cwt. Sheep, \$4.15; lambs, \$5 per cwt. Hogs, \$6 for selects.

Exporters.—Prices last week ranged from \$4.25 to \$4.80; bulls, \$3.50 to \$3.75.

Butchers'.—Picked lots sold from \$4.50 to \$4.90; loads of good, \$4.25 to \$4.40; medium, \$3.75 to \$4.10; common, \$3.25 to \$3.50; cows, \$2 to \$3.75; canners, 75c. to \$1.50 per cwt.

Feeders and Stockers.—Trade steady, at following quotations: Best feeders, 1,000 to 1,100 lbs., \$3.25 to \$3.60; best stockers, 600 to 800 lbs., at \$2.25 to \$2.60; medium stockers, 600 to 800 lbs., \$2 to \$2.25; common stockers, 500 to 700 lbs., at \$1.50 to \$1.75.

Milkers and Springers.—Good milkers and forward springers were in demand at \$40 to \$60 each, the bulk of the best selling around \$50. Medium cows sold at \$30 to \$35, and common, light cows, \$16 to \$25 each.

Veal Calves.—The quality of veal calves offered was poor; many of the thin, scraggy, inferior class, and few good to choice. Trade slow at \$2 to \$6 per cwt.

Sheep and Lambs.—The quality of sheep and lambs generally is not good. Export ewes, \$4 to \$4.30; rams, \$3 to \$3.50; lambs, \$4 to \$5.40 per cwt.

Hogs.—The quality of hogs has not been good for some time; farmers, seemingly, will not finish them properly. Selects, \$6; light, unfinished at \$5 to \$5.25 per cwt.

Horses.—The same dullness that has characterized the Toronto horse market for several weeks still exists. The bulk of the horses on sale generally are such that their owners do not care to winter at the present high prices of feed, and, as it costs as much to winter a poor horse as a good one, farmers are clinging to their best in hopes that they may reap high prices next spring. Heavy workers sold at \$125 to \$175; medium, \$75 to \$100; second-class drivers and saddle horses, \$70 to \$100;

expressers, \$100 to \$160; wagon horses, \$100 to \$140.

BREADSTUFFS.

Wheat.—No. 2 white, \$1; No. 2 red, \$1, sellers; No. 2, mixed, \$1, sellers; No. 2 Goose, 90c. bid; Manitoba, No. 1 Northern, \$1.11 bid, lake ports.

Corn.—No. 3 yellow, sellers, 71c., Toronto.

Barley.—No. 2, sellers, 92c.; No. 3, extra, 90c.

Oats.—No. 2 white, 53c. to 54c.; mixed, 53c., outside points.

Rye.—No. 2, 89c. bid.

Peas.—No. 2, 86c. bid.

Bran.—\$21 to \$22, in bulk, at outside points; shorts, \$23 to \$24.

Flour.—Ontario, 90 per cent. patent, \$3.85 bid, for export; Manitoba, special brands, \$6.20; second patents, \$5.60; strong bakers', \$5.30 to \$5.40.

Buckwheat.—70c., at outside points.

COUNTRY PRODUCE.

Butter.—The market is strong, with prices higher for best grades. Creamery, pound rolls, 31c. to 32c.; creamery, boxes, 29c. to 30c.; dairy, pound rolls, 28c. to 29c.; tubs, 26c. to 27c.

Eggs.—New-laid, 28c. to 30c.; cold-storage, 24c.

Cheese.—Prices unchanged, but firm; large, 13 1/2c.; twins, 13 1/2c.

Honey.—Market firm; prices unchanged. Extracted, 13c. to 13 1/2c.; combs, in dozen sections, \$2.75 to \$3.

Potatoes.—Car lots of Ontarios, on track, at Toronto, a little firmer, at 78c. to 82c. per bag.

Poultry.—Receipts large; quality poor; prices lower than in many months. Live turkeys, young, 10c. to 11c. per lb.; turkeys, old, 9c. to 10c.; geese, 7c. to 8c.; ducks, 7c. to 8c.; chickens, 6c. to 8c.; fowl, 5c. to 7c.; squabs, per doz., \$2 to \$3. Dressed poultry, 2c. per pound more than these quotations.

Beans.—Market steady at \$1.80 to \$1.90 for primes, and \$1.90 to \$2 for hand-picked.

Baled Hay.—No. 1 timothy, \$17.50 to \$18.50 per ton, for car lots, on track, at Toronto.

Baled Straw.—Market firm at \$9.50 to \$10.50 per ton for car lots, on track, at Toronto.

FRUIT MARKET.

Apples are in good demand. Prices firm at \$2 to \$4 per bbl.; Snows, \$3 to \$3.50 per bbl.; Spies, \$3 to \$4, the latter price being for choice, selected fruit; cooking apples, \$2 to \$2.50; windfalls, \$1.50 to \$1.75 per bbl.; crab apples, \$1.50 per bushel; pears, 30c. to 70c. per basket; grapes, 25c. to 40c. per basket.

HIDES AND WOOL.

E. T. Carter & Co., 85 Front St., have been paying the following prices: Inspected hides, No. 1 steers and cows, 7 1/2c.; No. 2 steers and cows, 6 1/2c.; country hides, 6c. to 7c.; calf skins, No. 1, city, 12c.; No. 2, 11c.; horse hides, No. 1, each, \$2.75 to \$3; tallow, 5 1/2c. to 6 1/2c.; wool, unwashed, 12c. to 13c.; wool, washed, 22c. to 23c.; rejections, 16c.; lamb skins, 75c. to 80c.; horse hair, per lb., 30c.

SEEDS.

The William Rennie Co. report the market as being steady for alsike seed. No red clover has been reported as being on the market thus far this season. Alsike No. 1 seed, per bushel, \$8.60 to \$9; No. 2, \$7.50 to \$8.

CHICAGO.

Cattle.—Steers, \$4.50 to \$5.25; cows, \$2.65 to \$4.60; heifers, \$2.50 to \$5; bulls, \$2.60 to \$5.

Hogs.—Choice heavy shipping, \$5.05 to \$5.20; light butchers', \$5.10 to \$5.30; light mixed, \$4 to \$5; choice light, \$5 to \$5.25; packing, \$4.50 to \$4.80; pigs, \$4.10 to \$4.25; bulk of sales, \$4.20 to \$5.

Sheep and Lambs.—Sheep, \$3.50 to \$5.25; lambs, \$5 to \$7; yearlings, \$4.50 to \$5.

CHEESE BOARD PRICES.

Napanee, 12 1/2c. Ottawa.—White, 12c.; colored, 12 1/2-16c. London, 12 1/2c. Brockville, 12c. bid on the board, but none sold. St. Hyacinthe, 11 1/2c. bid; no sales. Belleville.—White, 12 1/2-16c. Picton.—1,296 boxes sold at 12c.

MONTREAL.

Live Stock.—The export demand has been very fair of late, and shipments have been particularly large. For the week ending Nov. 2nd 2,888 cattle were sent out of this port, as compared with 2,472 the previous week. Shippers have contracted for all the Liverpool ocean-freight space for the balance of the season from this port at 27s. 6d., and 30s. The exports for October were 13,330 cattle, and 2,396 sheep, making a total for the season to date of 85,311 cattle and 7,351 sheep, which shows a decrease of 26,661 cattle and 2,040 sheep, as compared with the corresponding period last year. Supplies of choice cattle in the local market are very light, a large number of common animals being offered, and a fair supply of good. Everything offered is absorbed. Prices are about steady. Choice cattle, 4 1/2c.; fine, 4 1/4c.; good, 4c. to 4 1/2c.; medium, 3 1/2c. to 4c.; common, 2 1/2c. to 3c., and canners ranging down to 1 1/2c. per lb. The supply of sheep has been considerably larger lately, with a decline in price. Exporters took best sheep at 4 1/2c.; butchers', 3 1/2c. to 3 1/4c. Inferior sheep were sold at 3c., some of those having been held over a couple of weeks. Lambs easier, owing to liberal supplies, and a large trade was done at 5 1/2c. to 6c. per lb. Many calves changed hands at \$12 to \$15 each for choice stock; \$5 to \$10 for fair to good, and down to \$3 for common. The hog market showed a further decline, owing to the large offerings. Demand is good, and sales of selected lots were made at 6 1/2c. to 6 1/4c. per lb., weighed off cars.

Horses.—Trade was very dull. The only inquiry was from local sources, to which a very few sales were made. Prices continue steady, and are quoted as follows: Heavy-draft horses, weighing 1,500 to 1,700 lbs., \$250 to \$300 each; light-draft, 1,400 to 1,500 lbs., \$225 to \$275; blacks, 1,800 to 1,400 lbs., \$200 to \$225; express horses, \$150 to \$225; common plugs, \$50 to \$75 each, and choice saddle and carriage animals, \$300 to \$500 each.

Provisions and Dressed Hogs.—Dressed hogs declined 1/4c., changing hands at 9c. a lb. for fresh-killed, abattoir-dressed stock. Demand is active. Salt pork, in barrels, is in great demand, and prices range from \$22 to \$28.50 per barrel. Lard holds steady at 12c. to 13 1/2c. for pure, and 9 1/2c. to 11 1/2c. for compound. Demand for bacon is excellent, and prices are holding steady. Green bacon, boneless, and long clear, light, sells at 11 1/2c.; flanks, with the bone in, at 10 1/2c.; long clear, heavy, at 10c.; choice smoked brings 12c. to 16c. per lb. There is a very fair demand for hams, and prices show no change, being 12 1/2c. to 14c. for those weighing 25 lbs. and over, 13c. to 14 1/2c. for those weighing 18 to 25 lbs., 14c. to 15 1/2c. for 12- to 18-lb. hams, and 14 1/2c. to 16c. for 8- to 12-lb. hams.

Potatoes.—Demand continues fair, but the quality of the stock arriving is none too choice. Mixed stock, mostly from Eastern Ontario, is arriving freely, and dealers are paying about 55c. per 90 lbs. for it in car lots, on track, and selling, in broken lots, bagged and delivered into store, at 65c. to 70c. They pay from 5c. to 8c. more for choice whites, Quebec stock. This sells at about 75c. to 80c., bagged and delivered.

Eggs.—A few fall, fresh eggs are reaching the market, and are selling at about 30c. a dozen. The best trade is in cold-storage, which sells at about 24c. for No. 1 candled, and 27c. for selects.

Butter.—Somewhat easier tendency noticeable in the market during the past few days, probably owing to lighter demand, resulting from the recent extremely high prices. Dealers have been asking 27c. to 28c. for choicest makes.

Cheese.—The tendency of the cheese market is downwards, owing partly to the less desirable qualities now being made. Fresh receipts are valued at about 11 1/2c. to 12c. for Quebecs, 12c. to 12 1/2c. for Townships, and 12 1/2c. to 12 3/4c. for Ontarios. Choicest grades are bringing 1/4c. more than these figures. Shipments for the week ending Nov. 3 were about 48,000 packages, via Montreal, and 1,000 via Quebec.

Grain.—The market for oats continues very firm. No. 2 Ontario and Manitoba oats are selling, carloads, in store, at 59c. to 60c. per bushel; while Quebecs, which are not grading very well, range

from 53c. to 56c. Some corn is changing hands at 73c. to 75c., in store, for yellow and mixed.

Flour and Feed.—Flour prices are well maintained, notwithstanding the downward tendency in the price of wheat, until one Manitoba miller reduced them 20c. per bbl. Manitoba spring-wheat patents, \$5.90 to \$6.30 per bbl.; second patents, or straight rollers, being \$5.30 to \$5.70. Ontario winter-wheat patents are \$5.75, and straight rollers, \$5.50 per bbl., in bags. The demand for millfeed continues largely in excess of the supply, and, as a consequence, prices hold as firm as ever. Manitoba bran, in bags, is quoted at \$23; shorts being \$26 to \$28 per ton; Ontario bran, \$24 to \$25; middlings, \$27 to \$28.

Hay.—Prices advanced on best grades fully 50c. a ton since a week ago. Stocks on spot are light, and deliveries are very limited, while demand continues good. Dealers are now offering \$17 to \$18 for No. 1 timothy, and \$15.50 to \$16.50 for No. 2, and \$14 to \$15.50 for clover mixture, the range in the lower grades being rather wide. Sales are taking place here at \$20 a ton, and, perhaps, in some cases, a little more.

Hides.—Lamb skins have advanced 5c., and are in good demand. The demand for beef hides is rather light. Dealers are paying 7c., 8c. and 9c. per lb., Montreal, for No. 3, 2 and 1, respectively, and 8c. to 10c., respectively, for No. 2 and 1 calf skins, selling to tanners at an advance of 1/4c. per lb. Horse hides continue at \$1.75 each for No. 3, and \$2.25 each for No. 1. Tallow, \$10, to \$3 1/2c. per lb. for rough, and 6c. to 6 1/2c. for refined.

Poultry.—During the past week there has been some business done in poultry, generally at fairly-high figures. Dealers quote 13c. to 15c. for fresh-killed turkeys, 9c. to 10c. for chickens, 7c. to 8c. for fowl, and 10c. to 11c. for ducks.

BUFFALO.

Cattle.—Dull and easier; unchanged.

Hogs.—Heavy and mixed, \$5.50 to \$5.65; Yorkers, \$3.25 to \$5.45; pigs, \$5 to \$5.10; roughs, \$4.75 to \$5.10; stags, \$3.75 to \$4.25; dairies, \$5 to \$5.25.

Sheep and Lambs.—Wethers and ewes, steady; others lower. Lambs, \$5 to \$6.75; yearlings and wethers, \$5.50 to \$5.75; sheep, mixed, \$2.50 to \$5.50; Canada lambs, \$6.35 to \$6.60.

BRITISH CATTLE MARKET.

London.—London cables are firmer at 10c. to 12 1/2c. per lb., dressed weight; refrigerator beef is quoted at 10c. per lb.

The unconscious humors of country journalism, says William Allan White, are often more amusing than the best efforts of the alleged "funny man."

According to Mr. White, there once appeared in a Kansas paper the following "personal notice": "Our prominent townsman, Theodore Monkton, is seriously ill. He is being attended twice a day by Doctor Smith, in consultation with Doctor Morgan. His recovery, therefore, is in great doubt."

Professor Percival Lowell is the latest victim of the literal-minded New England printer, whose dislike of abbreviations once led him to announce the celebration in a Catholic church of "High Massachusetts." Professor Lowell's recent book on "Mars and Its Canals," appears in a Boston newspaper as "Massachusetts and Its Canals." Coming at a time when Bostonians are discussing the proposed canal across Cape Cod, the announcement doubtless seems wholly appropriate.

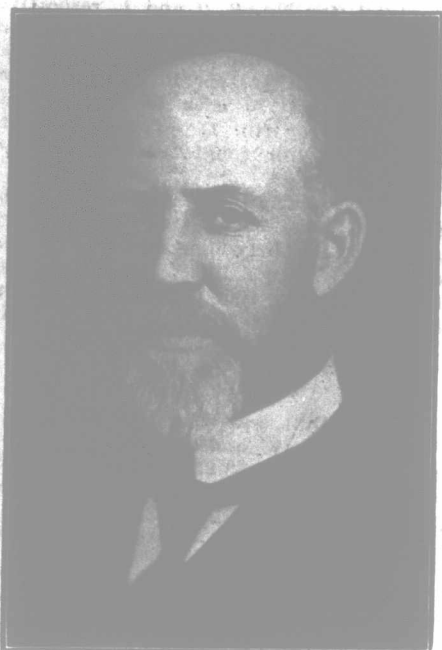
HAD FAIR LUCK.

Tourist.—"And so, my man, you are the oldest inhabitant. Have you had any remarkable incidents in your life? Oldest Inhabitant.—"Noa, sir." Tourist.—"What! lived for nearly ninety years and no calamity ever happened to you?" Oldest Inhabitant.—"Well, sir, I wouldn't say 'no calamity'; I has had four wives in my time." Tourist.—"Any bits of good luck, then?" Oldest Inhabitant.—"Well, sir, I ain't never been runned over by a motor-car."



Life, Literature and Education.

[Contributions on all subjects of popular interest are always welcome in this Department.]



Prof. Adam Shortt.

TO OUR STUDENTS.

The lengthening of the evenings reminds us that it is time to reopen our literary club, "The Farmer's Advocate and Home Magazine" Literary Society, which assumed such encouraging proportions and was the incentive to so much good literary work last year. This year we have decided to carry it on on somewhat different lines, and, as a beginning, beg to submit the following subjects for the attention of those interested:

COMPETITION NO. I.

Write an essay of from 1,000 to 2,500 words (approximately) on any ONE of the following subjects:

- Micawber as a character-study.
- Charles Dickens as a portrayer of character.
- What you consider Thackeray's chief message in literature, and why.
- George Eliot's place among the novelists, as illustrated in Adam Bede.
- Macbeth (Shakespeare), an outline of the story, with comments on its treatment, etc.

COMPETITION NO. II.

Write essays of from 500 to 1,000 words (approximately) on any ONE of the following topics or "texts":

- "Your old failures, your old hopes, your old resolutions—these cannot be all wasted; they can be wonderfully transformed, but they cannot be thrown away."—Philips Brooks.
- "The crown of all faculties is common sense."—Matthews.
- "It is not enough to be industrious; so are the ants. What are you industrious about?"—Thoreau.
- "The entire nature of man is the garden which is given him to cultivate."—Gladstone.

(e) "He that can work is a born king of something."—Carlyle.

(f) Give a definition of what constitutes (1) a well-educated man; (2) a well-educated woman.

COMPETITION NO. III.

(Word-filling.)

As a test in determining the value of words, fill in the omissions in the following:

"A _____ of damsels ruby-lipped,
Blooming like _____ of Samarcand,
_____ lowed to her command.
She glittered like a _____ among
The _____ of the starry throng,
With lovely forms as Houris bright,
Or Peris glancing in the _____;
And now they reach an _____ spot,
Beside a cool _____ grot,
And soft _____ beneath the _____,
By a delicious rose-bower made;
There in soft _____, sport and play,
The hours unnoted glide away.
But Laili to the Bulbul tells
What _____ grief her bosom _____,
And fancies, through the _____ leaves,
She from the garden breeze receives
The breathings of her own true love
_____ as the cooings of the dove."

CONDITIONS FOR ABOVE.

All answers to No. III. must be sent in so they may arrive at this office on or before December 7th.

Answers to No. II. must arrive on or before December 21st.

Answers to No. I. must arrive on or before January 15th 1908. (This considerable length of time is given to the answering of questions in Competition No. I. in case any of our students might wish to make an especial study of one of the subjects before writing upon it.)

One subject only may be written upon by any one person.

Trusting that our work for this session of 1907-8 may be the occasion not only of much useful literary work, but also of much intellectual pleasure to mere readers of the essays, as well as to the active members of the Society, we remain,

Very sincerely yours,

EDITORS LITERARY DEPT.

PEOPLE, BOOKS, AND DOINGS.

Ten thousand bulbs of flowering plants, imported by Earl Grey from England, were planted in Rockliffe Park, Ottawa, this fall, by the school-boys of the city.

The Italian Dante Society will have two swinging lamps placed, the one over Dante's tomb at Ravenna, the other over his monument, in the Santa Croce, Florence. The lamps will be made in Venice, in Byzantine-Venetian style, and will be kept perpetually burning, as a symbol of the poet's undying fame.

At the age of 90, Sir Joseph Hooker, the eminent English botanist, is pursuing his researches with all the ardor of youth. He is endeavoring, he says, to overtake arrears of work extending over many years.

Large colonies of swallows are to be introduced into the Southern States by the U. S. Biological Survey, for the destruction of the boll-weevil.

In Egypt there has been completed this year, by the British Government, a unique irrigation canal, composed wholly of riveted steel. It is over

a mile long, and is built of seven plates of steel, with sectional provision for expansion and contraction.

A chemist of Paris, Aristide Charrette, has succeeded in manufacturing small diamonds of perfect lustre by chemical processes.

Consolidated rural schools are now in successful operation in twenty-five of the United States.

PROF. ADAM SHORTT.

The recent amicable settlement of the dispute between the C. P. R. and their telegraph operators brings into enviable prominence the name of a Canadian, of whom the whole nation has a right to be justly proud, Prof. Adam Shortt, of Queen's University, Kingston, chairman of the board of arbitrators.

Prof. Shortt is a Bruce County man. He was not born with a silver spoon in his mouth, but he early showed himself possessed of more than a usual amount of gray brain matter. Added to this, he had an insatiable desire for reading, and the amount of work he could get through with was a marvel to all who knew him. Stern necessity forbade his attending school more than three days a week, eliciting the sympathetic comment, "Poor little beggar, it's a pity he can't get more schooling. He'd be a smart man if he only had a chance." But a schooling Shortt was bound to have, whether it were of the conventional order or the better schooling that comes from self-help and self-culture. Every book in the neighboring library he laid under requisition. Books with ideas were always at a premium with this young student, and if he suspected that any man in the neighborhood was possessed of knowledge that he wanted, Shortt was soon found camping on his trail. He found his way to the High School. His studies never dragged while there. His teachers, particularly his science teachers, never knew what this young experimenter would do next. Long before the term was out he was master of his subject. He seemed bound to question everything, and to keep on quizzing until he got an answer that suited himself. With him, a textbook was only an incident, a stepping stone, a sidelight—anything that means a help. For him there was no rest till he had gone into the subject himself, and had personally compelled it to yield up its secrets.

From the High School he found his way to Queen's University, where abundant liberty is given any student to think and to investigate for himself. The same love of research and investigation followed him throughout his course in Queen's, and later in Edinburgh. His faculty for grasping a subject in detail proved to be something marvellous. Along with this, he kept his mind independent, and as free from prejudice as may be expected of any man.

His first appointment to Queen's professional staff was to the Department of Natural Science. Later on he was given the Chair of Political Science, and in this field he has really come into his own. Here he carries out his principle of forming his opinions upon his own investigations. He travels everywhere to study con-

ditions at first hand. At one time he is found in Boston looking over old colonial records; again, he is in Paris, France, perusing the documents of the early French governors or of the Jesuits; or, again, he is in London or Ottawa, or any place where men are living and working, or where they have left behind them records of exploits or negotiations that bear upon our present life in any way. Little wonder that his students worship him. Few teachers have the power that he possesses, of inspiring pupils with a love for genuine work. When he discovers a "lad o' pairts," his joy is unbounded, and the lad has his work ready for him.

Prof. Shortt is an ideal Canadian, and after his spirit of independence, his love of work, his respect for facts, and his enthusiasm for the highest welfare of our Canadian democracy, our youth may well afford to pattern themselves. As a financier, as a critic of governmental and corporation administration, and as a student of political and social questions, he has few equals. O. C.

THE NEW EDUCATION IN THE UNITED STATES.

That a change is bound to come about in the species of "education" doled out to the children of the agricultural and industrial worlds, must be evident to anyone who reads closely the signs of the times. As a rule, such pots boil slowly, but already premonitory ebullitions are not wanting.

In Canada—to deal more especially with the agricultural side of the question—they may be recognized in the agitations for consolidated schools with technical departments and school gardens; in the establishment of agricultural classes in some of our High Schools and collegiate institutes; above all, in the spirit of the farmers themselves, who are almost to a man in favor of more specific agricultural education for their children. It is everywhere recognized that the teaching in the rural schools and in High Schools, in which young farmers are educated, must, to some extent, at least, go hand in hand with the teaching on the farm, if the best results are to be attained.

In the United States the movement has gone a step further. Already, in many places there are not only agricultural classes, but agricultural High Schools, which, although not yet perfect, are pushing themselves in to the thickening of the wedge, and are proving satisfactory enough to warrant the serious consideration of the Government in regard to their development. Many of the leading minds of the United States have, in fact, come to realize that, if the country would make the best progress, its people must be educated, and that the masses of farmers and tradespeople, which make up so great a proportion of the population, must be given the sort of education best suited to their needs as agriculturists and citizens of the Republic.

Last March a bill was introduced into Congress to provide an annual appropriation for industrial education in agricultural High Schools, and in city High Schools, and

for branch agricultural experiment stations, and regulating the expenditures thereof," and, in presenting it, Hon. Charles E. Davis, of Minnesota, in an address which covered the ground very comprehensively, voiced many arguments which apply to-day as well to Canada as to the United States.

"The science of agriculture is basic in principle," he said; "sooner or later we should return to first principles, and in the last analysis we must recur to the soil as the fundamental source of our wealth, prosperity and happiness. . . . The increase of knowledge, the specialization of industries, and the close division of labor, have made a new world, into which the graduates of our schools are precipitated. The old education leads the pupil to believe he is prepared for life. His preparation is only general. The new education must prepare the students for some specific line of life. It must be both broad and practical. It must combine the theme written in the book, the theme written in the soil, and in the machinery, with the inspiration for the best living which modern conditions can provide."

Passing on to the statistics of the schools of the United States, Mr. Davis reached the estimate that 93 per cent. of the total population must stop with the primary schools, and pointed out that, for this reason, the teachers in primary schools should be of unquestionable excellence in their work. To insure this excellence, the higher schools in which these teachers are trained must be of the best, and so the whole educational standard must be raised. Upon the co-operation of the Federal Government rests the responsibility of providing and maintaining this standard.

"Minnesota, Nebraska, Alabama, Georgia, and other States," he continued, "have demonstrated that the industrial education started in our State colleges should be extended into a system of agricultural High Schools, and into our city High Schools. The trend has been to organize an agricultural High School for each group of about ten counties, and to develop mechanic arts education, both in separate city High Schools and as courses of study in general city High Schools. . . . The graduates of the agricultural High Schools nearly all go back to the farm, and these schools have demonstrated so effectively that boys and girls can be educated for country life and returned to country life, that everyone who looks into the work of these institutions is ready to promote this kind of schools for the entire country."

"To Georgia belongs the credit of first taking the step thoroughly to establish a sufficient number of well-equipped agricultural High Schools to meet the needs of the farm boys and farm girls of the State. The Legislature, in July, 1906, authorized Governor Terrell to establish an agricultural High School in each of this State's eleven Congressional districts. A State appropriation of \$6,000 was provided annually as a current expense fund with which to begin each school. The districts securing these schools were required to provide at least 200 acres of land, and to erect buildings and equip the schools. The result was such that it is inspiring the entire country with an interest and faith in High-school education in agriculture and home economics. By private subscription, Georgia has raised \$800,000 with which to establish and equip these eleven schools. Never before have the American people so emphatically expressed their faith in agricultural education."

"There may be a difference of opinion," Mr. Davis continued, "as to whether we shall make our rural schools more efficient by retaining the present unit—the isolated rural school—or whether we should consolidate these into larger units. Whichever plan is pursued, all must agree that this class of schools must be improved, by providing teachers trained both in general studies and in the

subjects relating to the future life-work of that 85 per cent. of rural youth which will remain in country life. It may be presumed that the expense will not be very greatly different, whether we develop the rural schools under a plan of consolidation or by adequately improving the little rural schools. At present we have no body of people in our rural communities who have either knowledge or faith to reorganize our country schools. Probably the chief function of the provisions of this bill will be to provide a large class of leaders in our rural communities, who, as progressive farmers and homemakers, and as rural school teachers, will press to a successful issue the development of our rural primary school system."

Mr. Davis' remarks in regard to the wastefulness of inefficient industrial training are well worth reflection. "Of the three great wastes in the economics—land, material, and labor—by far the greatest waste is from inefficient labor. It has been truthfully said that, while America wastes land, the Old World wastes

rapidly changed from an indifferent attitude toward so-called 'look-farming,' to a high appreciation of and a profound respect for agricultural science, and institutions devoted to improving agriculture. Education in mechanics and home economics has likewise risen to a plane of high appreciation. It requires no prophet to predict that, within ten years after the passage of a law as outlined in this bill, the entire point of view recently held by the farmers of this country toward agricultural High Schools, and by the practical men of affairs toward city High-school education, will have been changed."

"The feverish desire to leave the land and go to the city will have been removed. Farms as places of business, and farm homes as places to develop splendid families, will be appreciated at their true American value."

"We need to build up a class of people educated in distinctive industrial and agricultural schools, highly organized, so as to give instruction and to inculcate pride in industrial

schools shall be wasted on unnecessary and soon-to-be-forgotten study, and that the instructors who teach in them shall be of the best, and of those best equipped to give the specific teaching required in the public school. This, of course, presupposes that the instruction given to teachers in training in the higher schools should be, to a sufficient extent, technical. A knowledge of French, German, Latin, etc., is, no doubt, broadening to those who can take the full university and post-graduate courses. It is a question, however, if such studies exert an appreciable influence over those who stop with a collegiate course and go forth straightway to teach in our rural schools, and to forget, straightway, almost every vestige of French, German and Latin with which they once wrestled. Were our rural teachers in embryo required to spend three-fourths of the time usually devoted in our High Schools to merely ornamental studies on the principles of agriculture and home economics, and were these principles systematically presented in our rural schools by teachers in love with the country and rural life (and, just here, no other should be admitted to a rural school), the time must surely be soon reached when, in the words of Mr. Davis, "the feverish desire to leave the land and go to the city will be removed." The introduction of agricultural classes into our High Schools is as the entering of the thin edge of the wedge to this end; and it is sincerely to be hoped that the teachers of these classes will prove to be of such quality and enthusiasm that the way may be speedily paved in Canada to the adoption of a more extensive system of technical education for our rural schools. M.

OUR ENGLISH LETTER.

II.

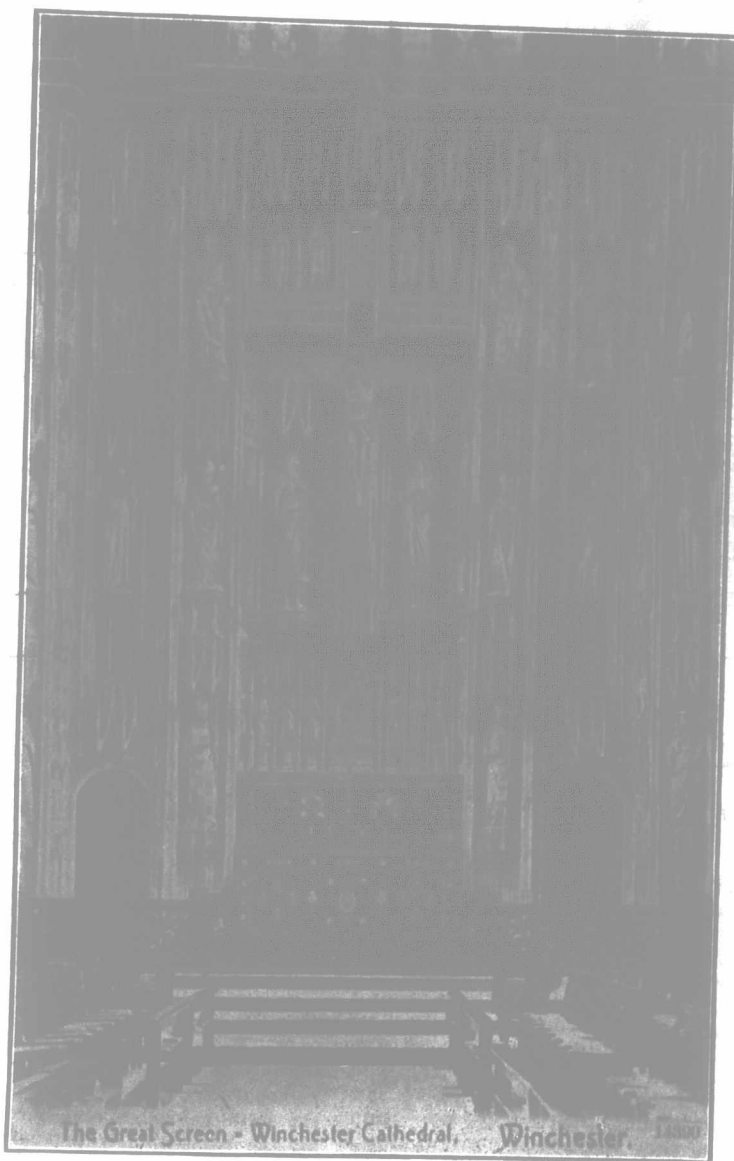
SOMETHING ABOUT ANCIENT WINCHESTER.

(Continued.)

The names of great men connected with Winchester—Bishops, Lord Chancellors (eleven of the earlier bishops being also Lord Chancellors)—are legion. The walls of the cathedral bear testimony in stone to many of these, some in prominent positions, some in lesser ones. In many cases these are much defaced by time. On one wall is a memorial upon which is engraved the Magna Charta and the Bible, a crozier and the cap of liberty. One other is to the memory of Bishop Wallis, dubbed by some "a terrible Whig preacher," by others, "a mild, gentle nonentity." This effigy is on the south wall, and the story tells that, the artist having by mistake turned the face westward instead of eastward, died straightway of grief. The artist did nothing of the kind, for he lived many years afterwards. Similar stories of the sensitiveness of artists are current in other connections, as, for instance, that of the sculptor who forgot the stirrups in the equestrian statue of George IV. at Charing Cross, and who, in consequence, is said to have committed suicide.

THE GREAT SCREEN.

The wholesale destruction of the sixteenth century left its mark upon the magnificent altar-screen begun by Cardinal Beaufort and finished by Bishop Fox. Niche rising above niche, in unsurpassed beauty, had each its figure, representative of the history of the Church, from its earliest birth, beginning with its Founder, Jesus Christ, and followed by those of Apostles, Saints, etc., some sixty in all, none of which figures were then spared. The hand of the restorer has since worked wonders, and the tracery and lacery (if there be such a word) of that beautiful screen is almost without a flaw. The empty niches are again filled, though somewhat differently from those of old. The Queen gave the figure of Edward the Confessor; the Colleges, those of their respective founders; the Dean gave King



The Great Screen, Winchester Cathedral.

labor. . . . The greatest economic need is that our industries be so changed that labor be not wasted. The nation that uses its labor, lands and products to the best advantage will take the lead in civilization and power.

"Can America afford to continue the kind of education which cultivates tastes too expensive for the earning capacities of her people? Even more than with boys, we are making the mistake of educating the tastes of our girls more rapidly than we are training them in the ability to secure those things which satisfy their tastes. Our most important racial and national institution—the home—can be developed, along with our other institutions, only as we give to it the discoveries of science and build it up through education. It is not enough that America has homes averaging better than homes of other parts of the world; they should be very much better. The farmers of America have

affairs and in the American home. So long as the teachers of our schools are trained in schools devoted mainly to non-industrial interests, they cannot well build up an industrial community with full knowledge and inspiration for their life-work. Let us have, as a dominating force in the education of our country youth and our city youth, teachers who are chosen as trained leaders in building up rural and industrial science and practice, and in home-making."

The chief objection to a technical education has chiefly been that it precludes a "broad" education, and may have a narrowing effect on the mind. It must be remembered, however, that Mr. Davis rears specifically to the school education which must end with the primary schools. A primary-school education must, it goes without saying, be, to a great extent, limited; and for this reason is it all the more urgent that not one hour of the time spent in these

Alfred, whilst those of other worthies associated with the history of Winchester and its cathedral have not been forgotten.

Pray do not think that all the claims of Winchester to historic interest are centered in its cathedral. On the walls of the ancient hall adjacent to the County Court hangs the celebrated Round Table, at which sat, or so the legend tells us, the knights of King Arthur, and it was upon the site of this hall that William Rufus held godless festival, and in it the vile judge Jeffries sentenced Alice Lisle to death.

I wish I could take you with me, in imagination, down from the west gate, through High Street, by the "Butter Cross," to the old-fashioned shops, never disfigured by modern vagaries of architecture, but preserving their quaint faces as I remember them of old. The "Piazza," once known as the "Penthouse," still stands, the houses above overhanging the street, with their odd gables and tiles. I was told that the answer given by one of the most prosperous and conservative of the tradesmen occupying one of the quaint old shops under the Piazza, to the question, "How have you been able to make so much money?" was, "By always charging very high and bowing very low," the latter remark, perhaps, being intended to be taken in a double sense, for you cannot retain your old-time architecture, with its picturesqueness, and yet have lofty ceilings and wide shop windows.

THE BUTTER CROSS.

Various reasons are given for calling the beautiful erection at this section of the High St. the Butter Cross. One is that it was paid for by licenses granted to eat butter in Lent; another, and more probable one, is that the sellers of butter congregated there, using the stone steps to place their baskets upon on market days. Of course, to this Butter Cross, as to others, is attributed the story of the sudden death of an old woman who swore falsely about the value of her butter. That Winchester must have been, even long ago, a good selling-center for farm produce, is proved by another legend, this time of good St. Swithin, who is said to have restored to an old lady the value of her wallet of eggs, which had been unfortunately broken on her way to market.

It seems that the graceful Butter-tower of this fine old city was once almost sacrificed to the greed or necessities (?) of its own town council in 1776, "which actually committed the vandalism of selling it for its material to the Paving Commissioners, who would quickly have broken it up but for the arising of the indignant burgesses, who resented, and, better still, prevented the outrage."

Passing by the Butter Cross, there is an archway, leading to one of the avenues which add to the beauty of the cathedral churchyard. Fifty years ago this old God's acre showed a veritable medley of disfigured, crooked, and in many cases undecipherable tombstones. These have been removed, placed reverently in the crypt, numbered and indexed for identification, if ever required, and in their place is a lawn of vivid green and velvety texture, dotted here and there by memorial stones which tell their own story and mark the sanctity of this "holy ground."

BISHOP CURLE'S PASSAGEWAY.

There is one very curious, and, I believe, unique corner of the Close which must not be left without mention. It is a passageway, very narrow and heavily arched, through which I have passed often in my girlhood, influenced by a most incongruous mixture of sensations, compounded of awe at the solemn hush of my cathedral surroundings, and a longing to use it as a "hidey-hole" in which to play our school game of hide-and-seek. Of the meaning of its Latin inscriptions, I then knew nothing and cared less. It seems that this passageway was known to the uninitiated as the "Slype," from the

Dutch, "Sleipdeur," a secret door, or "Sleiphol," a corner to creep into. It was constructed by Bishop Curle in 1636, in order to save the cathedral from the desecration of a footway, which had become, by common usage, a right of way. Its inscriptions, each one having a hand pointed in the direction to which the face of the passer-by was turned, still stand, as follows:

"Worshipper, go that way; traveller, this.

"Let that way be sacred to the choir, and this is made handmaid to the market-place."

Whilst still another says: "Private right has yielded to public; now, go by the way which is open to thee."

BISHOP MORLEY COLLEGE.

Nestled in a corner of this fine old Cathedral Close, is Bishop Morley College, not, as its name might suggest, an institution for the young, but one built as a provision for the declining years of such widows of the benefited clergy of the diocese as are fortunate enough to become suc-



The Butter Cross.

cessful candidates by virtue of their limited incomes and the claims of their late husband for such consideration. The dear little houses, with their bright gardens, under the shadow of the fine old cathedral, are a dream of beauty, in which many lives are lived of tender ministry to those less happily placed in cottage homes or in hospital wards.

Again I have come almost to the limit of space allotted to me, and am in a very dissatisfied mood, for I seem only to have touched the fringe of my subject, leaving but too many points of interest unreferred to. I can only say, do not leave Winchester out of your programme; even if your visit to England be but a very limited one. Allot to it all the time you can possibly spare. It will amply repay you to do so, and do not forget that just one short mile away from it is St. Cross, an old ecclesiastical church and charity of equal antiquity. But the story of St. Cross must wait its turn until another issue of our Home Magazine.

H. A. B.

"It is this desire of the happiness of those whom we love which gives to the emotion of love itself its principal delight, by affording to us constant means of its gratification. He who truly wishes the happiness of anyone cannot be long without discovering some mode of contributing to it. Reason itself, with all its light, is not so rapid in discoveries of this sort as simple affection, which sees means of happiness where reason scarcely could think that any happiness was to be found."—Thomas Brown.

The Quiet Hour.

UNDER SAFE LEADERSHIP.

He calleth His own sheep by name, and leadeth them out. And when He putteth forth His own sheep, He goeth before them, and the sheep follow Him: for they know his voice.—St. John x: 4, 5.

"He leads us on

By paths we did not know;

Upward He leads us, though our steps

be slow,

Though oft we falter by the way,

Though storms and darkness oft obscure the day,

Yet when the clouds are gone

We know He leads us on."

What wonderful pictures of God's Leadership are scattered through the pages of the Bible. We are shown how He leads individuals, such as Eliezer, who was sent by Abraham to find a suitable wife for Isaac, and who put the guidance of his responsible mission entirely into God's hands and then went straight ahead with confidence. When his petition to be led aright was very plainly granted, he did not forget—as we sometimes do—to thank the Lord God of Abraham, Who, as he says, led him in the right way. Do we not see, as we look back on the past, that God has led us also?

Then there is the great picture of the host of Israel—millions of people, with their flocks and herds—travelling safely in the wilderness for forty years. See how secure they are! There is the fiery, cloudy pillar leading the way; following it they know that they will be directed aright, protected from danger, and given everything they need. God said to His people Israel: "I have led you forty years in the wilderness: your clothes are not waxen old upon you, and thy shoe is not waxen old upon thy foot." And, in looking back on the wonderful history of the Christian Church, seeing how it has lived through fiery persecution, times of coldness, heresy and schism, and is growing ever more and more mighty, slowly but surely raising the ideals of the world by its leavening power,—in looking at this great host, led safely by God through nearly 2,000 years, we can gather hope for its safe conduct in the future. The Church is God's Church; it is founded on a Rock—even on Christ Himself—and the gates of hell can never prevail against it. Let us not fear for its safety; though it walks in the midst of enemies, it is the Bride of Christ, and He is always at hand to protect and lead His own.

Then there is the other lovely picture, so often repeated, of the shepherd caring for his own sheep, going before them to find fresh pasture and clear, still water, going after the foolish ones who stray, and always ready to give Himself to the uttermost for the sheep He loves with a tender, individual affection. Could anything express more beautifully our Lord's personal way of dealing with us? If the path be rough and hard, He knows all the hardships by personal experience, and never commands us to "Go!" His word is always "Come!" If He sometimes chooses the hard path that leads up the mountain it is because hardness is better than softness for developing fine character.

What a pity it is that we so often fail to trust Him. Something that we have been hoping for is denied us, and we at once feel afraid that our life will be spoiled. Or, we can't see the way clear before us, and instead of trusting our Guide, putting a hand in His and stepping fearlessly forward, we begin to worry and fret about the future. Worry grows from want of faith. Every time we allow it to get the better of us we are proclaiming the fact that we don't really believe in our Leader. Our Father is rich with all the riches of the universe, why can't we learn to look to Him, as children should, for our daily supply of necessities—necessaries for body, mind, heart and spirit? Instead of that we are apt to cross bridges before we come to them, shoulder burdens that are still in the future, and may never be laid on us at all, and so we lose our rightful heritage of happy-heartedness and grow old and careworn—just because we do not trust our strong

Leader. Though the path before us may be dark to us, He can see every yard of it. If we follow the guiding pillar of His providence, we shall find, as Israel of old, that a path is cut through the sea of trouble, that water of comfort flows out of the hardest rocks of difficulty, and that in the barren wilderness manna enough for the day's needs is always given us.

It is both foolish and wrong to lie awake at night anxiously planning for the future. It is foolish, because it not only does no good and makes us needlessly unhappy, but it also makes us unfit to bear necessary burdens and fight the battles God expects us to fight and conquer in. Our Leader will not smooth all difficulties out of our road. Why, even the poorest teacher in the world knows better than to do that. Just because His love is not weakly indulgent, He will often lead those who trust Him straight up to pain and difficulty. Does He not call us to "follow in His steps." Did not His steps lead to the Gethsemane of renunciation and to the Calvary of crucifixion? How many have found that to follow His calling meant turning the back on ease and luxury, choosing to be worn in body and wearied in heart and mind by the sorrow and sin and burdens of others, which they voluntarily took on their own shoulders. Think of Father Damien and the men and women who have followed him, deliberately devoting their lives to the leper colony of Molokai. Think of leaving the sweetness of life among their friends, and choosing to dwell "in the midst of all the horror and uncleanness that surround this island graye." Think of the courage shown by the man who faced the risk of contracting the horrible disease, and was for seventeen years "a spiritual leader and bodily physician for more than a thousand lepers." Stevenson says: "No human heart can know the agony which these years brought him, or the horror of the creeping death of the last seven years after he himself became a leper." Surely it was a Christ-like thing to do, a following in the footsteps of One who left His home to dwell among those who were corrupted with the leprosy of sin—a loathsome and terrible disease in the eyes of perfect purity—and who endured the curse of sin, for, St. Paul says: "He hath made Him to be sin for us, who knew no sin; that we might be made the righteousness of God in Him." Surely that pure and holy spirit must have shrunk back in dread from such agony, and yet He went forward, in spite of the shrinking, and was satisfied that the Father was making no mistake in planning His life-work and life-pain.

Do you think Damien regrets the sacrifice he made? Stevenson says that when he visited the island it was a different place than when Damien came there and "made his great renunciation, and slept that first night, . . . alone with pestilence; and looking forward (with what courage, with what pitiful sinkings of dread, God only knows) to a lifetime of dressing sores and stumps." Even yet, he says, "every fourth face is a blot on the landscape, and had you visited the hospital and seen the butt-ends of human beings lying there almost unrecognizable but still breathing, still thinking, still remembering; you would have understood that life in the lazaretto is an ordeal from which the nerves of a man's spirit shrink. . . . a pitiful place to visit, and a hell to dwell in."

And yet Damien's self-sacrifice was well worth while, for a noble band of sisters, doctors and missionaries, fired by his example, minister to those sorrowful, stricken people. "It was his part, by one striking act of martyrdom, to direct all men's eyes on that distressful country. At a blow, and with the price of his life, he made the place illustrious and public. . . . If ever any man brought reforms, and died to bring them, it was he. There is not a clean cup or towel in the Bishop-Home but Damien washed it." So says Stevenson, owning at the same time that this heroic soul was by no means perfect.

We are all called to be saints, and sinners though we may be—let us strive after our high calling. Christ's call of "Follow Me" touches the nobility that lies in the hearts of men; just because He does not call to a life of soft ease and comfort, but to brave endurance and grand self-sacrifice. And those who give

up their lives to His leadership inspire others in their turn. But it is not only in great matters that we should follow our Leader trustingly, but in everyday affairs. A few weeks ago, when I first became a settlement superintendent, I did the very thing I have just been condemning as "foolish and wrong," for I often used to lie awake at night wondering how I could ever accomplish all the work that was looming up before me. One day I was passing hurriedly through one of the corridors of our settlement when I met a clergyman who stopped to speak to me, saying that he was just leaving the city. I said to him, "I am at my wits' end to find volunteer helpers." He at once gave me the names of two ladies who, as he remarked, were "planning for work." I wrote to them, and they came enthusiastically to our assistance, and are charmed with the opportunity of doing settlement work. One of them told me of another lady. I wrote to her, and she came to see me an hour ago, eagerly promising to share our labors to the limit of her spare time.

Do you think that my running up against that clergyman was an accident? I don't. Was my remark to him merely a chance? Surely not. If I had trusted my Leader, instead of using up nerve force uselessly by lying awake at night trying to see my way, needful helpers would have been sent to meet me.

When Moses tried to evade God's calling, pleading that he was "slow of speech, and of a slow tongue," he was told that all the eloquence really needed for his mission would be supplied. He was not to go to the battle depending on his own resources. He should have Divine help: "Now therefore go, and I will be with thy mouth, and teach thee what thou shalt say"; and he should also have human assistance and sympathy: "Is not Aaron the Levite thy brother? I know that he can speak well. And also, behold, he cometh forth to meet thee."

Do you think those brothers—who were intended to supply each other's need—might have missed each other in the desert? If they had been walking at random, without a guide, their meeting would have been most unlikely; but, when God intends that people should meet, they don't miss each other—how could they?

"The good we hoped to gain has failed us. Well,
We do not see the ending; and the boon
May wait us down the ages,—who can tell?—
And bless us amply soon.

"In God's eternal plan, a month, a year,
Is but an hour of some slow April day,
Holding the germs of what we hope and fear
To blossom far away."

If God leads us up to some duty, He can supply the wisdom and power we need, either in our own person or through someone else. He can see the oak in the acorn, and He knows well how to bring a great work to perfection. When Bishop Ingram was speaking at the University Settlement a few weeks ago, he said that Oxford House, which is now doing such great things, "began with a little church school, started by two men who walked with a portmanteau and a bath from the little station—that was the first bath in the settlement." Later on, when he went to look over the site of the proposed building, he saw "a dead cat and the can that killed it side by side." That seems rather a forlorn beginning for the great Oxford House; but, as the bishop declared, "If the work is good work, God looks after it and prospers it."

Let us get into the habit of trusting our Leader in the little testings He sends us every day. Then, when He tries our faith severely, we shall be able to trust Him still. To feel safe only when the road is easy and bright does not require any trust at all. How pleased our Lord must be when His followers trust Him in the dark, trust on when things seem to be all wrong. The saying is true: "It is more disgraceful to distrust one's friends than to be deceived by them," and how much more careful we should be not to distrust our great Friend—

God. He has helped us in the past, can we not look back on the guidance and protection we have already received and take heart for the future?
HOPE.

A SONG OF TRUST.

I cannot always see the way that leads
To heights above;
I sometimes quite forget He leads me on
With hand of love;
But yet I know the path must lead me
To
Immanuel's land,
And when I reach life's summit I shall
know
And understand.

I cannot always trace the onward course
My ship must take;
But, looking backward, I behold afar,
Its shining wake
Illumined with God's light of love, and
so
I onward go,
In perfect trust that He who holds the
helm
The course must know.

I cannot always see the plan on which
He builds my life,
For oft the sound of hammers, blow on
blow,
The noise of strife,
Confuse me till I quite forget He knows
And oversees,
And that in all details, with His good
pian.
My life agrees.

I cannot always know and understand
The Master's rule;
I cannot always do the tasks He gives
In life's hard school;
But I am learning with His help to
solve
Them, one by one,
And when I cannot understand to say,
"Thy will be done!"

The Young People's Department.

WHY TOM CHANGED HIS MIND.

Tom Bridges sighed as he pulled out his chair, and turned up his smoky oil-lamp, preparatory to looking over his school work for the next day. There was a pile of smudgy exercise-books to correct, and a history lesson to adapt to the dull minds of his new scholars in the small back-country school. Everything seemed dull to Tom this chilly October evening. Perhaps he was a bit homesick for the cosy sitting-room in Toronto, with its bright gas-jets, its warm fire in the grate, his sisters' merry gossip, his mother's sympathetic smile, and his father's hearty laugh. He had only been living in the country six weeks, and from his heart he pitied all the inhabitants thereof. It seemed to him a place of mud and cold, of dreary monotony and miserable discomfort.

"I wonder if all farmhouses are like this," he groaned, as the sound of angry voices came up from the room below. "I hitched up Polly last time," young Harry Binns was saying. "You should do it to-night, Jim."

"We'll see which does it, you lazy little good-for-nothing," shouted Jim, whose voice was at the unmanageable age and varied inconsequently from high treble to low bass. A sound of scuffling followed, and then a crash.

"Pa!" cried Mrs. Binns, in a weary, high-pitched tone, "can't you send the boys out of my way? You never notice how bothered I am, with the dishes not done, and baby not put to sleep, and the place to sweep up"—she paused for breath—"and all, and Annie'll be here in an hour."

Tom almost smiled. There certainly was "all" to do in that kitchen. Pots

stairs—a bright, fresh girl's voice. It is wonderful how much better he felt at the mere sound of it, though the words were not at all remarkable.

"Why, of course, Mother, I'm going to help put the things away. You and Em must be quite used up. I'm so glad to be back again to help. No, I wouldn't live in New York for anything. Do you know, I was always wishing to get into the kitchen, at Auntie's. You soon get tired of having nothing to do. You can go to your homework, Em, I know you're crazy to get at those old books of yours. I'll take your place. But I must just kiss Baby once more. Oh, it's good to be at home!"

The girl finished with a sigh of pleasure, and there was a hearty roar of laughter, which shook the ceiling.

"Surely that's not Mr. Binns actually laughing!" thought Tom, more surprised than ever. "I think I shall have to go down and get warm by the stove, I'm really chilled through."

But, to tell the truth, it took him some time to make up his mind to open the kitchen door. It was so long since he had been in girls' society, and he was not sure if he had not lost the trick of it. But when he self-consciously walked in, Annie left him no time to worry about that.

"You must be Mr. Bridges, of course," she said, hurrying to shake hands with him, and evidently pleased to see him. "I've heard all about you from the girls. I'm so glad you can sing, so few boys here can."

"But, Miss Binns, I really—I'm pleased to meet you," stammered Tom, wondering, but pleased at her knowing of his pet accomplishment, which he had thought useless in the country!

"Come along, and fill up your pipe, if you have one," said Mr. Binns, cheerfully. "You look cold. Now, little girl, be quick and sit down, and tell us all about New York."

Tom watched Annie with delight as she moved quickly about, drawing the curtains, putting a green cover on the table, picking up the books, and working a regular transformation scene, before she sat down in a low chair, with some pretty-colored knitting in her hands. Emily had taken her homework upstairs to be out of temptation, but the boys were all taken up with Annie and her wonderful experiences. Mrs. Binns leaned back in her rocker, as if she felt she could rest now. Mr. Binns puffed at his pipe with a contented smile on his face; and Annie talked.

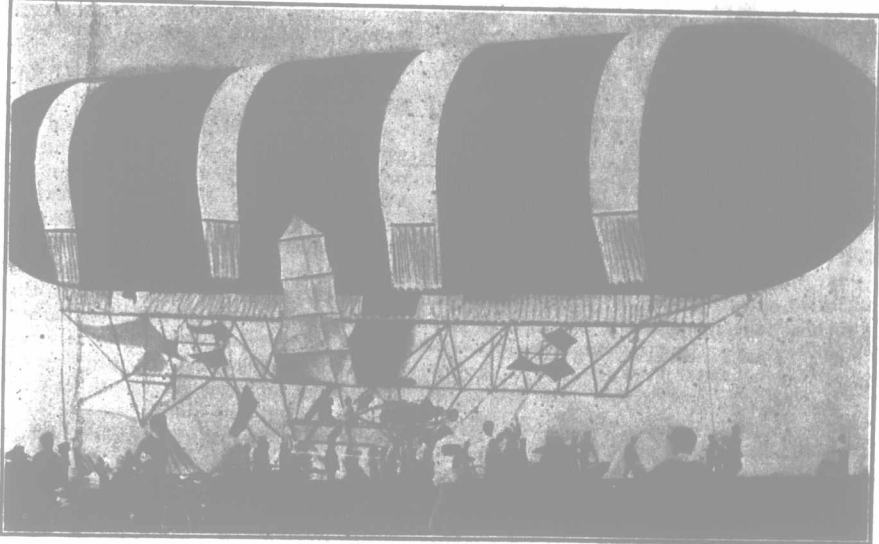
Tom went to bed at last, still wondering how the uncomfortable kitchen had suddenly become the cosiest room he had ever been in, but when he tried to think over the details, all he could really fix his mind upon was a girl in a warm red dress, with the pleasantest voice in the world.

"Pleasant," that was the word to describe Annie. Not actually pretty, but her eyes were pleasant, her laugh was pleasant, and so were her quick ways, and her pretty dresses—but Tom did not know that, for he was only a boy. He only knew that Jim and Harry were not so quarrelsome, that Emily was developing into a most interesting pupil, that his bed was never unmade when he came in at noon, nor was his lamp ever smoky, that the kitchen was somehow more comfortable, that Annie's hot biscuits were something to hope for when school was tiresome. And that happiness consisted in driving her to a jolly party on a bright frosty night, when her eyes were shining, and—

But Tom and Annie were much too young for that kind of thing. All I wanted to tell you was that Tom fell quite in love with school-teaching in the country, and never again regretted that he had come to board with the Binns.
C. D.

ABOUT THE PRIZE ESSAY.

I think, as we are all likely to be busy between now and Christmas, that we had better postpone the giving of the prize until some time in January. This will give the girls who have presents to make, time to read the books suggested, and I will give all the help I can in this column. Anyone who prefers to write the essay this month may, of course, send it to me at any time. Here is something on the subject, taken from an old number of the National Home-reading Union



Nueli Secundus, the New British Air War Balloon.

This is the airship which made the famous trip from Farnborough to London, recently, and circled around St. Paul's Cathedral, a picture of which was shown in our issue of October 24th.

ON WEDDING SUPERSTITIONS.

Marry when the year is new,
Always loving, kind and true;
When February birds do mate,
You may wed, nor dread your fate.

If you marry when March winds blow,
Joy and sorrow both you'll know,
Marry in April when you can,
Joy for maiden and for man.

Marry in the month of May,
You will surely rue the day;
Marry when June roses blow,
Over land and sea you go.

They who in July do wed,
Must labor always for their bread;
All who wed in August be,
Many a change are sure to see.

Marry in September's shrine,
Your living will be rich and fine;
If in October you do marry,
Love will come, but riches tarry.

If you wed in bleak November,
Only joy will come, remember;
When December's snows fall fast;
If you marry love will last.

and pans littered over the dirty stove, dust on chairs and dresser, one blind torn half off the roller, the crumpled cloth still on the table, the wide-open pantry door revealing the untidy shelves, torn school books scattered about the floor—a model of discomfort and confusion.

Mr. Binns' chair legs came down with a bang.

"A man can't read a line in peace in this house," he exclaimed. "Be off and hitch up, both of you. I hope you've got something for Annie to eat after her journey. Emily, you'd better look alive and help your mother."

The door shut with a bang, and Tom rapped his fingers in his ears, to shut out the rattle downstairs.

"Poor Annie!" he thought. "She'll wish herself back in New York! Well, it will be only one more grumbling voice in the house."

He fixed his eyes on the history textbook, and tried to forget his surroundings in the stirring times of Edward III. Instead, he dropped off to sleep, and woke up with a start an hour later, feeling very chilly. As he stood up to go through some gymnastic exercises, he was surprised to hear a new voice down-

Magazine, a very interesting and helpful English monthly:

"The hour had struck; the full flood-tide that rose after the Council of Trent had published its decree had slipped past, and it had grown too late now to unite, with that of Philip, the jealous power of France, against the little isle where, as the Armada slowly drifted out on the weary breeze, in deep green lanes the 'may' was white and the Elizabethan birds sang clear and true.

"The Armada came at last. No need to tell the story of that fight, or how the half-starved seamen, fed on peas and oil, faced the Stately Spanish ships, with the sea whitening round them in the rising gale, and no powder in the hold, and won a victory at which the heart thrills; but there has been preserved for us in an old letter, a picture which gives a lurid glimpse of the human passions of that time, and which helps us to realize that, behind the dry dates and the hard facts which are usually handed down as history, human passions were at work, and that the men of that time felt the throb and flow of national life, and mourned for their fallen, as we for the grim English dead that lie on the wide veldts of Africa and were our brothers.

"It is from an English merchant who happened to be in Spain when a false report reached that country that England had fallen, and that Sir Francis Drake had been captured along with other but less dreaded heretics. Then the men of that Spanish town made great feasts, running through the town on horseback, with rich apparel, and vizards on their faces, crying with loud voices, 'That great dog, Francis Drake, is prisoner, with chains and fetters!' Then came the bitter disenchantment, the broken and shattered ships that had met those English sea-dogs, the wounded men who cried out, we are told, 'on Sir Francis Drake, saying he was a devil and no man.' And here the merchant continues his strange story: 'I would,' said a man at St. Sebastian, snatching a harquebuss, which he did not know to be loaded, and levelling it at a passer-by, 'I would you man were Francis Drake. How I would hit him!' and so drew up the snaphance, and levelled at the man, and down fell the cock, and off went the piece, and killed the man, who spoke not a word.' Seldom has a more gruesome and dramatic picture of human despair been handed down to us than this, and in helping us to recreate the England and Spain of these times it is worth volumes. There were men and women behind the dates in our histories. Each age is fated to wrestle with its own peculiar problems, and having struggled with them to pass away. The questions which vexed the men of Europe in the time of Elizabeth were all religious questions. But, out of these religious debates, there came the first faint beginnings of colonial enterprise, and a new problem which we have yet to settle. It was the threat of Spain, and the coming of the Armada which provoked our colonial expansion, and created our wide-slung Empire. 'Had England,' writes Seeley, 'had to fight for her faith against France, her wars might have been of the old kind, and her battles fought either on the soil of England or of France, or on the narrow seas between them. It was because she had to defend herself against Spain, the monopolist of the New World, that she was tempted out into the Atlantic, and from that to the Pacific. Across the seas lay the deep forests and the virgin fields of America. It was the religious question that suddenly wedded them to us. So the Elizabethan problem changed to our problem.'"

Everyday Thoughts.

A man is relieved and gay when he has put his heart into his work and done his best; but what he has said or done otherwise shall give him no peace.—Emerson.

Every hand is wanted in this world that can do a little genuine, sincere work.—George Eliot.

Reflect that God, who makes the storm desist, can make a violent, angry heart subside.—Robert Browning.

A Bright Shepherd Dog.

The sagacity of shepherd dogs is truly remarkable, and, in fact, in some instances, their intelligence seems more

than human. A large collie had been trying to drive a flock of sheep across a narrow bridge, but they were suspicious of it, and held back. Presently the dog, finding it useless to try to drive them, leaped upon the backs of the sheep, who, in their crowded condition, looked like a great woolly floor, ran along on their backs to the bridge entrance, leaped upon the floor, and seizing one of the sheep by the neck with his mouth, dragged it on to the bridge. Once on it, its suspicions were allayed, and it trotted across, followed by the whole flock, while the dog stepped to one side to let them pass, then walked along behind.—Sel.

A Hint About Letter-writing.

If your friend makes a severe remark, either leave it unnoticed, or make your reply distinctly less severe; and if he makes a friendly remark, tending towards "making up" the little difference that has arisen between you, let your reply be distinctly more friendly. If, in picking a quarrel, each party declined to go more than three-eighths of the way, and if, in making friends, each was ready to go five-eighths of the way, why, there would be more reconciliations than quarrels! Which is like the Irishman's remonstrance to his gad-about daughter: "Shure, you're always goin' out! You go out three times for wanst that you come in!" LEWIS CARROLL.

"THE FARMER'S ADVOCATE" FASHIONS.



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Wilfred was taken to the lake, which was entirely frozen over, and the smooth ice glittered in the sunlight. It was the first time the little fellow had seen this body of water covered with ice, and, after viewing it for a few minutes, he turned to his mother and asked, innocently:

"Say, mama, who put the lid on the lake?"

About the House.

THE GERM OF THE BULLETINS. THE PRODUCTION, CARE AND USES OF MILK.

[Condensed from W. I. Bulletin, No. 160, issued by Ontario Department of Agriculture.]

The women in the country do not perform much of the actual work of milking the cows and cooling the milk. They usually, however, have this work more or less under supervision, and, if they so desire, can do much to improve the general conditions surrounding the production of milk, by insisting that those who milk the cows are properly dressed and wash their hands before they begin milking. By insisting upon cleanly methods and proper cooling of the milk, they can do much to increase the quality of the raw material. Care in this respect not only insures a better quality of cheese and butter, but a larger quantity. If the farmers' wives and daughters tell the farmers that they have to put their stables in a clean condition, that they have to carry on their work in a clean way, that they have to keep their utensils in a clean manner, and send the milk to the cheese factory in a clean state, it will be done.

MILK AS A FOOD.

In order to understand the food value of milk, or, in fact, of any food, we must have a definite knowledge of the composition of the body, and of the classes of foods necessary to support life. Briefly, we require to replace continually in the body muscle and tissue, fat, mineral matter, heat and energy and water. We know that with every movement we make, and with every thought we think, bodily material is being used up, and, therefore, worn out; and in order that we may not wear out and die, we must replace this loss as it occurs. This we do precisely as we keep a fire going, by adding fuel from time to time, our fuel being food.

For each different substance in the body, we have corresponding food materials. To build up muscle and tissue, we use muscle and tissue-building foods, or proteids, such as meat and eggs. For our fat, we eat butter, cream, olive oil, etc. We get mineral matter in all our ordinary foods; salt is, perhaps, the best known example. Water we find in all foods. Should any food contain the proper proportion of all five classes, we call it a "perfect food," hence eggs and milk come under this heading, although these require to be used with other foods to round out the diet.

In regard to its nutritive value, milk stands very high, and its worth is not appreciated as it should be, especially when we compare its cost and its value as a food. For example, a lunch of ten ounces of bread and a pint of milk will equal, in nutritive value, a lunch of soup, meat, potatoes, bread, butter and coffee. The value of skim milk is not appreciated as it should be. It still contains nearly ten per cent. of nutritive ingredients; that is, it has nearly all the protein of whole milk for building muscle and tissue and making blood and bone, and half the value for giving heat.

Then, too, we have buttermilk, which is also valuable. One glass of good buttermilk is equal in food value to half a pint of oysters, and yet what a difference in cost.

Milk is classed among the very digestible foods, although there are some to whom it is very indigestible, but this is a peculiarity of that individual stomach. When it is taken into the stomach, it is quickly curdled by the acid of the digestive juices, and in this regard it should be remembered that to be digestible, milk should be sipped, or taken slowly, so that it may enter the stomach and curdle in a soft mass instead of in hard lumps. This is one reason why it is well to use milk with other foods, and not take it in large quantities alone. Lime water is frequently used in milk to prevent too rapid coagulation, in cases of weak digestion. Milk, when boiled, is rendered indigestible, because the protein is hardened. This shows that milk, when cooked, should be just heated, never boiled, if possible to prevent it. Again, in heating milk it is always well to cover it in order to prevent scum.

Atwood, an American authority, says that one quart of milk has about as much nutritive value as a pound of beef. We can purchase in milk nutritive material at about one-third the cost that you can get it in beef. Milk is one of the cheapest of the nutritive foods, and has this great advantage over beef, that it is almost entirely digested.

A GOOD COW.

The first essential in the production of milk is that we must have a good cow. A good cow is one that will produce at least 6,000 pounds of milk, or make not less than 250 pounds of butter in one year, at a cost of not more than \$30 for feed. A man cannot afford to keep cows that produce only 3,000 pounds of milk in a year.

One of the factors that we must bear in mind regarding a good cow is that we must have a strong, healthy, vigorous one, if we would have milk that has vitality. The cow must be fed the right kind of food, juicy, succulent grass in summer, with mangels, carrots and corn silage to make up for it in winter. A good ration for winter is 8 to 10 lbs. clover hay, 30 to 40 lbs. corn silage, 20 to 30 lbs. mangels, 8 to 10 lbs. meal, made up of equal parts of oats and bran by weight, and 1 to 2 lbs. oil cake, gluten meal, or pea meal; the ration to be given in two feeds daily to each cow. Give the cow plenty of water and salt, and treat her kindly.

The cow-house should be kept clean, sweet, and well ventilated. No man should keep his cows in a small, damp, filthy house, and expect milk fit for human use. The cows must be kept clean, regularly brushed and curried.

As a rule, the milking should be done by a man. He should have on clean clothes, and should wash his hands before milking. Milk quickly into a clean pail. Immediately after the milk is drawn from the cow, strain it, and cool to a temperature of 50 to 60 degrees. If you get milk cooled thus, it can be kept for a long time, and will be fit for human consumption. Milk which is not cooled at once, forms a medium for the development of bacteria, and very often contagious diseases are spread through an impure milk supply.

One of the essentials in keeping dairy utensils clean is to have a smooth surface. This should be kept in mind when purchasing, and if all seams are not flushed smooth with solder, this should be done. As soon as the tin is worn off the inside, exposing the metal, the utensils should be discarded. All utensils should be washed as soon as possible after using. They should first be rinsed with lukewarm water to remove the milk, then washed with hot water in which a little washing soda has been dissolved, using a fibre brush instead of a cloth, rinsed with hot water, and scalded with boiling water. Cans should never be tightly closed when not in use, and should be placed on a rack in an inverted position so the dust cannot blow into them. If possible, they should be placed where the sun can shine on them. Cheesecloth should be plentifully used in dairy work. It is especially useful to tie over cans while milk is being cooled, and makes an excellent strainer, if kept perfectly clean.

Milk, after straining and cooling (which should be done quickly and thoroughly, this holding good also in the case of skim milk from a separator), should be kept in a cool place—on ice, if possible. Milk is ever ready to absorb flavors and odors from surrounding substances, hence should be kept where it will not be exposed to odors from vegetables, fruit, meat, etc. It should also be protected from dust, and out of the sun. Be very careful not to mix new milk with old. It is always well to make a practice of scalding and cooling the vessel just before the milk is placed in it. If milk is kept in a pitcher, or other open vessel, it should be covered with a damp cloth. Every precaution as to cleanliness and thorough cooling should be practiced with the milk to be used in feeding infants or young children. Unless it is kept cool and sweet, it is sure to affect the health of the child.

Once at a dinner at which Liszt was present, the hostess suddenly exclaimed in alarm that there were thirteen at table. "Don't let that distress you, madam," said Liszt, with a reassuring smile, "I'll eat for two!"

Carmichael.

BY ANISON NORTH.

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CHAPTER IV.—Continued.

"Why, it's Mallory's little gipsy!" said the big voice again, and I jerked away angrily. What right had



Henry Carmichael to see me cry, and what right had he to call me a little gipsy?

"Peggy, Peggy, what's the matter?" said Miss Tring, reproachfully; but I leaned against her, safe within the protection of her encircling arm, and looked out my defiance at Henry Carmichael. He was

looking at me with a curious, half-pitying smile; but he did not speak to me, only turned away in a moment and went down toward the barn, where, presently, I saw him playing with

Gay Torrance, pulling her curls and snatching her hat off, while she danced about him and sprang after it, laughing in glee. Well, she might play with Mr. Carmichael if she chose. He was a wicked man, and he had sworn at my father and called me a gipsy.

In a moment, however, my attention was fully taken up, and I forgot to be miserable. The captains had been chosen, and the picking of the sides had begun, the general noise and confusion ceasing as the names of the contestants sounded forth loud and clear. My father and Henry Carmichael, I noticed, were chosen on opposite sides, as though even in this they were fated to oppose each other; and then I looked to find Bill Gilliland, upon whom, it seemed, so much was to depend. He was standing a little to one side, his face full of anxiety.

The very instant after the last man was chosen, the word was given, and there was a general rush, some seizing the "pike-poles" with which the first bent was to be raised, while as many as could laid hold upon the great framework, and with some desultory "yeo-heaving," raised it into position and blocked it in place where it could be more conveniently handled.

Then, like bees, the whole force swarmed upon the pike-poles, gripping them until hands lay in long lines, knuckle to knuckle, almost throughout the entire length, while faces were expectantly turned toward the edge of the bent which was to be lifted.

For a moment there was a clamor of voices, amid which nothing could be distinguished, while Bill Gilliland stood frantically waving his arms and contorting his face in a hopeless endeavor to be heard.

"Shut-up, boys!" someone roared. It was Henry Carmichael. "Give Gilliland a show!"

Almost instantly there was silence, and Gilliland's countenance cleared. The next moment his voice could be heard shouting his commands in a clear, self-possessed tone.

"Now, then, men, ready! Yeo-heave!" And the men began to lift, steadily, without confusion, for the racing had not yet begun, and the united efforts of all were being put forth to raise the huge framework.

"Yeo-heave! Yeo-heave!" and the bent began to leave the ground, the long row of glistening pikes now appearing above the heads of the men swarmed below, and lengthening at every "heave."

"Yeo-heave!" "Yeo-heave!" Steadily the bent is going up, the great timbers mounting higher and higher like a vast, clumsy network against the blue sky, with men cling-

ing like spiders, here and there, to the meshes, and men pressing closer and ever closer below, just as though a huge mass of beams and poles were not swaying and creaking above.

Eagerly I searched for my father, and at last descried him, riding calmly upon the very topmost timber of the bent.

For a moment I caught my breath in the fear that he might lose his hold, or the bent might drop. The next instant his calmness reassured me, and I felt a throb of exultation. This feat of riding up there, so quietly, so recklessly, surely put my father on a level with huge and strong men, like that mighty man of the woods, Henry Carmichael, whom I could see straining, with shoulders bent like a great buffalo in the very thick of the "pike-pole" men. And was it not much more creditable to be up there riding into the sky than in safer places, such as out there at the very end of the corner pike-pole, where fat old Yorkie Dodd, with his big stomach, and lean Jim Jamieson were puttering away, without seeming to be of much use to anyone at all? Mr. Jamieson, I thought, looked somewhat frightened, and I wondered what there could be to be afraid of in that spot.

"Why doesn't your father go in a hard place up on top, or far in among the rest?" I said, rather brutally, to Hud Jamieson, who, with Gay Torrance, had clambered up on the lumber pile beside me.

"Huh!" he retorted, "Everybody can't go in far, silly!"

"It's his barn," I maintained, "n' he ought to go in the dangerous places."

But I did not catch Hud's reply, for the bent had at last shot into place perpendicularly, and a general clamor of voices, hammering of mallets, and rushing about was preceding the pushing up of the second bent.

"Which side's ahead?" I asked, somewhat puzzled to know just how things were progressing, but Hud looked at me with unmixed contempt.

"Why, no side's ahead yet, silly! That's just like girls! The racing doesn't begin until the purline plates go up!"

"Oh!" I said, apologetically, then settled myself back against Miss Tring to wait for the beginning of the race.

Very interesting, I thought it was, to watch bent after bent go slowly up, then settle into place with a sort of dull shock; and very beautiful, for, as the raising went on, the sun was sinking lower and lower, and the red light from it, spreading over fields, and hill, and forest, was striking the new white timbers into streaks and bars of gold, upon which the men hung in spots and clusters of russet, and gray, and ebon black.

With the raising of the last bent, in order to see more distinctly, we left our place on the lumber-pile, and moved nearer to the barn.

"Now the fun's going to begin! Whoop!" shouted Dick, coming up to us for the first time.

But I, at least, was hardly prepared for the pandemonium which succeeded. Scarcely had the bent reached its position and the girls been put in, when the word was sounded, "Now, boys, fer yer plates!" and there was a general race from all directions towards the huge purline plates which lay in two shining streaks on the ground. Everyone seemed to be shouting at once, and, in the general confusion, Bill Gilliland seemed to be of no more account than the lark in the meadow.

I watched my father, who was high up, hammering away with a mallet, and heard someone shout to him to "Let down that chain!"

Instantly he threw the mallet from him. It cut the air with a curve like a meteor, and as it neared the ground big Henry Carmichael stepped out from beneath a leaning timber, not far from me, and directly in the way of the mallet.

"Look out! Look out!" shouted half a dozen voices, but almost too

late. At the same instant Carmichael put his hand to his forehead and half staggered. Two or three men ran forward, while my father stood, seemingly paralyzed, at the top of the bent, notwithstanding a score of voices which kept shouting to him to let down the chain.

When Carmichael took his hand away, a thin stream of blood could be seen oozing its way down his face.

"It's only a scratch," he said, waving the men who had run up to him away.

"Only a scratch," repeated one. "But holy Moses, if it had struck an inch further back you were done for, Carmichael!"

"Who threw it?"

"Mallory."

With that the man ran off, but Carmichael looked up slowly to my father, who, all dazed, it seemed, had not yet moved.

For an instant the two looked steadily into each other's faces, and there was in Carmichael's a look more bitter by a hundredfold than had been upon it in the quarrel by the elderberry bushes.

Breathlessly I watched him, my ears strained to hear, and when he raised his great fist and shook it at my father, not a word missed me.

"You meant that, Mallory, and, by Heaven, I'll get even with you!" With that he walked off, and my father, the spell broken, in answer to the voices which were threatening to throw him down if he didn't wake up, let down a huge chain, which was instantly drawn about the end of the purline plate.

Upon the other side, for the whole occurrence had but taken a few moments—far less time than I have taken to tell it—the yeo-heaving was just beginning. But just now I had little interest in the race. Tremulously I looked at Dick, who was standing beside me.

"Don't be scared," he said, "father's bark is worse than his bite."

And then he did a rather strange thing for a lad of his years. With a smile he held out his hand to me, and quite solemnly I laid mine in it. He grasped it for a second firmly, and in some sort of way I felt that the grasp was the seal to a compact that, come what might, Dick would still be my friend. An instant later he was off, and presently I saw him running about among the timbers of the barn and clambering up posts and along beams as this one or that beckoned him to bring something. As for Hud, he was bravely explaining the ins and outs of the race, which was now in full swing, to Gay Torrance.

Of the details of the race, in such an uproar, I could distinguish but little, but by the time the plates were up and the rafters had been run into place I had recovered my good spirits enough to be able to jump and clap my hands when it appeared that, after all, the side upon which my father had been chosen had won. And now the men, with old Yorkie Dodd toddling on far in the lead, were setting out on a run for the house, where the tables were set in long array out of doors, and the girls and women were bustling about with pitchers of hot tea. But I turned to look once more at the great skeleton of the barn. The lower part of it was now quite in shade, and the timbers, bereft of their recent gold, looked pallid enough. But upon the rafters above the beams of the sun still lingered, and each shone blood-red, like a streak of fire. Beyond them, again, the sky was fast softening into twilight, and upon it sailed one fleecy, coral cloud. From the copse beyond the meadow a whip-poor-will was already trilling its weird, wild song.

"It's a blessin' it went up so well," said someone near me. "never a hitch, nor a man hurt, only that bit of a scrape Carmichael got. Who threw the maul? Mallory, did ye say?"

"Yes, Mallory. Carmichael said he meant to do it, but Lord save

us! Mallory 'ud never do a trick like that!"

"Oh, no. All the same, if Carmichael were a size or two smaller them two 'ud come to blows yet."

So saying the men passed on to the house, and I followed, thinking what a grand story about everything I should have to tell Chris when we went home.

Under the full moon that night, Yorkie Dodd, sitting by Chris on his bench, recounted in his halting drawl the story of the raising, dwelling with much fervor on the excellence of the "blow out" (least with which it had closed).

"Oh, aye," he concluded, "that's where ye miss the wimmin—in the cookin'. My wife's gone now three years Easter. She was powerful handy about the house, my missis was. Aye, that's where ye miss the wimmin, in the cookin' and bakin'."

"But dash it, man, ye don't surely value a woman jist fer the cookin' she does!" exclaimed Chris.

Yorkie shook his head slowly and sadly. "There's other things, sure, but wimmin's powerful handy fer the cookin' 'n' bakin'!"

"But there's yer boy, now," said Chris, encouragingly. "Sure, I hear great news of him, how he cooks yer meals, 'n' works like any man outside, as well."

Yorkie brightened visibly. "Oh, aye," he said, "Sandy's a good lad as ever was, 'n' his mother over again, but," ruefully again, "he's not up to her wi' the cookin'."

"Why don't ye hunt up another woman?" asked Chris. But Yorkie evidently did not detect the chaffing.

"Wha-t?" he exclaimed, perplexed. "Why don't ye hunt up a woman to cook fer ye?"

Yorkie hitched with becoming modesty. "Well, now," he drawled, "it's queer I never thought o' that. Mebbe a wumman isn't so easy to find, but I'll think on't, Christopher—I'll think on't." And with that he got up and shuffled off toward home, as though he had been called upon to face a matter which required immediate decision.

"Dash it! What hev' I done now!" exclaimed Chris, looking after him as he disappeared in the moonlight. "If I've set him on to some poor 'wumman'! But dash it, sure it 'll be her own fault if she takes him!" and with that he dismissed the subject, as though satisfied to be rid of the responsibility.

I slid onto the bench beside him, saying nothing, for I saw that he was about to speak again. Presently he began in that low, easy way in which he often talked when I was near, partly, no doubt, to me, but a great deal more to himself.

Before he got through I knew that he was dwelling on the incidents of the raising, as told by Yorkie, and more especially on that in which my father had thrown down the mallet.

"Folks is queer," he said, "n' different. Now there's them that's like an iron rod—that's yer father—straight up 'n' down, 'n' no shilly-shallying about them, ner mouldin' to other people's notions, 'n' 's long as they're set in the right all's well 'n' good. A good kind o' people, lass, 'n' one that the world hes often much need of. 'N' then there's them that's like a great river—that's Henry Carmichael—now runnin' calm 'n' smoothlike atween the meadows, 'n' now thunderin' 'n' blusterin' over the rocks in a waterfall, 'n' Heaven help them that gets mixed up in it—but then, afore ye know it, wimplin' again into a quiet-like pool, wi' the ferns noddin' 'n' the birds singin'. A good kind o' folks, too, lassie, if ye've a mind to look past the cata-racts that comes jist here 'n' there."

He sat still a moment looking out into the moonlight, while I sat wondering when Henry Carmichael could possibly be like a "wimplin' pool." Then, in a tone of disgust, he added, "'N' there's them that's jist—pigs!"

(To be continued.)

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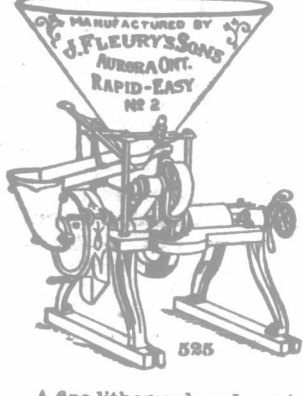
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Write me personally for particulars.

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Mfr. of 1900 Washer Co.,
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The Ingle Nook.

MODES OF DRESS.

(A Paper Read at a Meeting of the Ospringe Women's Institute by Miss Ada Currie.)

We learn from Bible history that the first garment was made of leaves. Before sin entered the world there seems to have been no occasion for any covering. Following history all down through the ages, we find that the more sinful a nation becomes—with also a certain amount of luxury—the more it grows extravagant and artificial in dress. Each age has its own style, and that style is an index to the habits and character of the people. For example, the quaint mode of dress at the time when our grandparents were young seemed peculiarly fitting to their charming manners. At the present time there is such a variety of styles to choose from that one can be suited whether she wants a gown of the very simplest or most elaborate make. This is also characteristic of present-day life, which is so busy, when living is so complex, so rushed, materialistic and artificial. It is a time when "Fashion is Queen and Money is King," and I am afraid we are too often apt to sacrifice comfort and health in order to dress as we think becomingly, and to be like other people. We do not feel that we are injuring ourselves in any way, and, because of years of habit and custom, we perhaps do not notice our manner of dress to be uncomfortable. Physicians and all writers who write of science, health and morality in connection with the human body, agree that the body should be free from anything which prevents perfect and easy circulation of the blood; that the clothing should be such that the weight of it is on the shoulders, not on the waist and hips. The waist, for good and natural reasons, is made pliable, and its weakness in that respect is taken advantage of and often drawn up to a smaller than its natural size; this throws other organs out of place, and, hence, induces a great many internal troubles. The waist may not be pressed much—just very little smaller—but yet ever so little will prevent the most perfect digestion of the food in the stomach. By being used to having the bone of the corset to help support the back, we will often, when tired, let it hold us up instead of teaching our own bones and muscles to do it. Prof. Fowler, and many others who are students and teachers of physical culture, claim that by proper dress and exercise, proper position in standing, right breathing, bathing, etc., by training and strengthening the muscles of the back, the abdomen and sides, one can become so strong that a great deal of sickness can be avoided. How we can dress so that the weight is mostly on the shoulders, and, at the same time, dress becomingly and in the custom of the present time, is a question yet to be answered. When a corset is worn, it is so stiff and hard that when a skirt is donned, the weight is not felt on the hips; but when no corset is worn, the skirt band must be very loose, or it will injure the tender waist of the wearer. The custom of the day will not allow people to dress with loose garments from the shoulders, without appearing odd and queer; but this kind of garment would be much more comfortable, and most becoming when properly draped and made. Should we not hail with delight and encourage to our utmost any tendency in the fashions to become so that the human body may have a chance to live naturally and healthfully as our Maker intended it should.

So much depends upon the women of the country as to what its future will be. Are we a strong nation physically? Let us look at the daily and weekly papers, and at the hundreds of almanacs, and a glance will show that the physical condition of the people is away below what it ought to be, else there would not be such an enormous amount of advertising of patent medicines. Think what will the future of our country be if it continues to devour such quantities of this stuff, composed largely of alcohol and some other things, some of which are helpful and others merely stimulants. Would it not be much better for our young women to make a study of the

human body, and find out the proper way to make it strong and pure, with the medicines which God has given us so plentifully—fresh air, sunshine, water, proper food, exercise and dress?

We believe the Women's Institute in Ontario is doing a good work, but I think if it accomplished nothing but to have been the means of implanting in the minds and hearts of the people a higher and more beautiful ideal in the mode of dress, it would have accomplished a noble purpose—an ideal which would lead us to dress according to the needs of the body, not according to the dictate of the Goddess Fashion, who would have us bow before her shrine and grovel in the mire of artificialism, and have us smile all the while, and say, "How beautiful!"

A few years ago an American speaker, being impressed with the importance Ontario, showed us, by a very convincing argument, that "as goes Ontario, so goes America," and, quoting from a noted writer, he said, "As goes America, so goes the world." If this be true, the people of Ontario have most certainly a trust to perform. We cannot think that Ontario yields such influence as this speaker would make out, but yet that should not lessen our sense of responsibility.

We, in this age, think of the folly of idol worship, while we are in the very midst of it ourselves, unless we look well to our ways. The idols of to-day are not always made of material things. Anything that we are apt to follow, instead of obeying God, becomes an idol for us to cast aside. Do not modern fashions, when followed, prevent our minds and bodies from better fulfilling their highest and best mission in the world? Why should not our mode of dress be made subject to our needs, rather than we be subjects to the reigning fashion goddess? It is true some of her styles are to be admired, but their artificial beauty would sink into insignificance in comparison with a more simple garb, draped by the hand of a true artist. We send missionaries to foreign lands, and we see those people adopt our mode of dress. Would it not be better for us to take a lesson from the Japanese ladies' garment rather than encourage them to pattern after ours, which is so far from the ideal? Is it not like taking one idol from them and offering them something which may grow to be another? John H. DeForest, D. D., in his book, "Sunrise in the Sunrise Kingdom," page 51, says: "The graceful and expensive Japanese clothing has been wholly given up as a public dress by multitudes of officials, teachers, soldiers and business men, who now appear in European clothes. The middle and lower classes, men and women alike, mainly cling to the inexpensive kimono. The upper-class women do not take to Western styles of dress, but continue to wear the broad and expensive sash, with gowns that do not show the form of the body; and, although they do not wear hats and bonnets, their hair ornaments are rich and costly. Mr. Fukuzawa used to say that the three strangest sights on earth are the wasp-waists of Western women, the deformed feet of Chinese women, and the black teeth of Japanese women. The custom of blackening teeth is rapidly going out of fashion." Of these three customs, it is not difficult to know which is most harmful to the human body. I think those Japanese ladies who do not take to Western style of dress are showing good sense, and I think we should be bettered by adopting the good qualities of their dress, and by the lessons we, as Canadians, have learned in economy, we make them without being expensive.

Dressmaking has become a nerve-racking occupation, and the busy housewife who cannot afford to pay a dressmaker, and often cannot get one—wants for any money, finds it more than she is able to bear to do the family sewing. Why could someone not invent a simple national (Canadian) costume, which would be an outward expression of a simple, beautiful and true life within? We need not think such a costume should become tiresome if it were comfortable for with the various magnificent and ever-changing materials in dress goods one should never need to lack for a beautiful garment; of course, that is, if one had the money to spend for it.

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"I make several floor Rugs and Mats each year, using Cotton or Wool dyes as occasion requires. The rags with which I made my last hooked rug, were all Cotton, which I dyed with Diamond Dyes for Cotton. The five colors are very rich and bright, and the whole effect very pleasing. I find your Diamond Dye colors for Cotton the best I ever used; they do not fade or get dull looking. Diamond Dyes are my best friends and aids in housekeeping."

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This lady knew well that Cotton Rags (vegetable materials) should be dyed with Fast Diamond Dye colors for Cotton, which always give those rich color that imitation and worthless dyes cannot equal.

WE WANT THE LADIES TO KNOW that when a merchant tries to sell a dye which he says will color Cotton and Wool equally well, he is trying to sell a poor imitation of our Diamond Cotton Dyes.

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Judge.—If you knew you were innocent why did you give a false name?

Prisoner.—I was afraid of compromising too many people.

Judge.—Indeed! And what is your real name?

Prisoner.—John Smith.

No doubt, if such a course were attempted, there would be opposition, and bitter opposition. Think of the enormous sums of money spent in the changing of patterns alone. But no great reform was ever made without a brave struggle, and so, if we want the future generation to be strong and noble in mind and body, we must be willing to count the cost now, and cast aside, as a worthless relic of the past, anything which hinders the highest human development.

[Institutors, here is a question for you, what is the use of talking and doing nothing? Why cannot some of you design a "national Canadian dress"—or get some artist to do it—which will be at once convenient, beautiful, comfortable? "The Farmer's Advocate" is very willing to help you in this movement, and will do so in this way: We will pay \$5 for any photo, accompanied by an explanation of such a dress, provided the following regulations are complied with: (1) The dress must appeal to us as artistic. (2) It must be such as can be worn without a corset. (3) The weight must fall almost entirely from the shoulders. (4) It must not be long enough to sweep the floors when walking. (5) It must contain a pocket. (6) It must be light in weight. (7) It must be convenient. (8) The photo must show the dress on a girl or woman.

Now, then, those of you who have this question at heart, get busy, and prove your interest by your works. There is no better medium in Canada for advertising your ideas than "The Farmer's Advocate," for we have subscribers all the way from Newfoundland to British Columbia, also some in the British Isles, the United States, Australia, New Zealand, Germany, France, China, South Africa and the British West Indies. We wish you all success in your project.—D.D.]

Christmas Presents.

Dear Dame Durden,—Being a lover of needlework, I was much interested in your Christmas suggestions, and think them most opportunely given, as many come too late to be of value to the busy housekeeper, who must of necessity do such work in the evening or spare moments culled from her daily routine.

Now that the eyelet embroidery is much in favor, many pretty little bags, center-pieces and belts may be made of linen, and by one who is clever at arranging and transferring patterns, numerous simple and pleasing designs may be originated. One pretty way of making a fancywork or button-bag is to form the bottom of two covered pieces of round cardboard, between which is gathered the bottom edge of the pocket forming the bag. If this bag is made of colored linen, the top edge may be finished with scallops of embroidery, with an eyelet in each scallop through which to run ribbon for drawing the bag together. As a fancywork bag, this is very effectively made of silk, with a silk lining divided into small pockets for holding thimble, thread, etc. A little crochet needle book, of the same color as the silk, is a delightful adjunct. But for a practical and inexpensive present, I have received nothing dearer to my heart than a tennis flannel kimono dressing sack. This was made of a good heavy grade of tennis flannel, with ribbon ties at the throat and midway down the front. To the business friend, who comes home at the end of the day weary, and seeks her own room for rest and comfort, this is a most acceptable gift. One Christmas I presented a friend with a Haviland China plate, which I accompanied with a card bearing the words, "Merry Xmas," formed from several varieties of our beautiful Canadian moss. She wrote me, "The plate is lovely, but I think I appreciate the little card even more."

Can we not exchange a few more suggestions along this line?
GENTLE JANE.

Questions.

Dear Dame Durden,—I am going to take a seat among the Chatterers, and ask a few questions. I do enjoy the Ingle Nook so much, and there are such a lot of things that I would like information on:

(1) Would you mind giving the value of apples as a food in your next number of "The Farmer's Advocate"?

(2) What is the difference between

pulverized sugar and icing sugar, or are they one and the same thing?

(3) Could you, or any of the Chatterers, give me any information about asphaltum varnish for pipes and stoves?

(4) Also, in that recipe for hard soap, would beef tallow do, or has it got to be pork dripping?

(5) Would you please place in the next number of "The Farmer's Advocate" just how we should address a letter to the Ingle Nook?

Halton Co., Ont. A NEWCOMER.
(1) If you will turn to page 1331 of your August 22nd "Advocate" for this year, you will find a very comprehensive article, by Prof. W. T. Macoun, on the "Use of Fruit as Food."

(2) Pulverized sugar and icing sugar are the same.

(3) Has any Chatterer had experience with asphaltum varnish?

(4) It is always better to follow a given recipe exactly.

(5) Simply address your letters: "Ingle Nook," "Farmer's Advocate," London. I am sorry these answers could not appear as soon as you wished; we can seldom insert Ingle Nook letters sooner than three weeks after they are received.

Preparing Birds' Wings.

Dear Dame Durden,—We have received some very useful information through the pages of "The Farmer's Advocate," and I thought perhaps you would be able to help me. I would like to know how to prepare birds' wings when they are to be used on hats; how to polish quills, and how the feathers are fastened on in the breasts, the kind that are manufactured. I would send you a recipe for ginger-snaps if I were not in a hurry, but as it is I must close.
Essex Co., Ont. C. B.

I am very sorry to have to refuse any of our Chatterers information, but, as a friend of farmers, "The Farmer's Advocate" cannot give information which could possibly lead to destruction of those best friends of the farmers—the birds. If people only knew how crops and fruits are helped by these little creatures, which eat up millions of destructive insects in a year, they would be very sorry to take a single bird-life. We think the time will come when no woman will wear on her hat the wings or body of a little dead bird—indeed, this season, ninety per cent. or more of the feathers seen are those of domestic fowl—but the time cannot come too soon. Even with the best chance possible, the birds have all too hard a battle for existence; as a noted lecturer said not long ago, their life is a continual fear—of cats, of snakes, of squirrels and weasels, and the thousand dangers that are met in the long flights to and fro from North to South. Surely the least we can do is to give them all the protection in our power. Even were it not for their economic value, think of the pleasures, both of sight and hearing, that they bring us. What would a songless springtime be? . . . Next time, C. B., ask us a question more to our liking, won't you? We shall be pleased to have the ginger-snap recipe.

From Happy-Go-Lucky.

Dear Dame Durden and Chatterers All,—It is some time since I have written before, but your plaint of overwork after your vacation brought me out, for I was just thinking what pleasant times you would be having. As I have been just one day and a half from home for three and a half years, I had forgotten about the neglected work, but it is pleasant to work on such a day as this. I would call it an ideal day, with the woods in their brilliant autumn dress, and the air so clear and bright, the sun shining on the waters of the bay, and the evergreens setting such a somber background for the rest. I was much taken with your account of the fairs. I have had to be satisfied with that this fall, as I did not attend. I am very much interested in the department, as there are so many helpful hints and recipes. I always turn to your page on opening the paper. All that I am sorry for is I cannot contribute anything to help you along, excepting a word of encouragement.

HAPPY-GO-LUCKY.

Renfrew Co., Ont.
Many thanks for the "word of encouragement."

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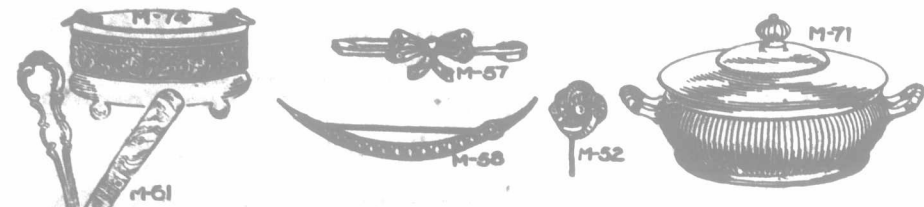
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| M58 Solid gold stick pin,
pearl centre..... 1.00 | M72 Fine quadruple plate
fruit dish, bright finish,
gold lined, 8 in. diameter 5.50 |
| M57 Solid 1 1/2 safety pin,
with pearl bowknot (photo
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fern dish, bright finish,
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| M68 Solid 1 1/2 pearl crea-
cent, finest quality pearls
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ruple plate..... 1.25 |
| M74 Fern dish, fine quad-
ruple plate, bright finish,
7 1/2 in. diameter..... 4.00 | M69 Fine quadruple plate
bread tray, 12 in. long 3.00 |
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4. Lady's gold-filled watch for eleven new subscribers.

These articles are all good, and may be relied upon.

In addition, we have books bearing on almost every department of farming, for list of which see elsewhere in "The Farmer's Advocate."

Tell your friends about our journal, and its new serial. Secure their names, and let us send you one of these premiums. State definitely which premium you prefer.

keted, of which 10,895,810 have passed inspection in Winnipeg, with outward shipments amounting to 5,837,432 bushels. Last year, out of 27,000,000 bushels marketed, at the same date, 17,190,250 had passed inspection, and 7,864,999 had been shipped across the lakes. . . . In the United States, 100,000,000 bushels of grain are now ready to be marketed in Dakota and Minnesota, but are practically tied up for want of the money to handle it-with. A despatch setting forth the exigencies of the case has been forwarded to President Roosevelt, and an appeal made to him to advance money to raise the embargo and start grain shipments to Europe. In answer, it has been announced by Secretary Cortelyou that help will be extended at an early date.

GOSSIP.

The annual meeting of the American Cotswold Registry Association, for the election of officers for the ensuing year and the transaction of other business, will be held Wednesday evening, 7.30 p. m., Dec. 4th, Live-stock Records Building, Union Stock-yards, Chicago, during the International Live-stock Exposition. —F. W. Harding, Secretary.

THE OTTAWA CLYDESDALE SALE.

The date of Mr. Wm. Meharey's sale of imported Clydesdale fillies, announced in our last issue to take place on November 26th, has been changed to December 3rd, at the same place, Buller House, Ottawa, when a choice selection of fifteen two- and three-year-old Clydesdale fillies, bred to noted stallions in Scotland, will be sold, without reserve, to the highest bidder, on seven months' time without interest, or five per cent. off for cash. These are described as a superior lot of heavy-draft mares—large, smooth, and full of quality and of the best breeding. This is a chance to secure a good brood mare or two at the buyers' own price. See the advertisement, and for particulars write the owner, to Russell P. O., Ont.

Current Events.

The King's birthday was celebrated on November 9th. His Majesty was born in 1841, hence is sixty-six years of age.

Mr. W. J. Mackenzie King has been appointed a Royal Commissioner to investigate the question of Japanese immigration into British Columbia.

The total immigration into Canada for the first nine months of the present year was 236,008, an increase of 54,736 over the figures for the corresponding months of 1906.

Mr. G. M. Bosworth, fourth vice-president of the C. P. R., has announced that, from December 1st, the freight charges between Eastern Canadian cities and points west of Ft. William will be materially reduced.

Over \$36,600,000 has been sent to New York from the Bank of England during the past fortnight, to meet demands for money occasioned by the present stringency in the money market.

It is stated that all the railways in Russia are now practically in the hands of the revolutionaries, and that plans for armed uprisings are being spread everywhere throughout the Empire.

The anxiety caused by the unsatisfactory condition of the grain market still continues. Grain-buyers say the banks will not extend the necessary credit; the banks, on the other hand, declare they are providing for all legitimate needs, and are only withholding credit from mere speculators. In the meantime, the Ogilvie Flour Mills have stopped buying any grades of wheat below No. 3, and the Western Canada Flour Mills Co. is not buying at all. Smaller firms follow the one or the other. The chief complaint of the grainmen is, however, that the banks will not allow the wheat to be taken out of Fort William and Port Arthur until paid for, and, as a consequence, much wheat is held back which might be more readily disposed of were it once across the lakes. At the two ports there are in store at present 1,171,317 bushels; 15,000,000 bushels of the crop has been mar-

THE LONDON SHIRE SALE.

The auction sale, at London, Ont., of imported Shire horses, on November 7th, the property of Messrs. Moore & Sons, Nottingham, England, was largely attended, and the stock greatly admired, being of large size, fine quality and in excellent condition, having stood the ordeal of shipping remarkably well, as, indeed, do all the importations of this breed, indicating a strong constitution and a quiet disposition. The mares were evidently wanted, though the prices bid were not up to the expectations of the sellers in several cases. The season was unfavorable for the sale of stallions, and none of these were sold, except a spring colt, a sturdy gray, which went to Corson Bros., Delaware, Ont., for \$145. The highest price of the sale was \$400 for the brown two-year-old filly, Tuttlebrook Sylvia, by Nailstone Cour De Lion, taken by John Mawhinney, Marshville, at \$400. She is a filly of great substance and quality and fine action for such weight, a characteristic which was especially noticeable in nearly all of the offering. A grand pair of well-matched black mares, three and four years old, Tuttlebrook Primrose and Tuttlebrook Violet, both by Rempstone Fashion, were very much admired, and keenly bid for, falling to Thos. Parker, Wyoming, Ont., at \$750 for the pair. They were certainly magnificent specimens of this great draft breed, and were reckoned cheap at the price. The balance went at prices ranging from \$200 to \$325, except one, which was withdrawn by consent, the bidding not being considered near her value. The sale was excellently managed, and but for the scare about the scarcity of feed, the stock would doubtless have brought a good deal more money. The stallions in the importation, held for private sale, are a capital lot, and should find buyers at the reasonable prices at which Messrs. Moore are willing to dispose of them.



The Richest Food You Can Feed Your Stock

S-W. Screw Press Linseed Cake is the richest food for stock on the market. It contains a large per cent. of protein and carbohydrates, the most desired elements in a food, and has exceptional food and manurial values.

SHERWIN-WILLIAMS SCREW PRESS LINSEED CAKE

is made by a special process. Our oil is manufactured by the "screw press method"—by which we are able to extract the oil from the seed at a low temperature—and this enables us to leave the albumen and mucilaginous matter in the cake. Our cake is so rich, goes so far in feeding, and has such exceptional quality that it commands a premium in foreign markets.

Ask your dealer for S-W. Screw Press Linseed Cake or Meal (the ground cake), or write us direct for prices and further information. We control the "screw press process" in Canada and our cake is the only cake made by this superior method.

Upon request we will send you a little booklet (B-237), which contains valuable information about linseed cake and how to feed it.

THE SHERWIN-WILLIAMS CO.

LARGEST PAINT AND VARNISH MAKERS IN THE WORLD
LINSEED OIL DEPARTMENT
644 CENTRE STREET, MONTREAL, QUE.

ONTARIO PROVINCIAL WINTER FAIR

WILL BE HELD AT

Guelph, Ont., December 9 to 13, 1907

Exhibits of

Cattle,
Sheep,
Swine,
Poultry,
Seeds.

OVER
\$10,000.00
IN PRIZES.

Entries for
Live Stock
and Seeds
Close Nov. 23
Poultry Entries
Close Nov. 25.

A splendid programme of lectures has been arranged.

SINGLE-FARE RATES ON ALL RAILWAYS.

For prize list, entry forms, or programme, apply to the Secretary.

ARTHUR JOHNSTON,
President.

A. P. WESTERVELT, Secretary,
Parliament Buildings, Toronto.

GOSSIP.

SALE DATES CLAIMED.

Nov. 28th.—Mossom Boyd Co., Bobcaygeon, Ont., Polled Herefords, at Windsor, Ont.
 Dec. 3rd.—Wm. Meharey, Russell, Ont., imported Clydesdales, at Ottawa.
 Jan. 6th, 1908.—Estate of Wm. Hendrie, Hamilton, Ont., Shorthorns.
 Jan. 8th.—H. M. Vanderlip, Cainsville, Ont., Berkshires.

\$740 FROM NINE ACRES.

In last week's issue of "The Farmer's Advocate" was reported the sale, by a Peel County, Ont., farmer, of a wagon-load of alsike clover seed for \$527. Now comes the report that Mr. George Simpson, of Peterboro County, Ont., recently sold one load of alsike clover seed grown on a nine-acre field of his farm for \$740 to Mr. Jas. Storey, of Peterboro. This is equal to over \$82 per acre for one crop. Why should farmers complain?

HICKORY HILL AYRSHIRES.

Three miles north of Dundas, Ont., lies Hickory Hill Stock Farm, the property of Mr. N. Dymont, breeder of Ayrshire cattle. Founded some years ago on a comparatively modest foundation, in point of numbers, by judicious selection in purchases of animals to strengthen the herd, and exercising care and good judgment in selecting herd-headers, using only those backed by producing ancestors, the herd of forty-five head to-day ranks among the best—large, strong-constituted, built on true dairy-type lines, carrying large, even udders, with well-developed teats. Their record in the Provincial dairy tests and in the show-rings is an enviable one. For some time past, the stock bull in use was Dairyman of Glenora, by Imp. Comrade of Garluff, dam Imp. Mayflower 2nd of Drumsue, whose milk record was 75 lbs. a day. Besides being so richly bred on producing lines, he was a show bull of no mean order, having to his credit second prize at London, third at Toronto, and first at a number of county shows; while as a sire of producers, a number of his heifers now in the herd, under official inspection, have shown remarkable results, a few of which are: Susie of Hickory Hill, at two years, 6,500 lbs. within the year; butter-fat test, 4 to 5 per cent. Jubilee of Hickory Hill, at three years, gave 9,500 lbs.; test, 4 to 5 per cent. Rosalie of Hickory Hill, at three years, has now nearly reached 9,000 lbs., and has a month of the yearly test to run yet; test, 4 to 5 per cent. Snow Flake of Hickory Hill, at three years, is now up to 6,500, and has five weeks more to run to make the year; her test shows the same, as high as the others. Primrose of Hickory Hill is a six-year-old cow that has given 9,000 lbs. in nine months; test, 4.4 per cent. Others, not in the official test, are: Flos Morton of Hickory Hill, that has given, regularly, 55 lbs. a day. This year, at London, in hot company, she won first and championship. She has now a bull calf, by Canadian Duke, that won first at London as a two-year-old, and is a grandson of the great cow, Nellie Osborne, Barton Princess of Hickory Hill is a 57-lb.-a-day cow that this fall won seven second prizes. These mentioned are only representative of the herd, showing that as profitable producers they are a high-class lot. The present stock bull is Imp. Milk Record, a typical, high-class animal that this fall won third at Toronto, second at Sherbrooke and first at Ottawa. All heifers now coming in are being bred to him. For sale are females of all ages and two bulls fit for service, both by the old stock bull; one of Maggie Brown of Hickory Hill, that, in July, as a four-year-old, gave very nearly 1,500 lbs. of milk; the other out of Millie Grey of Hickory Hill, that, in December last, gave 1,300 lbs. of milk, a high-class pair of young bulls, exceptionally well bred. This fall, in the result of fall fairs, including London, this herd won seventy-six prizes, thirty-seven of which were firsts. Mr. Dymont reports the demand for Ayrshires during the past year as the best in his experience. His address is Clappison P. O., Ont.

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.

Veterinary.

JOINT ILL.

Colt had joint ill when ten days old. He is now four months old, and is growing well, but his joints are enlarged, and he is stiff and lame. J. K. P.

Ans.—It is probable the articular cartilage of the bones of the joint is destroyed, and, if so, he will never be any use, but will continue stiff and lame. If the cartilage is not destroyed, he will make a useful animal. It would be well to blister the affected joints repeatedly. Take two drams each of biniodide of mercury and cantharides, and add eight ounces alcohol. Rub well, once daily, for two days. Then apply sweet oil daily until the scale comes off. Blister this way every four weeks. V.

MARE STALKS WHEN STANDING.

My pregnant draft mare's legs swell at nights when she stands in the stable. The swelling disappears on exercise. A. T. C.

Ans.—This is very hard to treat in a pregnant mare. Give her four drams nitrate of potash every night for three doses. Feed on bran, with a little boiled oats, or steamed rolled oats, and half a cupful of flaxseed twice daily. For the noon feed, give a few roots and a little rolled oats and bran dry. Give a reasonable amount of good hay, and give regular exercise. Hand-rubbing and bandaging the legs will give good results. V.

CHRONIC COUGH.

Horse had distemper last June, and got very thin. He still coughs, especially after drinking, and does not gain in flesh, and has a dry coat. J. R.

Ans.—Chronic coughs like this are very hard to check. Give him, every morning, a ball composed of two drams solid extract of belladonna, one dram powdered opium, twenty grains digitalis, and one dram camphor, with sufficient oil of tar to make plastic. Roll in tissue paper and administer, or dissolve in a pint of warm water and administer as a drench. To improve his general condition, take three ounces each of sulphate of iron, gentian, ginger and nuxvomica. Mix, and make into twenty-four powders. Give a powder three times daily. Repeat the last prescription as often as necessary. Feed well, and give regular exercise. V.

Miscellaneous.

MILK, CREAM AND BUTTER YIELDS.

If milk tests 4 per cent. butter-fat, how many pounds of it will it take to make a pound of butter? If cream tests 33 per cent., how many pounds of butter will there be in a gallon? Your paper is getting more interesting all the time. G. T. S.

Ans.—It is impossible to give an exact answer to the questions, as so much depends upon the overrun, i. e., the amount of butter made in excess of the fat in the milk or cream. However, generally speaking, 100 lbs. milk, testing 4 per cent. fat, will make about 4½ lbs. butter, and this means that it would take 22.2, or practically 22½ lbs. of such milk to make a pound of butter. One gallon of cream testing 33 per cent. fat weighs about ten pounds; therefore, 100 pounds of such cream would contain 33 pounds fat, and ten pounds, or one gallon, would contain 3.3 pounds fat. With a 15-per cent. overrun, there would be made from such cream 3.795 pounds of butter, or practically 3½ pounds. With a 20-per cent. overrun, there would be made 3.96 pounds of butter, or practically 4 pounds. H. H. DEAN, Ontario Agriculture College.



"Time flies ever onward" but it never gains a fractional part of a second on an **ELGIN WATCH**

Every Elgin Watch is fully guaranteed. All jewelers have Elgin Watches. An interesting, illustrated booklet about watches, sent free on request to **ELGIN NATIONAL WATCH CO., Elgin, Ill.**

Double Standard
Polled Herefords at Auction
Thursday, November 28th,
AT WINDSOR, ONT.

73 Head mostly females, half of them polled, the balance being horned cows with polled calves at foot, and bred to polled bulls. All registered in Am. Hereford Record, and in Canadian Herdbook. Catalogue on application.

Feed being scarce and cattle low, now is the opportunity for those who can to buy. If you want to sell your Herefords readily use a

Mossom Boyd Co., Bobcaygeon, Ont.

Imp. Clydesdale Fillies by Auction
15 TWO AND THREE YEARS OLD,
AT OTTAWA, ONT.

Will offer 15 extra good fillies. Large and smooth, with the best of quality and breeding, in good condition, and all bred to good horses in Scotland. Registered in both books. Sale at one o'clock.

TUESDAY, DECEMBER 3, 1907.

TERMS—Seven months without interest, on bankable paper; 5 per cent. off for cash.

WM. MEHAREY, RUSSELL, ONT.

Steel Hog Troughs



Our steel hog trough has proved itself a true success. "All right. Just the thing. Would use no other." That's what they who use them say. Send us your order; do it now. Get our free catalogue of tanks, food cookers and troughs. We make the Gordon all steel cheese vat. Write us.

The Steel Trough and Machine Co., Limited, Tweed, Ontario.

CANARIES Norwich is the Canary Market of the world, and the Aviaries of W. Rudd its market place. Every variety of Canary for exhibition, breeding or song at lowest prices for quality. Cages and all bird-room requisites. Illustrated catalogue and breeder's handy diary, with prescriptions, testimonials, etc., post free. Export orders made a specialty of. **W. RUDD, Bird** 100 1/2 St. St. Paul, Minn.

Valley Home Shorthorns AND BERKSHIRES.

Our herd numbers sixty-five head. We are prepared to give bargains to suit all who wish to buy from one animal up to a carload of females, and 12 bulls from 9 to 18 months old. Also 65 Berkshires of prolific strains.

S. J. PEARSON, SON & CO., Meadowvale, Ont.
 Stations: Meadowvale, C.P.R.; Brampton, G.T.R.

TRADE TOPICS.

CURE YOUR RHEUMATISM!—Get a \$1 package of Vitæ-Ore on thirty days' trial from the Theo. Noel Company, Toronto. It cures old chronic cases. See big page advertisement on back page of this issue.

GRAND TRUNK EXHIBIT, JAMESTOWN EXPOSITION.—Telegraphic advice is received that Jury of Awards, Jamestown Exposition, Norfolk, Va., have announced that Grand Trunk exhibit has been awarded two gold medals and one silver medal, covering installing of exhibit, photographic scenes and fish and game display.

Free to the Ruptured

Simple Home Cure that Anyone Can Use Without Pain, Danger or Loss of Time from Work

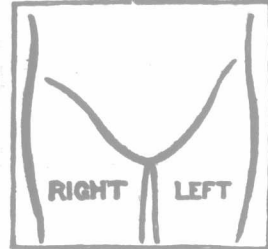
SENT FREE TO ALL

I cure rupture without operation, pain danger or loss of time. When I say cure I do not mean hold, but a cure that stays cured and goes away with trusses for all time.

To convince you and your ruptured friends that my Discovery actually cures I want you to test it without one cent expense to yourself. Remember, I am not trying to sell you a truss, but I offer you an absolute, perfect and permanent cure that means freedom from pain and suffering, a largely increased physical and mental vigor, a fuller enjoyment of life's blessings and years of comfort and satisfaction added to the length of your life. Don't send any money, simply fill out the coupon below, indicate on the diagram the location of the rupture, and mail it to me. Don't neglect this important matter a single day or continue to be tortured any longer by cheap, ready-made trusses. My remarkable offer is the fairest ever made and should be taken advantage of immediately by all rupture sufferers.

Free Treatment Coupon

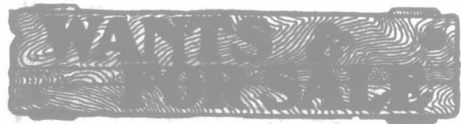
Mark on the diagram the location of the rupture, answer the questions and mail this to Dr. W. S. RICE, 665 Main Street, Adams, N. Y.



Age
Time Ruptured?
Does Rupture pain?
Do you wear a truss?

Name

Address



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

TERMS—Three cents per word each insertion. Each initial counts for one word and figures for two words. Names and addresses are counted. Cash must always accompany the order. No advertisements inserted for less than 50 cents.

WANTED—A few good subscription agents for The Farmer's Advocate and Home Magazine. Liberal terms. The William Weld Co., Ltd., London, Ont.

WANTED—An indoor servant. One qualified to take charge. Small family. Comfortable home and highest wages. Address: Mrs. E. Gunn, D'Arbina Farm, Beaverton, Ont.



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.

BROOD and White Leghorns, Banded and White Rocks and White Wyandottes. Cockerels, \$2; yearling Brown Leghorn hens at \$1 each. F. W. Kouse, Guelph.

BEAUTIFUL White Cockerel bantams, Owen Sound prize winners, \$5. Trio. H. O. Heimbecker, Hanover, Ont. Also Silver-laced Wyandottes.

COCKERELS for sale, \$1 up. Brown Leghorns, White and Buff Wyandottes; also good trio Banded Rocks. Joseph Rooke & Son, 117 Wellington Rd., London.

CANADA'S best exhibition and laying White Leghorns for sale. Grand utility hens, cockerels, pullets, one dollar each. Must sell at once, hence low price. Write to-day. Jas. L. McCormack, Brantford.

FOR Banded Rocks, White Wyandottes, Leghorns, write: Rev. Walter Rigsby, Sarnia Indian Reserve, Box 2, Sarnia.

FOR SALE—Wyandottes, Rocks, Orpingtons, Leghorns, Minorcas, Houdans, Toulouse geese, Pekin ducks. R. Laurie, Drumbo.

FOR SALE—Pure-bred Buff Orpington cockerels and pullets. P. Crockett, 960 Richmond St., London, Canada.

PURE-BRED White Wyandotte cockerels and pullets for sale. T. Smith, Vigo, Ont.

PEKIN ducks for sale at \$1 each. Large Toulouse geese, \$2 each. Robert Clemens, Ridgeville, Ont. Box 26.

QUESTIONS AND ANSWERS. Miscellaneous.

LOOKING FOR DUCKS.

Could you inform me where I can get a White Mammoth Pekin drake, and what price I will have to pay? A. A.

Ans.—You will find Pekin ducks advertised in our issues of Nov. 7th and 14th. Drop a line to the advertisers.

MULCH FOR STRAWBERRY PLANTS.

Would sawdust be good to cover strawberry plants to keep frost from heaving them out? H. S.

Ans.—Sawdust will not do to cover, nor leaves, nor manure nor anything inclined to pack. Only light straw, through which the air can pass, is serviceable, as in the case of sawdust, leaves, etc., they rot the roots through closely packing.

PLANTING ORCHARD ON LOW GROUND.

Would it be advisable to plant an apple orchard on a piece of low, flat land, having a quicksand subsoil about eight inches below the surface? Please give me any other information on the subject that you think might be of use. T. S.

Ans.—I would not advise planting an apple orchard upon such land as you describe. It is particularly important in setting out an orchard or fruit plantation of any kind that the site selected afford good soil drainage, and, if possible, also good atmospheric drainage. Low, flat lands, even when well drained, are not, as a rule, good for fruit plantations, because they are subject to injurious early fall and late spring frosts through the settling of cold air upon them from higher levels. Even though trees may thrive upon such land for a time, they are not, as a rule, as productive as trees upon high, well-drained soils, nor does the fruit develop that high color which brings the best price in the market. H. L. HUTT, O. A. C.

IMPERFECT CHESTNUTS.

1. I have a chestnut tree, a few years old, which has quite a lot of burrs on each year, but the chestnuts do not mature. It stands alone in one corner of the garden. What would you advise me to do for it?

2. When is the proper time to cover the strawberry-bed for winter, before or after the ground freezes? J. G.

Ans.—1. I am at a loss, from the information given, to determine what is the cause of the unproductiveness of your chestnut tree. You do not say whether it is one of the native sweet chestnuts, or one of the introduced Spanish varieties, which are now being grown in some parts of the country. From the fact that you mention it stands alone, you possibly wonder whether it may be self-sterile like some of our fruit trees through inability to fertilize its own blossoms. The chestnut is what botanists describe as "monoecious," that is, it has both male and female flowers separate upon the same tree. The pistillate, or female forms, are those from which the burrs form; while the staminate, or male, flowers are the tassels which are borne on the ends of the twigs above the burrs. The question of the ability of the staminate flowers to fertilize the pistillate ones on the same tree has not yet, as far as I know, been studied with reference to the chestnut. Possibly, as has been found with many of the fruits, certain trees of chestnuts may also be self-sterile. If this should be the case, the best way to insure fertilization would be to graft upon the tree scions from other trees, which might possibly bring about the pollination required.

2. The best time to cover a strawberry plantation for winter is as soon as the ground freezes hard enough to enable one to get upon it without breaking through the crust. Care should be taken not to cover so heavily as to smother the plants. A light covering of a couple of inches of loose straw manure or such material is the best covering. H. L. HUTT, O. A. C.

CHICKENS DYING.

Our spring chickens have had the run of the place all summer; all the apples they want, and wheat twice a day. For the last two or three weeks a number have had diarrhea. Their combs lose color, their tails and wings droop; feed doesn't digest, and two or three have died. Please state cause and cure. R. N. A.

Ans.—I have seen a few lots of chickens act similar to the ones mentioned in this letter, but I have never been able to locate the cause. The only thing to do is to remove the chickens from the run, and feed good, wholesome food. Those that are sick would be best treated by giving them a moderate dose of castor oil, say a dessertspoonful to every chicken. Also, feed them largely on a mixture of dry grains, composed of one-half shorts or middlings and the other half any kind of ground grains which are about the place, mixed with boiled milk. If you wish to know exactly what the cause is, you might send two or three of the birds to the Bacteriological Laboratory here for examination, where they will be examined free, you, of course, paying express charges. W. R. GRAHAM, O. A. C., Guelph.

SMALL-FRUIT PLANTATION.

Next spring I want to plant about an acre in fruit, berries included. Would like to have a list of varieties suited for this district. The fruit is for family use and local market. Thanking you for same and any information you may desire to give as to planting and distances. E. T.

Ans.—Send to the Department of Agriculture, Parliament Buildings, Toronto, for Bulletin No. 147, which gives a list of varieties of fruits recommended for planting in various parts of the Province. I shall be glad to help you make a selection for your purpose, in case you wish a smaller list of varieties than is there given. The distance apart at which these various fruits should be planted, varies somewhat with soil and varieties, but the following may be given as approximately best for the various kinds of the fruits mentioned: Apples 35 to 40 feet apart; the larger-growing variety of pears and sweet cherries should be from 20 to 25 feet apart, while smaller-growing pears, sour cherries, plums, peaches, and quinces should be planted from 15 to 20 feet apart, or might be planted alternately with the apple trees; grapes require from 8 to 10 feet apart; blackberries and the suckering varieties of raspberries should be in rows 6 feet apart and the plants set about 3 feet apart in the row. These, in time, will form regular hedgerows. Currants and gooseberries should be from 5 to 6 feet apart. If desirable, the cost of cultivation of these small bush fruits may be lessened by planting the raspberries and blackberries in hills, the same as currants and gooseberries, so that the whole plantation can be cultivated lengthwise and crosswise, and thus save much hand hoeing. Strawberries should be in rows, 4 feet apart, and plants set from 1½ to 2 feet apart in the row. In planting an acre such as you desire for home use, it is well to have a greater number of varieties than one would plant for market, and these should cover the season from early to late with all fruits, and by interplanting the smaller-growing varieties with the larger ones, a great number can be planted upon a small piece of ground. Care, however, should be taken that the bushes and smaller trees are not left so long as to encroach upon the more permanent trees. This is the chief danger in the practice of interplanting the larger-growing fruits with the smaller ones. H. L. HUTT, O. A. C.

"Sorry, sir," telephoned the butcher, "but we are just out of sirloin. Why don't your wife order you a round?" "What's that?" exploded Harker at the other end of the line. "I say, why don't—" but we are just out of sirloin. Why don't my wife order me around? Great Caesar, man; that is all she does—order me around from morning until night. If you were nearer I'd—" But the startled butcher hung up the receiver and fled.

HORSE OWNERS! USE



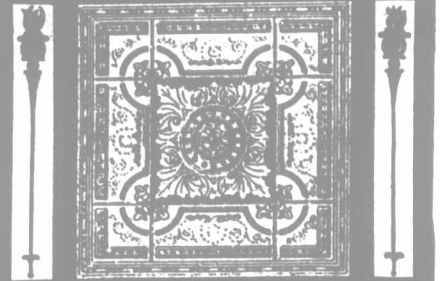
GOUBAULT'S CAUSTIC BALSAM.

A safe, speedy and positive cure. The safest, Best BLISTER ever used. Removes all bunches from Horses. Impossible to produce scar or blemish. Send for circulars. Special advice free.

THE LAWRENCE-WILLIAMS CO., Toronto, Canada

METALLIC CEILINGS

Are both artistic and serviceable. Popularly used by practical people everywhere.



Easily applied—most moderate in cost—fire-proof, sanitary and wonderfully durable—with countless designs to select from.

Write us for booklet telling all about them. METALLIC ROOFING CO., LIMITED 42 TORONTO AND WINNIPEG

GOSSIP.

At a meeting of the Blackburn Primitive Methodists to consider how they should celebrate their "centenary," an innocent old soul asked, "But who was St. Henry?" Laughter accompanied the explanations, but the old soul subscribed to the "centenary" fund.

Volume 20 of the American Shropshire Sheep Record has been received at this office, thanks to the secretary and editor, Mr. Mortimer Levering, LaFayette, Indiana. It is a ponderous volume of 1,550 pages, containing pedigree records of sheep numbering from 211,123 to 232,978, showing the continued popularity of the breed.

Mr. J. Gordon Gibb, Manager of Gibb's Woodfield Stock Farm and Short-horn herd, St. Catharines, Ont., advertised in this paper, writes: "Our herd is headed by the Lavender bull, Trout Creek Wonder, sired by the Mayflower bull, Prince Sunbeam (imp.) =45216= (81964), a Toronto champion, now at the head of Sir Wm. Van Horne's herd, and out of Lavender Rose 2nd (imp.) =43583=. Lavender Rose sold, at auction in the States, for \$1,600. Trout Creek Wonder is proving an excellent getter, and very sure, heavy-fleshed, with soft, mossy coat. Among the cows are a number purchased at the sale of W. D. Platt, and all, or nearly all, imported, among them being Missie Queen =50174=, a straight Missie, and sired by Bornholm Abbotsford =27111=. She has produced for us two bull calves, one of which we are offering for sale, and I feel sure will make a mark for himself in the show-ring. Trout Creek Missie 20th =65967= is another Marr Missie. We are offering a very fine red bull from her, by Gold Cup (imp.), sold at the Platt sale for \$2,100. Other cows in the herd are: Cinderella 9th (imp.) =54045=, a Roan Lady; Proud Lovely (imp.) =54079=, bred by Wm. Duthie; Roan Lady 5th (imp.) =54083=; (Caledon Chief, the sire of Proud Lovely, was sold to go to Buenos Ayres, for \$7,500); Iris (imp.) =54065=, by Bapton Chief (78076); Village Bird =33940=, one of the old Village family. These are a sample of what we are breeding from, and, although our herd is small, numbering some 25 head, it is a well-bred straight-Scotch herd, and everything is registered in the United States. As we are not known in Shorthorn circles, we are willing to sell cheap, and let our animals speak for themselves. Our long-distance telephone number is 516."

Saves Hours of Cleaning

Of course your wife would try to wash even the worst cream separator bowl properly twice every day. But why ask her to slave over a heavy, complicated "bucket bowl," like either

12%lbs 12%lbs 8%lbs 10%lbs 6%lbs

of the four on the left? Why not save her hours of cleaning every week by getting a Sharples Dairy Tubular Cream Separator with a simple, light, tubular bowl, easily cleaned in 3 minutes, like that on the right? It holds the world's record for clean skimming.

Sharples Tubular Cream Separators are different—very different—from all others. Every difference is to your advantage. Write for catalog M-128, and valuable free book "Business Dairying."

THE SHARPLES SEPARATOR CO.
West Chester, Pa.
Toronto, Can. Chicago, Ill.

A Phenomenal Record

As a tree is known by its fruits, so also is a Life Insurance Company known by its actual results to policyholders.

The actual results realized under the policies of

have never been excelled by any Canadian Company.

All its surplus belongs to, and is distributed among its policy-holders—

It has the Lowest Expense Rate to income—notwithstanding the fact that its net business for the past ten years has increased more rapidly than that of any other native company—

Not a dollar received from its policy-holders has been lost, out of the millions invested for their security.

Write Head Office, Waterloo, Ontario.

HE BEGAN TO GET WISE.

This tale relates how a bishop, accosted in Fifth Avenue by a neat but hungry stranger, derived profit from the encounter.

The bishop, so runs the yarn, took the needy one to a hotel and shared a gorgeous dinner with him, yet, having left his episcopal wallet in the pocket of a different episcopal jacket, suddenly faced the embarrassment of not possessing the wherewithal to pay up. "Never mind," exclaimed the guest, "I have enjoyed dining with you, and I shall be charmed to shoulder the cost. Permit me." Whereupon the stranger paid for two. This worried the prelate, who insisted, "Just let me call a cab, and we'll run up to my hotel, where I shall have the pleasure of reimbursing you." But the stranger met the suggestion with, "See here, old man! You've stuck me for a bully good dinner, but hanged if I'm going to let you stick me for cab-fare!"

QUESTIONS AND ANSWERS. Miscellaneous.

DRAINAGE SOUGHT.

A, B, C have farms adjoining one another. A wishes to put in a drain, and the only and natural course is through one corner of B's farm (about 20 rods), and then through a portion of C's. Can B and C compel A to help put it across their farms, as it will benefit them as well as it does A?

Ontario. SUBSCRIBER.

Ans.—It is a matter in respect of which an effort ought to be made to bring about an agreement between all the parties interested, under Sec. 8 of the Ditches and Watercourses Act (Revised Statutes of Ontario, 1897, Chap. 285). See especially sections 5 to 9, inclusive, of the Act. In the event of failure to arrive at such an agreement, the engineer, appointed by the municipal council to carry out the provisions of the Act, might be called in (see particularly Sec. 13). We think that if the matter be gone about judiciously, and regard be had to the provisions of the Statute mentioned, a suitable conclusion ought to be reached without serious trouble.

LINE FENCING—TRESPASSING—DITCHING.

1. A and B are farmers, with farms adjoining each other. B's portion of line fence is in poor condition. A's stock gets over B's portion of fence on B's property. B orders A to take care of his stock. Must A take care of his stock, or must B put up with any damage done by A's stock?
2. Can A compel B to build a lawful line fence, and how should he proceed to do so?
3. What constitutes a lawful line fence?
4. B's fowl are constantly in A's crops. What proceedings can A take to make B keep his fowl out?
5. A has a ditch along line fence. Can A compel B to help keep the drain in repair?
6. Can B take A's stock to pound when they get through B's portion of the fence, it being in poor condition?
7. If he should take them to pound, what can A do about it? J. E. D. Ontario.

Ans.—1. Section 2 of the Act respecting pounds (Revised Statutes of Ontario, 1897, Chap. 272) provides that the owner of any animal not permitted to run at large by the by-laws of the municipality shall be liable for any damage done by such animal, although the fence enclosing the premises was not of the height required by such by-laws. But this provision is subject to be varied, or displaced, by by-laws of the township municipality, passed pursuant to The Consolidated Municipal Act, 1903, by section 546, sub-section 2 of which provides that the council may pass by-laws for restraining and regulating the running at large or trespassing of any animals, and providing for impounding them, etc.; and sub-section 3, for appraising the damages to be paid by the owners of animals impounded for trespassing, contrary to the laws of Ontario or of the municipality. You ought, therefore, to see the township clerk, and have him show you the township by-laws (if any) on the subject.

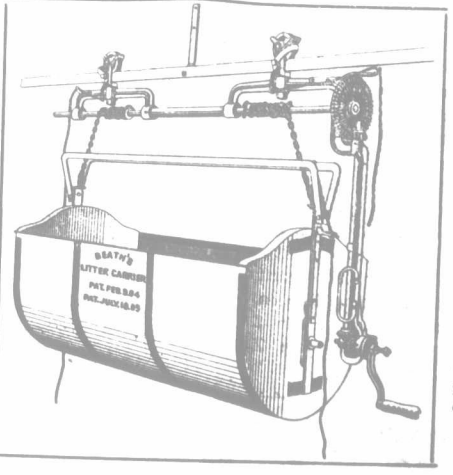
2. Yes; see the Line Fences Act, Revised Statutes of Ontario, 1897, chapter 284, and more especially sections 3 to 10, inclusive.
3. It depends upon the township by-law on the subject. See sub-sections 2, 3 and 4 of section 545 of Consolidated Municipal Act, 1903.
4. He can notify B, under section 3 of the Act respecting pounds, in writing, of their trespass; and then, if B neglects or refuses to prevent the poultry from further trespassing on A's premises, A can have B brought before a justice of the peace and fined.
5. We do not see that he is in a position to do so.
- 6 and 7. See answer to question No. 1.

Beath's Litter Carrier

Read What Others Say.

JOHN HUNTER, NORVAL, ONT.: "Can clean the stables in half the time."

JAMES COATES, SHIRLEY, ONT.: "It gives perfect satisfaction. No up-to-date farm ought to be without one."



Read What Others Say.

JOHN DRYDEN & SON, BROOKLIN, ONT.: "It saves much labor over the old style. All farmers should have one where possible."

HIRAM GIFFORD, OSHAWA, ONT.: "It is very easy to handle. I would not be without one."

NOW IS THE TIME TO BUY!

The long winter months are ahead, with their disagreeable daily task of cleaning the stables. Be modern!

DON'T USE A WHEELBARROW!

Clean your stables in the new way, with Beath's Litter Carrier. It is the easiest to handle. Completes the job in half the usual time. It is the only Carrier which can be kept clean when in operation. Will not clog or freeze. The track and switches used with Beath's Carrier are the cheapest and simplest to erect. Will not cover with ice and snow out of doors. You cannot go wrong in buying this Carrier.

Write immediately for our special November offer. It will save you money.

THE METAL SHINGLE & SIDING CO., LIMITED
Preston, Ont. Manufacturers.

Has your Horse an old Strain or Swelling?

Here's the way to cure it. Rub three teaspoonfuls of Fellows' Leeming's Essence in the sore place, and repeat the rubbing in 24 hours if a sweat or running does not appear. This running turns to a scurf and forms a firm bandage on the part. So long as it stays over the strain or swelling, the effect of the dressing holds good. In 14 to 16 days, the scurf falls off and the horse is well. And you can work the horse all the time Fellows' Leeming's Essence is curing it. Try it on your horse. Get

Fellows' Leeming's Essence

for Lameness in Horses.

50c. a bottle. If your dealer has none, write NATIONAL DRUG & CHEMICAL CO., LIMITED, MONTREAL.

THE EIGHTH ANNUAL INTERNATIONAL LIVE STOCK EXPOSITION

UNION STOCK-YARDS, NOV. 30 TO DEC. 7, 1907.

A week's education in breeding, feeding and marketing problems that no farmer or stockman can afford to have his family or himself miss. Over thirty annual conventions of breeding associations held here during the week of the show.

Daily Sales of Pure-bred Breeding Stock:

TUESDAY, DEC. 3, 1 P. M. 50 SHORTHORNS FROM BEST HERDS. For catalogue write B. O. Cowan, Asst. Sec'y American Shorthorn Association, U. S. Yards, Chicago.	WEDNESDAY, DEC. 4, 1 P. M. 50 CHOICE HEREFORDS. For catalogue write C. R. Thomas, Secretary American Hereford Association, Kansas City, Mo.
THURSDAY, DEC. 5, 1 P. M. 50 ABERDEEN-ANGUS FROM LEADING HERDS. For catalogue write Chas. Esher, Jr., Irwin, Iowa.	FRIDAY, DEC. 6, 1 P. M. 50 CAREFULLY-SELECTED GALLOWSAYS. For catalogue write Chas. Gray, Sec'y American Galloway Association, U. S. Yards, Chicago.
FRIDAY, DEC. 6, 10 A. M. 50 CHOICE RED POLLED CATTLE. For catalogue apply to Geo. B. Buck, Sunny Hill, Ill.	TUESDAY, DEC. 3, 1 P. M. RAMBOUILLET. For further information write Dwight Lincoln, Millford Center, Ohio.
WEDNESDAY, DEC. 4, A. M. AND P. M., AND THURSDAY, DEC. 5, P. M. SHROPSHIRE. Choice animals from flocks of G. Howard Davison, Millbrook, N. Y.; J. G. Hammer, Brantford, Ont.; T. A. Cox, Brantford, Ont.; and other well-known flocks.	THURSDAY, DEC. 5, A. M. HAMPSHIRE DOWN AND COTSWOLDS. For full particulars write F. W. Harding, Waukesha, Wis.

Low Railway Fares. Sales Held on Show Grounds. New Attractions.

When Writing Please Mention Advocate

MEDICAL AUTHORITIES

Say that eight persons out of ten suffer at some time or other from piles. Whether the piles are bleeding or protruding, or itching or "blind," Zam-Buk gives immediate ease.

Mr. Neil Devon, Webbwood, Ont., suffered with piles eight years. A few boxes of Zam-Buk cured him. He since says: "I have had no return of the trouble, so that I know I am permanently cured."

Zam-Buk cures Cuts, Chapped Hands, Ulcers, Burns, Sore Legs, Abscesses, Poisoned Wounds, Boils, Eczema, and all skin troubles. Rubbed well in, it is a splendid embrocation for Rheumatism, Neuralgia and Sciatica, etc. 50c. a box of all druggists and stores, or post-paid on receipt of price from The Zam-Buk Co. 3 boxes for \$1.25.

Ring-Bone

There is no case so old or bad that we will not guarantee

Fleming's Spavin and Ringbone Paste to remove the lameness and make the horse go sound. Money refunded if it ever fails. Easy to use and one to three minute applications cure. Works just as well on Sidebone and Bone Spavin. Before ordering or buying any kind of a remedy for any kind of a blemish, write for a free copy of

Fleming's Vest-Pocket Veterinary Adviser

Ninety-six pages of veterinary information, with special attention to the treatment of blemishes. Durable bound, indexed and illustrated. Make a right beginning by sending for this book.

PLEMING BROS., Chemists, 75 Church Street, Toronto, Ontario

THICK, SWOLLEN GLANDS

that make a horse Wheeze, have Thick Wind, or Choke down, can be removed with

ABSORBINE

or any Bunch or Swelling caused by strain or inflammation. No blister, no hair gone, and horse kept at work. \$2.00 per bottle, delivered. Book 3-C free.

ABSORBINE, J.R., for manking, \$1.00, delivered. Cures Gout, Tumors, Varicose Veins, Hydrocele, Varicocele. Book free. Made only by W. J. YOUNG, P.D.F., 73 Womouth St., Springfield, Mass. Canadian Agents: LYMAN BONS & CO., Montreal.

Kendall's Spavin Cure

PORTAGE RIVER, N.B., March 5 '06. "I am using your Spavin Cure and can say there is nothing to be compared with it." Gilbert Maxwell.



At a bottle—6 for \$5. Our great book—"Treatise on the Horse"—free from dealers or Dr. R. J. BEMMILL CO., Easting Falls, Vermont, U.S.A.

Iceland, Welsh and Shetland Ponies

FOR SALE: One piebald Shetland mare, 5 years old, bred. One black bred. Pair of bay and white Iceland ponies rising two years, one of each sex; well matched and driven some. One piebald gelding, rising two, from imp. Iceland sire and dam, and others. Also outfits for ponies. Apply to: E. DYMENT, Copetown, Ont., Wentworth Co.

Imported Clydesdales

Just arrived, a choice shipment of stallions and fillies; dark colors; all first-class breeding. Inspection invited. Terms to suit.

Geo. G. Stewart, Howick, Que.

Clydesdales, Shorthorns and Cotswolds—For richest bred and choicest individuals of above breeds, write me. My new Cotswold and Clydesdale importation will arrive early in the season.

J. C. ROSS, Jarvis P.O. & Sta.

CLYDESDALES AND SHORTHORNS—Canadian-bred, registered. One stallion, rising 3, by Imp Macqueen. Two stallions, rising two, by Imp Primrose. Also my stock bull, Gilbert Logan 36424 W. D. PUGH, Clarendon P. O. and Station.

Subscribe for "Farmer's Advocate"

GOSSIP.

Mr. A. C. Hallman, Breslau, Ont., writes: "Never was there a better collection of Holsteins and Tamworths at Spring Brook Stock Farm. The cattle are going into winter quarters in prime condition. The young bulls exhibited at Toronto are doing fine. The first-prize and junior-champion bull calf is growing nicely, and should grace the head of some good herd. He is well-grown and ready for service. His dam, Princess Margaret 2nd, has dropped another full brother to this bull, which will be a rare chance for somebody to secure a prizewinner and an exceptionally well-bred calf. My herd of Tamworths was never so complete. Every breeding animal is of excellent conformation and rare breeding. The imported boar, Knowle King David, is proving himself a splendid stock-getter. I have four sows that have farrowed fine litters, sired by him. They are vigorous and strong and the right type. This will give a rare opportunity of getting some of the best English blood to lay a foundation, or introduce new blood. My imported sow, Knowle Sultana, is growing fine, after raising the ten pigs, which she farrowed eight days after she arrived. Even with this large litter she won first prize at Toronto. The young pigs are doing grandly, and are a rare good lot. Have sold one of the young boars to Dr. Flowers, Dallas, Texas, and another to Mr. John McAlphin, Aughrim. I have three boars left and five sows. I sold a fine boar, ten months old, winner of third prize at Toronto, to Mr. Turnbull, Listowel, which should prove a great benefit to the neighborhood where he is owned. Another pair of Toronto winners went to Henry Palmer, Avondale, Pa., an exceptionally nice pair. This is the 4th shipment to Mr. Palmer, who always comes back for more good stock. This is the time farmers should select their breeding stock for next summer. The man that is wise will lay a good foundation when prices are low; higher prices are sure to follow."

GLENWOOD HOLSTEIN SALE.

A goodly number of the most progressive dairymen of the section, together with a number from various parts of the Province, assembled at Glenwood, Stock Farm on October 31st, to attend the auction sale of Holstein cattle from the herd of Messrs. F. & N. Howe, Crampton, Ont. The roads and weather were all that could be desired, and, under the able management of Capt. T. M. Moore, auctioneer, good prices were realized, despite the scarcity of feed so very general. The stock was in good condition, and some first-class milk records were produced at the sale, and all stock advertised were disposed of at good prices, eighteen head averaging over \$100 each. Mr. J. W. Hill, of St. Thomas, secured the highest-priced cow, Irene May (3566), which has produced, since Feb. 2nd, 1907, 10,625 lbs. of milk this season thus far, testing 3.90 per cent. butter-fat, for \$165. Consuelo Kenteith (5844) went to strengthen the herd of Fred Carr, of St. Thomas, at \$160. This cow has a thirty-day record of 1,436 lbs. in July, testing 3.20 per cent. fat. Aaggie Netherland Buttergirl (6020) went to the same buyer at \$110. D. C. McBain and E. C. Gilbert, of St. Thomas, were also purchasers of cows considerably over the \$100 mark. Byron Stevens, of Bridgen, was the largest purchaser, ten head going to that gentleman, among which was that grand young cow Maggie Netherland (4705), testing 5.20 per cent. fat; also her two-year-old heifer, Maggie Netherland De Kol (5824), which has a 4-per-cent. test. He also secured the aged cow, Netherland Edgely (6102), whose milk test is 4.30 per cent. fat. J. C. Rounds, of Drumbo, got the two calves for \$100. Robert Simington, Camlachie, secured the imported stock bull, Sir Catherine De Kol Houwtje (40373). Andrew Thompson, of Watford, got the heifer, Molly May's De Kol (5826), for \$120. Some of the other purchasers were Mr. E. D. George, Putnam; Mr. B. Barr, Harrietsville, and Mr. J. W. Rouse, Crampton. This sale proved highly satisfactory to all concerned.



Tudhope Sleighs

It takes more than good material to make a good sleigh. Experience and expert workmanship are equally important. All three go into every Tudhope Sleigh.

Since 1855, Tudhopes have been building the best sleighs in Canada. And Tudhope Sleighs for this winter are the best that the Tudhopes have ever built.

TUDHOPE No. 42

A popular style for all uses. XXX Hickory Shafts, Runners etc. Steel-braced throughout. High spring back. All mountings nickel plated on brass.

Write for free copy of the Tudhope Sleigh book, showing illustrations of this and other Tudhope Sleighs.

THE TUDHOPE CARRIAGE CO., Ltd. ORRLIA, Ont.



CLYDESDALE STALLIONS

Our new importation has just loaded. An exceedingly good lot. Some extra big fellows. They may be seen at our stables, Fraser House, London. Call and see them, or write

MESSRS. DALGETY BROS., GLENCOE, ONT.

Imp. Clydesdale Stallions



My latest importations are the sons of Baron's Pride, Up-to-Time, Baron Hood, Fieckle Fashion and Sir Christopher; are up to a ton in weight; with strong, flat bone, the best of feet and ankles, and big, smooth, flashy tops. A choice lot. My past 47 importations and straight way of dealing are my guarantee.

Wm. Co'quhoun, Mitchell P. O and Station. 'Phone.



CLYDESDALES

At Columbus, Ont., the home of the winners, this year's importation just arrived. The pick of Scotland's best. For size, style, conformation, quality and royal breeding, they eclipse any former importation we ever made. Look them up in our barn on Exhibition Grounds. Over 30 head to select from.

SMITH & RICHARDSON, COLUMBUS, ONTARIO.

CLYDESDALES



We have imported more Royal, H. A. S., Toronto and Chicago winners than any other Canadian importers. This year's importation has just arrived, and we think are away the best lot we ever imported; leading Scotch winners among them. Look up our stable on Exhibition Grounds.

GRAHAM BROS., CLAREMONT, ONTARIO

Long-distance 'phone. C. P. R.

Graham & Renfrew's CLYDESDALES and HACKNEYS

Our Clydes now on hand are all prizewinners, their breeding is gilded. 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 4428.

GRAHAM & RENFREW, BEDFORD PARK, ONT.

Largest Importation of Clydesdales, Hackneys and Percherons of the Year.



My latest importation has just arrived home. I have now on hand for sale: 20 Clydesdale stallions from 1 to 5 years of age; 25 Clydesdale fillies from 1 to 4 years of age; 13 Hackney stallions from 2 to 8 years of age; 12 Hackney fillies, with size, quality and action, and bred in the purple. A total of 73 head, Canada. Will be sold right, and on terms to suit.

T. H. HASSARD, MILLBROOK, ONT.

Oak Park Stock Farm IMP. HACKNEYS, SHROPSHIRE, AND BERKSHIRES.

A large number of Hackneys (stallions and fillies), imp. and out of imp. stock; all aces; show stock. Shropshire and dam. Everything strictly high class. T. A. COX, Manager, Brantford, Ont.



Imp. Clydesdales (Stallions and Fillies), Hackneys, Welsh Ponies.

I have now on hand Clydesdale stallions and fillies—Scotland prizewinners and champions; Hackney fillies and Hackney pony; also Welsh ponies. There are no better animals, nor no better bred ones, than I can show. Will be sold cheap and on favorable terms. A. AITCHISON, GUELPH P. O. AND STATION.

SIMCOE LODGE CLYDESDALES

Our stable of imported and Canadian-bred Clydesdale stallions and fillies was never so strong in show stuff as now, although we have had some very strong lots. Call and see what we have before buying elsewhere. HODGKINSON & TISDALE, BEAVERTON, ONT., G. T. & C. N. R. Long-distance 'phone.



IMPORTED CLYDESDALES!

9 stallions, 1 to 6 years of age; 1 them in foal; 1 two-year-old Hackney stallion; 1 Percheron stallions, 3 years old. All are selected animals, bred in the purple. Will be sold cheap and on terms to suit. T. D. ELLIOTT, BOLTON, ONT. 'Phone.

Imp. Clydesdale Stallions and Fillies.

Our new importation of stallions and fillies are the best we could select in Scotland, particularly well bred, with the size, smoothness and quality that Canadians admire. Show ring stuff. Come and see them. Will sell on terms to suit.

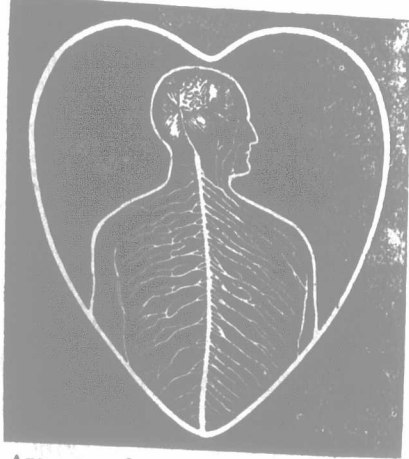
JOHN A. BOAG & SON, RAVENSHOE P. O., BROWN HILL STA.



25 Imported Clydesdale Stallions and Fillies 25

Two Clyde stallions, 1 Hackney stallion, over 20 Clyde mares and fillies, from 1 to 5 years of age. Many high class show animals among this lot. Many winners in Scotland among them. They have size, quality, style, action and breeding. Come and see them. GEO. A. BRODIE, Bethesda P. O., Stouffville and Gurnley Stations.

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.



Sunnyside Herefords

Present offering: Twenty good breeding cows, yearling heifers, good happy heifer calves; also one very promising bull calf, the get of Oward and Protector 2nd. In car lots or singly. Come and see them, or write and state what you want. Satisfaction guaranteed. **ARTHUR F. O'NEIL**, Maple Grove, Ont., Middlesex Co.

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

Brown Swiss Cattle
FRENCH-CANADIAN HORSES.

We are offering for sale cattle of both sexes and almost any age; the greatest dual-purpose breed alive. Horses of all ages. Stallions, mares and fillies. The best bred in Quebec. Write us for prices. We represent exactly as the animal is.
C. E. STANDISH, Ayer's Cliff P. O., Trebarthe Farm, Quebec.

W. R. BOWMAN, MT. FOREST.
Durham bulls roans and reds, sired by imported Newton Prince, \$75. Shropshire ram and ewe lam \$10 to \$15 each, sired by our stock rams—Prolific (imp.) a Chicago winner, and Dickins (imp.) A few choice breeding ewes at \$12 to \$15 each. Yorksire soxes due to farrow in February, sired by an imported boar, weighing over 300 pounds, at \$20 each. One boar ready for service at \$15. A Jersey bull, two years old, a winner at London; quick sale \$50

ABERDEEN - ANGUS

For sale, 50 head to pick from, males or females, by imported sire Drumbo station.
WALTER HALL, Washington, Ontario.

ABERDEEN - ANGUS CATTLE
For sale: young bulls and females. Herd won first prize, and stock bull the championship, at Western Fair, London, 1907, in strong competition. Elora sta., G.T.R. & C.P.R. **W. N. LOWE**, Elora, Ont.

Hawthorn Herd of Deep - milking
SHORTHORNS
6 YOUNG BULLS.

by Aberdeen Hero, Imp., =28840-. Also females all ages.
Wm. Grainger & Son,
LONDESBOUR P. O.

SCOTCH SHORTHORN BULLS.—Woodfield Prince, sire the \$2,100 Goldeup, imported, =50038- (66064). dam Trout Creek Missie 20th =65967-; red, little white; calved July 6th, 1906; a show bull. Also four extra bull calves, 8 to 10 months, by the Lavender bull, Trout Creek Wonder =56167- (247851), out of Scotch cows; imported by W. D. Flatt; eligible for American Herdbook. Write for pedigrees. **Gibbs' Woodfield Stock Farm**, St. Catharines, Ontario.

SHORTHORNS

For want of stable room will sell cheap 10 heifer calves, 12 yearling heifers, 4 two-year-old heifers in calf, and 3 red bulls about 14 months old. Right good ones. **CLYDESDALES.**—Two-year-old mare in foal, and a good pair 4 and 5 years old. Write, or come and see them.

JAMES McARTHUR,
GABLES, ONTARIO.

He who stops just one heart from breaking has not lived in vain.

GOSSIP.

Volume 13 of the Kent or Romney Marsh Flockbook has been received at this office, thanks to the courtesy of the secretary and editor, Mr. W. W. Chapman, Mowbray House, Norfolk, Strand, London, England. The volume, which is creditably and closely printed, contains 354 pages, and the pedigrees of rams numbering 18,021 to 20,422, and flocks from 1 to 132, besides a list of the officers and of breeders registering, the constitution and rules of the society, and much other information.

POLLED HEREFORDS.

On another page will be seen this week the advertisement of Mossom Boyd Company, Bobcaygeon, calling an auction sale at Windsor, Ont., on 28th instant, of Polled Hereford cattle. The Hereford breed of cattle has been so long known to have strong, long horns that the advertisement of polled specimens will strike some people as peculiar, and many will think they are not pure Herefords, but a concoction of the blood of the Hereford mixed with that of one of the Polled breeds. This, however, is not the case. The cattle are pure Herefords, and are either already registered or are eligible for registration in both the American and Canadian Hereford Herdbooks, and also in the American Polled Hereford Herdbook. They are called double standard for this reason, namely, that they comply with the standard of registration in both books. As our readers may not yet have learned much about this variety of cattle, a few words of information may not be out of place. The breed originated through the formation of a society of breeders in the United States, with the object of improving the Hereford breed of cattle by making them polled. These breeders first adopted the plan of using a cross of one of the polled breeds, and the cattle resulting from these crosses were registered under the title of Single Standard Polled Herefords. At the same time the society instituted a thorough enquiry of all the breeders of pure Hereford cattle to ascertain whether a "sport" of nature in the form of a polled specimen ever occurred among the pure breeds. This enquiry resulted in the discovery of a few such specimens, and it was found that these specimens were very propent in transmitting the polled character. Their produce from pure Hereford cows were registered under the title of Double Standard, because they were pure and eligible for both herdbooks, to distinguish them from the Single Standards, which were not pure. We believe that it was in 1902 that the discovery of these "sports" was first made, and the few breeders who were fortunate enough to secure one or more of them have been reaping large profits since then, for the demand for polled calves has been very much greater than they could supply, so that they have been obtaining prices seldom less than \$300 each, and more frequently \$500 and upwards, for calves as soon as weaned. Some of the leading breeders of the United States are adopting the polled blood, and it seems quite probable that this variety will attain great popularity, and will, for a number of years, be necessarily so scarce that those who take up the business of breeding them will find them very profitable. It appears that the polled character is very readily transmitted. A pure polled bull can be relied upon to poll very nearly all of his calves from horned cows, so that a breeder of Herefords by merely purchasing a polled bull can very soon breed himself a complete polled herd, and the suggestion made in the advertisement that those who wish to sell their Herefords readily should use a polled bull is probably good advice, even if it should be necessary to pay such prices as are indicated above; but cattle most frequently sell at auction for less prices than those at which they are held privately. The weather is frequently bad, and attendance, for one reason or another, often inadequate to take all that are offered, especially in a large sale. Under such circumstances, the bidders usually get all but a few tops at low prices, consequently it is good business to attend and be prepared to take in any bargains that offer.

Executors' Sale.

OF HIGH-CLASS AND CANADIAN-BRED

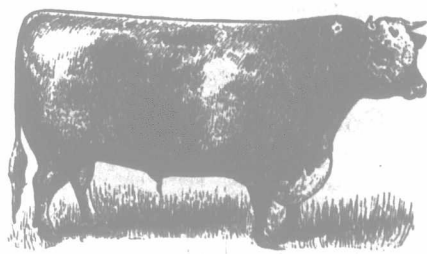
SHORTHORNS

And Milk Cows and Heifers

At the SALE PAVILION of the HAMILTON STOCK YARDS
HAMILTON, ONTARIO, CANADA

Monday, the 6th January, 1908

AT ONE P. M., WITHOUT RESERVE.



THERE WILL BE SOLD THE ENTIRE HERD OF 43 HEAD OF IMPORTED AND CANADIAN-BRED SHORTHORNS, AND 15 HEAD OF MILK COWS AND HEIFERS (GRADES).

The Estate of the Late Wm. Hendrie, Valley Farm, Hamilton.

TERMS CASH.

AUCTIONEERS { G. P. BELLOWES,
CAPT. T. E. ROBSON.

FOR FURTHER PARTICULARS AND CATALOGUES APPLY TO:

T. M. Poulter, 52 King St., E., Hamilton, Canada.

AUCTION SALE

There will be sold by public auction on

Wednesday, December 4th,

at lot 9, second concession, Gosford South, Village of Ruthven, the following valuable farm stock and implements: 11 FINE PEROMERON HORSES (4 registered); a number of cattle; 50 hogs; a quantity of hay and straw; a large quantity of grain of all kinds; all kinds of farm machinery, nearly all new and in first-class condition; some household effects; buggies and wagons; one new pneumatic bike buggy; all kinds of articles found on an up-to-date farm. Nothing reserved. Apply for information and sale bills to

Sale to start at 10 a. m.
Lunch served.

GARNET M. WIGLE, Proprietor,
RUTHVEN, ONT.

Auctioneers: Prosser, Clark, and Atkins.

Shorthorns!
BELMAR PARC.

John Douglas,
Manager.

Peter White,
Pembroke, Ont.

Calves for sale by our grand quartette of breeding and show bulls:

Nonpareil Archer, imp. Proud Gift, imp.
Marigold Sailer. Nonpareil Eclipse.

Females, imported and from imported stock in calf to these bulls.

An unsurpassed lot of yearling heifers.

Pure Scotch
Shorthorns!

Our herd is headed by Imp. Prime Favorite, grand champion bull at the Canadian National Exhibition, at Toronto, and at the New York State Fair, at Syracuse, for 1907, assisted by Imp. Scottish Pride. If you want a choice young bull do not fail to ask for one of our bull catalogues. A number of females in calf, or with calf at foot, also for sale. Correspondence solicited. Visitors always welcome. Long-distance phone. **W. G. PETTIT & SONS, Freeman P. O., Ont., Burlington Jct. Sta.**

Maple
Shade

Shorthorns & Shropshires

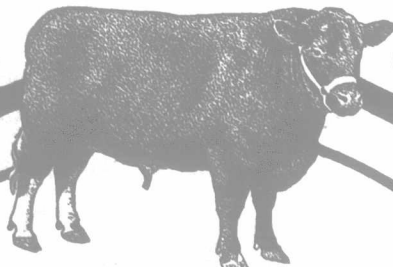
One yearling Lavender bull for sale. Younger bulls growing. All shearing rams and ewes sold. Will sell a few good ram lambs.

JOHN DRYDEN & SON, Brooklin, Ont.

Stations: Brooklin, G. T. R.; Myrtle, C. P. R.
Long-distance telephone.

When Writing Advertisers Kindly Mention "The Farmer's Advocate."

The Famous Steer RUBY ZENOLEUM International College Champion, 1906, Owned and Fed by Nebraska Experiment Station



Chicago Live Stock World said "192 Exhibitors at the International, Chicago, are Users of Famous ZENOLEUM. That tells the story."

IT WILL HELP YOUR CATTLE

No other animal dip and disinfectant has so many real uses about the cattle-barn and feed-lot. It is valuable to the farmer and stockman, the beef-grower and the dairyman. Zenoleum kills lice, cures mange and all skin diseases. Heals sores and wounds. Stops contagious abortion. Prevents calf-cholera and scours. Its use makes clean surroundings.

ZENOLEUM

Destroys disease germs and prevents contagion. One gallon goes a long way with the average herd. Perfectly healthy animals are better producers and make greater profits. Zenoleum keeps stock well.

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AT ALL DEALERS—Four sizes; eight ounce tin, 25c; thirty-two ounce, 50c; medium tin, 90c; large tin, \$1.50. Nearly any dealer in Canada will supply you with Zenoleum. If not, send to us.

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If Zenoleum is not all we claim it is, or even what you think it ought to be, you can have your money back. No talk, no letters—just money.

64 Page Booklet

Zenoleum Veterinary Adviser written by Agricultural College Authorities. Positively Free for the asking. Send a postal check.

The Zenner Disinfectant Co. 112 LaSalle Ave., Windsor, Ontario

SHORTHORNS AND LINCOLN SHEEP.

Two bulls, 11 and 19 months old—a Miss Ramsden and a Bessie, both by the good breeding bull, Proud Gift—80077—(imp.), also cows and heifers in calf by him. Inspection solicited. Always have some choice Lincoln sheep for sale at reasonable prices.

J. T. GISSON, DENFIELD, ONTARIO.

Scotch Shorthorns Claretts, Stanfords, English Ladys, Mildreds, Nonpareils. Present offerings by Springhurst 4484 and Mildred's Royal. Prices moderate. F. W. EWING, Salem P. O., Elora Station.

Spring Valley Shorthorns

Bulls in service are: Bapton Chancellor (imp.) = 40359 = (78286), Clipper Chief (imp.) = 64290 =. Stock for sale at all times.

CYLE BROS., Ayr, Ontario.

John Gardhouse & Sons

Importers and breeders of Scotch Shorthorn cattle, Shire and Clydesdale horses, and Lincoln sheep. Call and see us.

Highfield P. O., Weston Station 3 1/2 Miles. Telephone.

LIVINGSTON'S OIL CAKE MEAL.

Nothing is better for fattening steers quickly and putting them on the market in prime condition than Oil Cake Meal. Thousands of Canadian and English stockmen use Livingston's, and would have no other. It is equally good for milk cows. They give more and better milk when fed Livingston's Oil Cake Meal. Also used for horses, sheep and hogs. Write for information regarding prices, etc., etc., to

DOMINION LINSEED OIL CO., LIMITED
Montreal, Que. Baden, Ont.

SHORTHORNS

One roan Shorthorn bull, 3 years old, highly bred, quiet to handle; a bargain. Cows and heifers all ages. Also a number of Chester White sows that will weigh from 100 to 150 lbs each. No fancy prices.

D. ALLAN BLACK, Kingston, Ont.

Maple Grove Shorthorns



Herd headed by the grand show bull, Starry Morning. Present offering: Imported and home-bred cows and heifers, also a few young bulls. Terms and prices to suit the times. G. D. WAGAR, Enterprise Stn. and P. O. Addington Co.

Special Offering of Scotch SHORTHORN BULLS

3 just past two years old; 15 just over one year old; 7 just under one year old. The best lot we ever had to offer in individuality and breeding, and prices are right. Catalogue.

John Glancy, Manager. H. GARGILL & SON, Cargill, Ont.

Queenston Heights SHORTHORNS

All Scotch. The thick-fleshed, early-maturing sort. Special prices on young stock either sex. Ask for catalogue with sample pedigrees.

Hudson Usher, Queenston, Ont. Farm three miles north of Niagara Falls.

SCOTCH SHORTHORNS!

We now offer four heifer calves 10 and 11 months old. All reds. Bred from Imp sire and dams. Will be sold right C. RANKIN & SONS, Wyebridge P. O., Wyevale Sta.

Greengill Herd of High-class SHORTHORNS

We offer for sale choice young bulls from 6 to 12 months old, sired by imp. Lord Roseberry; also cows and heifers, with calf at foot or bred, either imp. or Canadian-bred.

R. MITCHELL & SONS, Nelson P. O., Ont., Burlington Jct. Sta.

IMPORTED SHORTHORN BULL, Royal Kitchener—60084—, five years; quiet; active; sure. Will sell or exchange. Also young stock sired by him, and out of imp. and home-bred cows, for sale. Ira B. Vannatter, Bailinabad P. O., Erin, C.P.R.; Georgetown, G.T.R.

QUESTIONS AND ANSWERS. Miscellaneous.

REMOVING STUBS FROM HEN'S LEGS.

I have a Buff Orpington hen, which has stubs on her legs. I have tried several things, but can only get rid of them for a time. What remedy would you use to get rid of them entirely?

A SUBSCRIBER.

Ans.—Why do you want to get rid of the stubs or feathers on the hen's legs? Do you think the hen will be less likely to breed feather-legged chicks with the stubs removed? If you pull the feathers, the holes are there, and if the judge sees the holes it is as bad in the show-ring as seeing the feathers. If your object is to make the bird more pleasing to yourself, and the holes in the legs where the feathers came out are not unsightly, the only thing to do is to keep on pulling, unless you burn the holes with a hot needle, and this I would not advise.

W. R. G.

TUBERCULOSIS IN FOWL.

My hens go lame, limp around for a while, then can't walk at all, and at last just sit stupid till they die; eat well at first, but not at last. Discharge is slimy, and of a greenish-yellow color. Have fed Pratt's poultry food and other medicine; whitewashed roosts, and try to keep the place clean. They took it last winter. Ration: mixed grain, mangels, milk, etc.

A. L.

Ans.—This looks to me to be a case of tuberculosis. The symptoms are very similar to this disease. There would be no treatment, except to kill and burn the sick, and use lime freely under the roost. A pint of carbolic acid added to a bushel of lime would improve matters. If your correspondent wants to make sure of the disease, I would suggest that a sick bird be sent to the Laboratory here for examination.

W. R. G.

O. A. C., Guelph.

TURKEYS DYING.

I have a very nice flock of turkeys, numbering twenty-five, and very near fit for sale. They are taking sick, and die in about twenty-four hours. They bunch up, will not eat, beak turns white, act very stupid. I have lost two, and another one is sick. I feed wheat, corn, barley and peas mixed, a little corn alone. Could you tell me what to do?

M. J. H.

Ans.—The turkeys are evidently eating something that is making them sick. I have known new barley, when fed in large quantities, to cause serious indigestion, but when a bird is sick but twenty-four hours I do not know what would be the cause. I would leave the peas and barley out of the feed, and give each sick bird at least a dessertspoonful of castor oil.

W. R. G.

GOSSIP.

Attention is called to the advertisement in this issue of an extensive auction sale of Percheron horses, cattle, hogs, hay, straw, grain, etc., the property of Mr. Garnet M. Wigle, Ruthven, Ont., to be held on his farm on December 4th. This is a clearing sale, without reserve, and should attract a large attendance, as the probability is that bargains will be going.

Wisconsin boasts of the champion butter-fat producing cow of the Holstein variety. Colantha 4th's Johanna, bred and owned by W. J. Gillet, of Rosendale, recently completed an official test, in which she produced, in seven consecutive days, at forty-nine days from calving, 651.7 lbs. of milk, 28.176 lbs. of butter-fat, equivalent to 32.87 lbs. of commercial butter. Colantha produced in one day over 44 lbs. of butter-fat, equivalent to 5.36 lbs. of butter, and her average production for the seven days came to within half a pound of this amount, and she averaged 3.694 lbs. for thirty days, and 3.473 lbs. for sixty days. She is eight years old, and has been kept under ideal conditions. She had not calved for three years prior to that time, and gave milk to within a couple of weeks of last calving. Her daily feed during the seven-day test was well-ensiled and matured corn silage (about 30 lbs. eaten), 10 lbs. clover hay, 35 lbs. sugar beet, 21 lbs. of a grain mixture consisting of equal parts by weight of bran, ground oats, and gluten food, and 3 lbs. of oatmeal.

Lump Jaw



The first remedy to cure Lump Jaw was

Fleming's Lump Jaw Cure

and it remains today the standard treatment, with years of success back of it, known to be a cure and guaranteed to cure. Don't experiment with substitutes or imitations. Use it, no matter how old or bad the case or what else you may have tried—your money back if Fleming's Lump Jaw Cure ever fails. Our fair plan of selling, together with exhaustive information on Lump Jaw and its treatment, is given in

Fleming's Vest-Pocket Veterinary Adviser

Most complete veterinary book ever printed to be given away. Durably bound, indexed and illustrated. Write us for a free copy.

FLEMING BROS., Chemists, 75 Church Street, Toronto, Ontario

1854 Maple Lodge Stock Farm 1907

Some choice Shorthorn heifers and young bulls for sale. Our Leicesters are exceptionally good this year. Rams and ram lambs and ewes for sale.

A. W. Smith, Maple Lodge, Ontario

T. DOUGLAS & SONS

STRATHROY, ONT.



Breeders of Shorthorns and Clydesdales. 15 bulls, 60 cows and heifers, 1 imp. stallion imp. and home-bred sires. Write us what you want or come and see our stock. Farm 1 mile north of town.

PLEASANT VALLEY SHORTHORNS

For sale: 3 young bulls by Old Lancaster Imp., from Imp. dams, including Lan-aster Victor, first prize sr bull calf at Dm at Sherbrooke, second at C. N. E. Toronto. Correspondence solicited. Inspection invited.

Geo. Amos & Son, Moffat Stn. & P.O. C. P. R. Farm 11 miles east of City of Guelph.

DOMINION SHORTHORN HERDBOOK WANTED.

The Dominion Shorthorn Breeders' Association will pay \$1 each for the following volumes of their herdbooks: Volumes 8, 9, 10, 11, 12, 13, 14, 15, 16, 17 and 19. Parties having these volumes to part with, write for wrappers and mailing instructions to

W. G. Pettit, Sec.-Treas., Freeman, Ont.

A. EDWARD MEYER, Box 378, Guelph, Ont.,

Breeds SCOTCH SHORTHORNS of the following families: Cruickshank Belongs, Mysies, Brawith Buds, Villages, Broadhooks, Campbell Claretts, Minas, Urys, Bessies, Bruce Mayflowers, Augustas, Marr Missies and Lovelaces, and others. Herd bulls: Scottish Hero (imp.) = 56043 = (90065), Siltyston Lad = 67214 =. Correspondence solicited. Visitors welcome. Long-distance phone in house.

JOHN LEE & SONS, Highgate, Ont.



SHORTHORNS & LINCOLNS

The champion herd of Highgate and Essex counties.

For Sale: 6 choice young bulls 3 reds and 3 roans, of grand type and quality; also good selection of young cows and heifers. Visitors welcome.

FLETCHER'S SHORTHORNS & YORKSHIRES Present offering: My \$3,000 stock bull, Imp. Joy of Morning—32070—, 8 years old, winner of 1st prize at Dominion Exhibition, Toronto. Quiet, active and sure. Will sell or exchange. Also young stock of either sex. In Yorkshires: choice sows bred, and boars fit for service, from Imp. sire and dam, at your own price. GEO. D. FLETCHER, Binkham P. O., Ont. Erin station, C. P. R.

Clover Lea Stock Farm SCOTCH SHORTHORNS

Superior breeding and individual excellence. For sale: Bulls and heifers—reds and roans, some from imp. sire and dam. Visitors met at Ripley station, G. T. R.

R. H. REID, PINE RIVER, ONTARIO.

MAPLE GROVE SHORTHORNS

Scotch and dairy bred; up-to-date in type; prize winners at the local shows. A number of 1 and 2 year old heifers 1 year old bull, and one 5 month old—the last will make a show bull. Flora bred—will be sold easy. L. S. POWELL, Wallenstein P. O. and Stn. G. P. R.

Brown Lee Shorthorns

Nonpareil Victor—63307— at head of herd. Young stock for sale at all times. Prices very reasonable. Ayr, C. P. R.; Drumbo, G. T. R. DOUGLAS BROWN, Ayr, Ont.

ELM PARK STOCK FARM

Shorthorns, Clydesdales and Berkshires. Stock for sale at all times. Herd headed by British Flag (50016) (82971). JOHN M. BECKTON, Glencoe, Ont. G. T. R., C. P. R. and Wabash R.

FEW HERE KNOW THIS.

When an eminent authority announced in the Scranton (Pa.) Times that he had found a new way to treat that dread American disease, Rheumatism, with just common, everyday drugs found in any drug store, the physicians were slow indeed to attach much importance to his claims. This was only a few months ago. To-day nearly every newspaper in the country, even the metropolitan dailies, is announcing it and the splendid results achieved. It is so simple that anyone can prepare it at home at small cost. It is made up as follows: Get from any good prescription pharmacy Fluid Extract Dandelion, one-half ounce; Compound Kargon, one ounce; Compound Syrup Sarsaparilla, three ounces. Mix by shaking in a bottle and take in teaspoonful doses after each meal and at bedtime. These are all simple ingredients, making an absolutely harmless home remedy at little cost.

Rheumatism, as everyone knows, is a symptom of deranged kidneys. It is a condition produced by the failure of the kidneys to properly filter or strain from the blood the uric acid and other matter which, if not eradicated, either in the urine or through the skin pores, remains in the blood, decomposes and forms about the joints and muscles, causing the untold suffering and deformity of rheumatism.

This prescription is said to be a splendid healing, cleansing and invigorating tonic to the kidneys, and gives almost immediate relief in all forms of bladder and urinary troubles and backache. He also warns people in a leading New York paper against the indiscriminate use of many patent medicines.

A first-grade boy brought perfect spelling papers home for several weeks, and then suddenly began to miss five and six out of ten.

"How's this, son?" asked his father. "Teacher's fault," replied the boy. "How is it the teacher's fault?" "She moved the little boy that sat next to me."

Salem Herd of Shorthorns

We offer: Ten high-class bull calves. Ten high-class heifer calves.

As well bred as they can be.

J. A. Watt, Salem P. O. Elora, G. T. and C. P. R.

CEDARDALE SHORTHORNS

Owing to scarcity of feed, am offering at special low figures for quick sale: 17 heifers, one to three years old. 4 young bulls from six months to one year old. 16 cows, in calf or with calf at foot. Both beef and deep-milking strains.

T. S. Sproule, M.P., Markdale, Ont.

SUNNYSIDE STOCK FARM

Bulls in service: Queenston Archer -48898-. Trout Creek Stamp -67660-. A number of first-class young bulls, red and roan, and a few cows and heifers, for sale. Prices right.

JAMES GIBB, Brookdale, Ont.

SHORTHORN FEMALES.

I have sold all my young bulls advertised in Advocate, but have some good females, representing the families of Village Maids, Claret, Cruickshank Village Blossoms and Ramsdens. Box 556.

HUGH THOMSON, St. Mary's, Ont.

ATHELSTANE SHORTHORNS!

Pure Scotch Rosewood, Rosalind and Countess strains. Ten one and two year old heifers of the above strains, the get of the Village-bred son of Imp. Knockle Duster, Vicar 33355, and the Bruce Mayflower bull, Star Prince; also young bulls from 6 to 12 months old. Prices reasonable.

WM. WALDIE, Box 324, Stratford, Ont.

YOUNG SHORTHORN BULLS!

Am now offering 2 grand ones from Scottish Peer (imp.). Will make show animals. Also Leicester sheep. A number of young breeding wethers to sell.

JAS. SNELL, Ginton, Ont.

STONELEIGH E. JEFFS & SONS, STOCK FARM

Breeders of Shorthorns, Leicesters and Berkshires. Young stock of various ages and both sexes for sale. Bond Head P. O., Bradford & Buton stns., G. T. R.

Subscribe for "Farmer's Advocate"

GOSSIP.

AMERICAN ROYAL STUDENT STOCK-JUDGING CONTEST.

The beautiful silver loving cup, valued at \$500, which was offered this year for the first time by the American Royal Stock Show, of Kansas City, Missouri, was won by the five students representing Iowa State College, who, also, were awarded \$400 in prize money, to be proportioned among them according to their scores made in judging the different classes of live stock. The grand total of points made by one team showed Iowa ahead with a score of 5,177; Kansas second, with 4,552, and Missouri, third, with 4,354. Chicago records were lowered, Iowa scoring 5,177 as a team, and Metcalf, a member of this team, doing individual work that merited him a grade of 1,053 points. The loving cup was placed in contest this year for the first time, and must be won three time before it becomes the permanent property of an institution. Professor W. J. Kennedy was the instructor in charge of the Iowa team.

W. COLQUHOUN'S CLYDESDALES.

Mr. W. Colquhoun, of Mitchell, Ont., has lately arrived home with another importation of Clydesdale stallions. For twenty-six years Mr. Colquhoun has been importing Clydesdales, and during that time has made forty-eight trips to Scotland. Among Clydesdale fanciers, his importations are noted for their size, superb quality of underpinning and draft character. The lot now on hand are certainly no exception to the rule.

Prince Fragrant (11460), a bay eight-year-old, is a ton horse in weight, exceptionally smooth, on a good strong foundation, and is certainly one of the very best stock horses in Canada, his get being at the top all around the circuit this fall, including Toronto; sired by the Highland champion, Sir Christopher (10286), by Prince of Loudoun, by Prince of Wales, dam Bell of Frick Mains (14212), by Laird Darnley.

Opulence (12264), a bay five-year-old, is another ton horse, exceedingly smooth, with good length of rib, strong back, abundance of quality, an ideal bottom, and a wonderfully good doer, sired by Baron's Pride (9122), dam Montrave Ketha (13976), by Prince Albion, by Prince of Wales, grandam by Macgregor.

Cockade (12529), a brown four-year-old, is a big, flashy, quality horse, stylish on top and a grand-quality bottom, a rare good kind, sired by Up-to-Time (10475), by Baron's Pride, dam by King of the Roses (9927). Galloway Type (12993) is a black three-year-old, by Fickle Fashion, by Prince of Wales, dam May Blossom of Drummond (13681). Here is a wonderful three-year-old, which, now only in very moderate condition, will weigh 1,800 lbs., and will make over-a-ton horse, and has quality, style and symmetry all through. In condition, he will be a great show horse. Wilful (13828) is a brown two-year-old, by Baron Hood (11260), by Baron's Pride, by Sir Everard, by Top Gallant, by Darnley, dam Rosie of Leathe 16367, by King of the Roses. This colt is one of the stylish, flashy kind, on a high-class quality bottom, and moves off like a Hackney. Glenview Prince is a bay two-year-old, imported in dam, that will develop into a big, lofty, well-put-up horse. He is sired by MacEachern, dam imported, by Alexander's Pride.

Limestone (8926) is a five-year-old chestnut Hackney stallion, by Commerce 7406, dam Toponthank Jess 16292, by Donal Grant 1473. The best we can say about his individuality is that in the Old Country, in the home of the Hackney, he was shown many times, and won twenty-two first prizes and two seconds, and this year stood for service at five guineas. A perusal of the above shows this importation to be an exceptionally well-bred lot, rich in the blood of Scotland's greatest sires and winners. Write Mr. Colquhoun, to Mitchell P. O., long-distance telephone.

Stoneycroft Ayrshires. SEVENTY-FIVE (75) HEAD. Imported and imported-in-dam, both sexes and all ages. Winners and champions in Scotland and Canada among them. A high-class lot. Anything for sale. Also imported Clydesdales and Imp Yorkshires. Harold Morgan, Ste. Anne de Bellevue, Que. Bell Phone connection.

SPRINGBROOK AYRSHIRES Produced 7,000 lbs. of milk each, testing 3.9% butter fat, in 1906. Two choice young bulls dropped in August, 1906, and several calves of 1907 for sale. W. F. STEPHEN, Box 163, Huntingdon, Que.

STONEHOUSE AYRSHIRES On hand for sale: A number of imp. cows and heifers winners of high honors in Scotland & Canada. 4 young bulls bred from champions and winners themselves. Extra choice offering. HECTOR GORDON, Howick P. O. & Sta., Quebec.

Glenhurst Ayrshires Oldest-established herd in Ontario. Imp. and Canadian-bred. Average B. F. test for the whole herd, 4.8; milk yield, 40 to 60 lbs. a day. For sale: females of all ages, and several young bulls; all by Imp. sire and some out of Imp. dams. James Benning, Williamstown P. O., Lancaster Sta.

Ayrshire Bulls One last September and a few March and April calves by the champion Douglasdale (imp.). W. W. BALLANTYNE, "Neidpath Farm," Stratford, Ont. Long-distance phone.

Wardend Ayrshires We have only four spring bull calves on hand for sale. Will sell them at reasonable prices. Sired by White Prince of Mele No. 21825, bred by A. Hume, Menie. F. W. TAYLOR, Wellman's Corners, Hoard's Sta., G. T. R.

Burnside Ayrshires. IMPORTED AND CANADIAN-BRED Winners at the leading shows of Scotland, Canada, and U. S. Importation of 74 head have just landed home. All bulls sold. 20 fine 2-year old heifers due to freshen in Sept. A few advanced Registry cows to freshen in Aug. and Sept. Anything I have is for sale at reasonable prices. R. R. NESS, HOWICK, QUE., P. O. AND STATION.

HOLSTEINS We must sell at least 25 cows and heifers at once in order to make room for the increase of our large herd. This is a chance of a lifetime to buy good cattle at bargain prices. The best way to arrange to come and look the herd over. If you cannot, we will do our best for you by correspondence. Also a few young Yorkshires, about 2 months old, for sale cheap. True to type and first-class. Bred from imported stock. THOS. S. CARLAW & SON, Warkworth P. O., Cambellford Stn.

MAPLE GLEN HOLSTEINS Herd of 35 head with A. B. O. breeding, backed up by better tests of over 16 lbs as a two-year-old to over 26 lbs. as a cow. A good herd to select from. Two spring bull calves on hand. A. B. O. test of one is over 26 lbs. for dam and 6. dam. Come and inspect the herd. Any animal will be offered for sale. G. A. GILROY, GLEN BULL, ONT.

LOOK HERE Have on hand bull calves from choice dams, and sired by son of greatest cow in Canada, Bourne's G. Pieterie De Kol; 643 lbs. 7 days; 26 lbs. 1 day. His sire's dam and granddam have records averaging over 55 lbs. butter week. Also choice bulls for service. Prices right. FRED ABBOTT, Fairview Stock Farm, Harrietsville, Ont.

Maple Hill Holstein-Friesians Bull calves from No. 1 dams, sired by bulls with great official backing. Write for prices. G. W. Clemons, St. George, Ont.

Glenwood Stock Farm—Holsteins and Yorkshires. Holsteins all sold out. Have a few young Yorkshires, about 2 months old, for sale cheap. True to type and first-class. Bred from imported stock. THOS. S. CARLAW & SON, Warkworth P. O., Cambellford Stn.

Lyndale Holsteins Bull calves for sale out of cows with records of from 18 to 20 lbs., and sired by a grandson of Pieterie's Hengerveld's Count De Kol. BROWN BROS., LYN, ONTARIO.

HILTON STOCK FARM—Holsteins, Galloways and Tamworths—Free sent offering: Some young cows; a nice lot of young pigs; few boxes six months old, and cows in pig. H. G. MORGAN & SON, Hilton P. O., Brighton Tel. and Stn.

Imperial Holsteins Bull calves for sale. W. H. SIMMONS, New Durham P. O., Ont. Grove Hill Holstein Herd Offers high-class stock at reasonable prices. Only a few youngsters left. Fair and skin. F. R. MALLORY, Frankford, Ontario, G. T. R. and C. O. Railway connections.

Ridgedale Farm Holsteins—1 yearling bull, 6 bull calves, from one to four mos., by Prince Pauline De Kol 6th, and from rich, heavy-milking dam. Come and see them or write: R. W. WALKER, Utica P. O., Ont. Fort Perry, G. T. R., or Myrtle, C.P.R., Ontario Co.

Annandale Great Dairy Herd ONLY BULLS, 4 to 10 months old, for sale at present. Bred from great producing ancestors. Bred right. Fed right. Holsteins and Ayrshires GEO. RICE, Tillsonburg, Ont.

RECORD OF MERIT HOLSTEINS Herd 110 strong. Over 40 head now in the Record of Merit. Two of the richest-bred bulls in Canada at head of the herd. For sale: 18 bulls, from 3 months to 1 year of age, all out of Record of Merit cows and sired by the stock bulls. P. D. HDE, Oxford Centre P. O., Woodstock Station.

FAIRVIEW HERD is the place to buy your next bull. I can furnish you with a bull sired by our great herd bull, FONTIAC KORBNDYKE, who has 19 daughters in the last year's report that made official records from 19 pounds at less than two years old to over 314 pounds at four years, and the whole number averaged over 4 1/2 lbs. No other bull in the world has ever made such a showing in one year. I have just tested another of his daughters that made 26.40 pounds butter in seven days with second calf. I have over 50 cows and heifers in calf to him. Come and look my herd over before making your selections elsewhere. E. H. Deiser, Nevelton, St. Law. Co., N. Y., near Prescott.

"THE MAPLES" HOLSTEIN HERD is made up of Record of Merit cows and heifers with large records, and headed by Lord Wayne Meethilde Calamity. Bull calves from one to five months old for sale. Walburn Rivers, Folden's, Ont.

RIVERSIDE HOLSTEINS For sale: Eight young bulls from 3 to 8 months old, out of Record of Merit cows, sired by Johanna Bue 4th's Lad and Sir Pieterie Poesh DeBoer, whose dam and sire's dam average in official test 75.87 lbs. butter in 7 days, and 87.6 lbs. milk 1 day. J. W. RICHARDSON, Caledonia, Ont.

Beaver Creek Herd of Holsteins FOR SALE: A few cows and five yearling heifers, and some heifer calves. All bred from good milkers. Albert Mittlefehldt, Elcho, Ontario.

JUICY STEAKS

To repair waste tissue in an animal organism requires food. To make growth necessitates the giving of a greater portion and to build fat on tissue—the end sought in putting a steer, hog, or sheep in market condition—calls for a very large consumption of nutritious elements. Now heavy feeding has a tendency to bring about derangement of the digestive organs. The wise feeder prepares the animal system against the steady and tiring strain which the stuffing process puts on both stomach and nerves.

He follows the suggestion of Dr. Hess (M. D., D. V. S.), who has formulated a prescription in which are found the elements long ago recognized as beneficial in building up and strengthening the digestion.

DR HESS STOCK FOOD

not only makes the ration digest perfectly, but it creates increased appetite for more. A steer fed with Dr. Hess Stock Food consumes, besides its grain, a larger amount of rough fodder, which of course makes the grain more available for fat forming, thus adding to the profit of feeding.

Dr. Hess Stock Food contains also iron for the blood and nitrates to act as cleansers of the system, which are endorsed by such men as Professors Quitman, Winslow and Finley Dun. It makes cows give more milk and keeps farm teams in fine condition.

Sold on a Written Guarantee.

100 lbs. \$7.00 25 lb. pail \$2.00.

Smaller quantities at a slight advance. Duty paid.

Where Dr. Hess Stock Food differs in particular is in the dose—it's small and fed but twice a day, which proves it has the most digestive strength to the pound. Our Government recognizes Dr. Hess Stock Food as a medicinal compound, and this paper is back of the guarantee.

FREE from the 1st to the 10th of each month—Dr. Hess (M. D., D. V. S.) will prescribe for your ailing animals. You can have his 96-page Veterinary Book any time for the asking. Mention this paper.

DR. HESS & CLARK, Ashland, Ohio, U. S. A.

Also manufacturers of DR. HESS POULTRY PAN-ACE-A and INSTANT LOUSE KILLER. INSTANT LOUSE KILLER KILLS LICE



GOSSIP.

DALGETY BROS'. CLYDESDALES

With an average of three and four importations a year for over a dozen years, among which were a large number of show-ring winners in Scotland and Canada, and a record for square dealing excelled by none, the Messrs. Dalgety Bros., of London, Ont., and Dundee, Scotland, enjoy, to the fullest extent, the confidence of the people. The high average at which their last year's filly importations were sold, and the early and rapid selling of their stallion importations, year after year, is the best guarantee needed that the kind they bring are the kind the people and the country want. Their latest importation of stallions landed a few days ago at their stables in London, Ont., an importation that for great size, excessive smoothness, strong, flat bone, well-sprung pasterns, coupled with superior style, quality and the very richest breeding, certainly excel any former importation made by the firm, and will stand comparison with any ever landed on Canada's shores. Royal Carlung (11486) is a bay seven-year-old, by Prince of Carlung (7146), by Prince of Wales, dam Royal Queen, by Mount Royal 8065, by St. Lawrence, by Prince of Wales. This is a massive, smooth-built horse, up to a ton in weight, with an ideal set of underpinning, and quality from the ground up. He won many prizes in Scotland and several in Canada, and his get in Scotland are winners wherever shown, Sir Arnold (12363) is a bay five-year-old, by Lord Stewart (10084), by Castlerough, by Darnley, dam Maggie of Everard, by Sir Everard (5353). Here is another ton horse, thick, smooth, full of character and quality, on the best of feet, ankles and strong flat bone, a rare good kind he is. Linton Lad (12639) is a bay four-year-old, by Alexander Everard (11242), by Sir Everard, by Top Gallant, by Darnley. Here is a horse of superb quality, over a ton in weight, exceedingly smooth, and choke-full of character. He is certainly one of the very best horses in Canada. He was never shown, having been owned by a gentleman in Scotland, lately deceased, hence his being for sale. The man or section of country that gets him will certainly be lucky. Marcellus Agan (13901) is a brown three-year-old, by Marcellus (11110), the noted Cawdor-cup and Brydon-shield winner, he by the great champion, Hiawatha, dam Queenie (18840), one of Scotland's most noted show mares, by Fitz Gallant, by Top Gallant, by Darnley, grandam Fanny Fraser, by Darnley King (2717), by Darnley, breeding royal enough, and a royal colt; will make over-a-ton horse, and has character and quality to spare, a rare good colt. Lord Kinross (13070) is a bay three-year-old, by the great Labori (10791), winner of the 100-guinea Brydon-shield, he by the champion Hiawatha, dam Pearl 15681, by The Most Noble (10657), by Gallant Prince, by Prince of Wales, grandam The Belle 12502, by Prince Robert, by Prince of Wales, a colt away out of the ordinary in point of great size, smoothness of turn and superb quality. He is a show horse from the ground up. This year, at London, in very strong company, he won first in his class and championship over all ages. Kinburnie (13866) is another bay three-year-old, by Royal Favorite (10630), dam Kate of Kinburnie (18645), by the great horse, Cawdor Cup (10045). This colt, at London, in the same class, came in for second place beside his great stable mate. He is a very thick, smooth colt, on an ideal bottom of strong-quality bone. He will make over-a-ton horse, and a rare good one. Glencraig (13900) is a brown two-year-old, by Montrave Merman (11437), by the great Macgregor, dam Miss of Inehgall, by Tamboudoun. This colt is of a more lofty type, showing a massiveness of build and draftiness that is seldom seen, together with a vast amount of quality and character, will certainly make something away above the average. From the above, it will be seen that this lot are exceptionally fashionably bred, and individually are all that can be desired in a draft horse.

COWS GIVE MORE MILK
—cattle make better beef—Bulls are no longer dangerous when dehorned with the

KEYSTONE DEHORNER.
Cuts 4 sides at once—No crushing or urising. Little pain. The only humane method. Write for free booklet. **R. H. MCKENNA**
219 Robert St. Toronto, Ont. Late of Picton, Ont.

Brampton Jerseys

Unbroken record of several years success at all leading Canadian exhibitions is unequalled by any other herd of any kind or breed of live stock on the American continent. When buying a family cow, a stock bull or a dairy head, buy only this best. Our public record proves that we have them. **B. H. BULL & SON,**
Brampton, Ont.

Pine Ridge Jerseys For sale some choice young bulls, bred in the purple, of ideal type; also a few heifers and heifer calves and some Cotswold shearing rams and ram lambs. **Wm. Willis & Son, Newmarket P. O. & St.**

HIGH GROVE A. J. C. G. JERSEYS
Arthur H. Tufts, Iwood, Ont. (Successor to Robt. Tufts & Son.) On account of scarcity of winter feed head must be reduced. Males and females, all ages, for sale cheap, quality considered.

GOSSIP.

The late Palermo Sales of pedigree live stock at Buenos Ayres indicate the advance made in breeding stock on pedigree lines in that country. The champion Shorthorn bull, Newton Stone 17th, realized £1,865 (\$9,325), which was considered moderate for an animal of his class. The highest average was £665 15s., realized by Mr. C. Lopez for five head, and for ten others the same owner obtained an average of £274 15s.

The noted Clydesdale stallion, Baronson (10981) is dead. Not only the owner, Mr. M. Marshall, but the Clydesdale breed, has sustained a serious loss in the death of this noted horse, which took place last month after a severe attack of inflammation. Baronson was bred by Mr. David Mitchell, at Polmont, and was got by Baron's Pride, out of the noted prize mare, Princess Alexandra, a daughter of the still more famous Sunray. He passed into Mr. Marshall's hands at the Millfield sale some years ago, and has been very successful at the stud. Indeed, of late years he had taken rank as one of the leading breeding horses of the day, one of his get being the famous Cawdor-cup winner, Oyama. His progeny were characterized by fine quality along with size, and they were always in keen demand.

Porter's Golden Fawn St. Lambert and Golden Lad JERSEY HERD.

I AM now breeding the two most popular and productive families of the Jersey breed known—the St. Lambert and Golden Lad. And what is more, my foundation stock of both families was purchased from the two most noted and best breeders of Jerseys on the continent: The St. L.'s from the late Wm. Rolph, of "Glen Rouge"; and the Golden Lads from T. S. Cooper, Linden Grove, U. S. A. My Golden Lads are headed by Blue Bell's Fox of Linden Grove—a grandson of Mr. T. S. Cooper's high-priced cow, Blue Bell, which was sold at his 1904 sale for \$3,600. I have a few animals of both sexes for sale.

R. R. Station, Toronto Junction, G. T. R. & C. P. R. **THOMPSON PORTER, Carleton West, Ont.**

Linden Oxfords

We have a nice bunch of rams, two-year-olds, yearlings and ram lambs for sale. Sired by choice imp. Royal-winning ram.

R. J. HINE, DUTTON, ONT.
P. O. and Telegraph Office.

Leicesters A few choice ram lambs and ewes of various ages. Also DUROC JERSEY SWINE. **MAC CAMPBELL & SONS, Harwich, Ontario.**

71 Years WITHOUT CHANGE MEANS

that in 1836 we made an importation of sheep, that Shorthorns followed very soon, that we have been importing and breeding them ever since, and that this year I have made an importation of **Shorthorns, Shropshires, Clydesdales and Welsh Ponies** as good as could be bought. They, with high-class home-bred ones, are for sale, write me. **ROBERT MILLER, STOUFFVILLE, ONTARIO.**

Shropshires and Cotswolds

I am now offering 35 shearing rams and 50 shearing ewes, also an extra good lot of ram and ewe lambs from imported Minton ewes and Butlar ram.

JOHN MILLER,
Brougham P.O. Claremont Stn., C.P.R.

SPRINGBANK OXFORDS.

SPECIAL OFFERING:
20 ram lambs; 3 shearing rams by an imp. Hobbs Royal Winner.
The above are choice, and will be sold worth the money. **WM. BARNET,**
Fergus, G.T.R. & C.P.R. Living Springs P.O.

40 IMPORTED SHROPSHIRE RAMS AND EWES—First choice of England's best flocks. Ram lamb from the champion ram of Canada, 1906. **LLOYD-JONES BROS., Burford, Ont.**

FOR SALE—Pure Shropshire Ram and Ewe Lambs from imported stock. A few ewes might be spared. Also fine St. Lambert Jerseys; male and female; all ages. Prices reasonable. Write for particulars. **H. E. Williams, Sunny Lea Farm, Knowlton, P. Q.**

Oxford Down Sheep, Shorthorn Cattle Yorkshire Hogs.

Present offering: Lambs of either sex. For prices, etc., write to **John Cousins & Sons** Buena Vista Farm, O. Harriston, Ont.

Farnham Farm Oxford Downs

We are now offering a number of select yearling rams and ram lambs, sired by imported ram, for flock headers; also yearling ewes and ewe lambs. Price reasonable.

Henry Arkell & Son, Arkell, Ontario.
Arkell, C. P. R.; Guelph, G. T. R.

PURE-BRED DORSET SHEEP

My entire flock of 10 young breeding ewes and one stock ram for sale.

N. McDOWELL, Norwich P. O., Ont.

Southdowns

FOR SALE: 2 imported prizewinning rams, and 60 home-bred and imported ewes. **GOLLIES**,—uppies by champion sire, and out of prizewinning dam.

Robt. McEwen, Byron, Ont.

If you go HUNTING this season we want to get you

DEERSKINS

They are worth money. Well worth your skinning and shipping to us. Write us.

E. T. CARTER & CO., TORONTO.

FAIRVIEW SHROPSHIRE RAMS

Very choice imp ram lambs. Real good home-bred yearlings. One excellent two-shear (Newton Lord) and Fair Star Rose combined in his breeding, and a four-year-old son of Fair Star Rose—a capital and very sure breeder. Splendid values to quick purchasers. **J. & D. J. CAMPBELL, Fairview Farm, Woodville, Ont.**

Sheep and Cattle Labels.

Drop me a card for sample and circular, it costs nothing, and will interest you.

F. G. JAMES, Bowmanville, Ont.

CONSTIPATION.

Although generally described as a disease, can never exist unless some of the organs are deranged, which is generally found to be the liver.

MILBURN'S LAXA-LIVER PILLS

have no equal for relieving and curing Constipation, Biliousness, Water Brash, Heartburn, and all Liver Troubles.

Mr. A. B. Bettes, Vancouver, B.C., writes:—For some years past I was troubled with chronic constipation and bilious headaches.

Price 25 cents per box, or 5 boxes for \$1.00, all dealers, or mailed direct on receipt of price.

THE T. MILBURN CO., LIMITED Toronto, Ont.

NEWCASTLE TAMWORTHS.

Oldest established herd in Canada. For sale 12 young sows sired by Colwell's Choice and Newcastle Warrior, both Toronto champions.

Maplehurst Herd of Tamworth Swine, Bronze Turkeys, Toulouse Geese, Pekin Ducks, S.-C. W. Leghorns.

For sale: A large herd of Tamworths, of excellent breeding and ideal bacon type. This herd won sweepstakes at Toronto and London, 1906-6.

D. DOUGLAS & SONS, Mitchell, Ont.

CHESTER WHITE HOGS

The largest herd of bacon-type Chester White hogs in Canada. Strictly high-class have won highest awards.

ROBERT CLARKE, 41 Cooper Street, Ottawa, Ont.

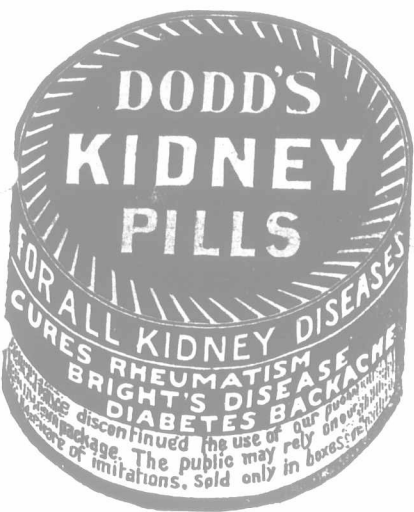
Cedar Lodge Yorkshires

100 head brood sows (imp.) and the product of imp. stock, weighing from 500 to 800 lbs. each. Stock hogs by imp. sires and dams, very large and full of quality.

P. O. COLLINS, Bowesville P.O., Ont. Manotick Sta., C.P.R.

EAST BAK HERD.—Large English Yorkshire and Berkshire Swine, Shorthorn Cattle, Barred Rock Poultry.—To make room I will sell suckers of choice breeding and quality at \$5 each—registered.

A good quantity of good rich milk for ten months in the year is what every dairyman wants from every cow in the herd, and a cow that will not do this is not worth keeping.



QUESTIONS AND ANSWERS. Veterinary.

SALLANDERS.

The hocks of my three-year-old mare have cracked across the front. They did the same last year, but got better when she went on grass. She is supposed to be in foal.

Ans.—This is a skin disease called sallanders, and is very hard to treat on account of the motion of the hock closing and opening the cracks at each step.

ABORTION.

Will feeding steamed grain to mares cause abortion? I have been feeding it to two mares, and both have aborted.

Ans.—If the barley is of good quality, it will not cause abortion; but if it contains ergot, it will. Ergot is not often present in barley, but some seasons it is, and, when present, is generally so small that it cannot be noticed.

WORMS—SWOLLEN SHEATH.

1. Colt passes small white worms. 2. French-Canadian stallion's sheath swells when he stands in stable for a few days.

Ans.—1. You do not state the colt's age, but I suppose it is a weanling. Take four drams each of sulphate of copper, sulphate of iron, tartar emetic and calomel. Mix, and make into twenty-four powders.

2. Purge him with eight drams aloes and two drams ginger. Follow up with two-dram doses of nitrate of potash twice daily, for five days.

My cattle began to cough the first of the summer of 1906. They all have coughed more since being stabled. A calf, born in March, also has the cough.

1. Do you think they have tuberculosis? 2. Would the flesh be fit for food? 3. Would it be safe to put healthy cattle in stable with them? 4. Should stable be disinfected and how?

Ans.—1. It is very probable they have, but the only method of making a definite diagnosis is to get your veterinarian to test the herd with tuberculin.

2. When but one organ is diseased, and that not to such an extent as to interfere with the health of the animal, the flesh is considered healthful; but if more than one organ is diseased, or the health affected, the flesh is not fit for food.

3. No. 4. Sweep thoroughly, and then give a thorough washing with a hot five-per-cent. solution of carbolic acid in water. In a few days, give a thorough coat of hot lime wash, with five-per-cent. carbolic acid.

Miscellaneous.

CEMENT TANK IN BARN FOR WINDMILL.

Would a cement tank be all right and give good satisfaction for a windmill tank placed in a barn? We have a wooden tank, but it leaks; only lasting a short time. If cement is all right, in what proportions would it need to be mixed?

Ans.—Properly-constructed cement tanks have given excellent satisfaction for the purpose stated. One part Portland cement to four parts good sharp gravel will make a strong tank, the walls being 5 or 6 inches thick.

YORKSHIRES of Choicest Type and Breeding.



I have on hand 75 brood sows of Princess Fame, Cinderella, Clara, Minnie, Lady Frost and Queen Bess strains. My stock boars are true to type and richest breeding.



Large White Yorkshires!

An offering at the present time a choice lot of boars ready for service, from imported stock, also young pigs of both sexes, not akin. Prices right, and quality of breeding unexcelled.

H. J. DAVIS, WOODSTOCK, ONT.



MONKLAND Yorkshires

Imported & Canadian-bred. We keep 25 brood sows, and have constantly on hand between 100 and 200 to choose from.

JAS. WILSON & SONS, FERGUS, ONT.



Maple Leaf Berkshires.

Doctor sows, bred to British Duke (imp.). Also young boars and sows for sale, 10 and 12 weeks old.

JOSHUA LAWRENCE, OXFORD CENTRE P. O. WOODSTOCK STATION.



FAIRVIEW BERKSHIRES

are second to none. Have now for sale some sows bred, and boars fit for service, also younger ones from two to four months old, bred from show stock.

John S. Cowan, Donegal P. O. Atwood and Milverton stations.

Glenburn Herd of Yorkshires.

Winner of gold medal three years in succession. 6 young boars from 6 to 9 months; also 75 young sows, from 6 to 12 weeks old.

David Barr, Jr., Box 3, Renfrew, Ont.

Elmhurst Berkshires

With our recent importation, personally selected from the best herds in England (some of them prizewinners), we have the most select herd of Berkshires in Canada.

Motto: "Goods as Represented."

Yorkshires and Tamworths—Either breed any age, both sexes; sows bred and ready to breed.

Elmfield Yorkshires. 60 young pigs of both sexes, from 4 weeks to 4 months.

DUNROBIN STOCK FARM. Clydesdales, YORKSHIRES, Shorthorns, grandly-bred Yorkshire sows.

Willowdale Berkshires. are unsurpassed for quality and breeding. My stock is bred from the best imported and the richest breeding to be found in England.

Maple Grove Yorkshires. Imported and Canadian-bred boars and sows of the best possible breeding, with lots of size and quality.

SUNNYMOUNT BERKSHIRES! Boars fit for service. Sows bred and safely in pigs. Sows fit to be bred. Young pigs just weaned.

OAKDALE BERKSHIRES. Largest Berkshire herd in Ontario. Stock boars and several brood sows imported.

LARGE ENGLISH YORKSHIRES.—We have a limited number of choice young pigs for sale, bred from our choicest sows and got by the imported boars.

Mount Pleasant Herd of Tamworths and Holsteins. For Sale: Pigs of either sex, from 6 weeks to 7 months; pairs not akin; also bull and heifer calves under 5 months.

CLOSING-OUT SALE.—Orchard Home Tamworths at closing-out prices. Brood sows in pig; fall pigs; boars fit for service, all ages, including the great Toronto champion, Newcastle Warrior (2394).

BERTRAM HOSKIN, The Gully P. O.

DALL BROS., Cherry Valley, Ont.



THE EUREKA ROOT CUTTER

Fitted with either slicing or shredding cylinder. The fastest cutting, easiest turning machine on the market. The SHREDDER is the ideal of root cutting. It does not mash, but cuts the roots in thin, narrow strips. If your dealer does not handle them, write

THE EUREKA PLANTER CO., LTD.
Woodstock, Ont.,

Manufacturers. Our free catalogue explains all. Correspondence solicited. Agents wanted.

CONSUMPTION Book Free!

If you know of any one suffering from Consumption, Catarrh, Bronchitis, Asthma, or any throat or lung trouble, or are yourself afflicted, this book will help you to a cure.

Write at once to the Yonkerman Consumption Remedy Co., 132 Rosa Street, Kalamazoo, Mich. Don't wait—do it now.

A STIMULANT AND MUCH MORE!

Mere stimulants give only fictitious help, and are followed by a reaction that leaves one worse than before.

BOVRIL



gives more permanent strength, energy and stimulus than anything else.

When run down or weary use Bovril.

By Royal
Warrant



Purveyors to
the King.

CRAIGALEE STOCK FARM FOR SALE

Positively one of the best farms in York county. Lots 9 and 10, in 5th con., Scarborough, contains 140 acres, 4 miles from Markham, G.T.R., 3 miles from Locust Hill, C.P.R.; 1 1/2 miles from P.O., church and school; two-story brick house; barn 40 by 90 feet; stone stables, cement floors; 18 horse gasoline engine and 60 feet of shafting; water in stables; hay forks, slings, etc., complete; 4 acres orchard small fruits. Farm thoroughly drained and fences first class, and in a high state of cultivation; 3 1/2 miles from Locust Hill creamery. Bell telephone connection. Everything first-class. Address:

H. J. SPENGLY, Box Grove P. O.

When Writing Advertisers Kindly Mention "The Farmer's Advocate."

"A Drowning Man Will Catch at a Straw."



You feel that you are losing out. Little by little you find yourself weakening under your load of cares. More and more you dread the daily grind. You'd like to lie down and take a rest for a twelve-month, but that's out of the question. That little pain in your back—that little ache in your side—the occasional weakness in your stomach—the nervousness and depression of spirits, that six months ago you thought were trifles that would soon "wear out," have come to be spectres that haunt your footsteps by day and your sleep by night. You have finally awakened to the fact that you are breaking down.

Your medicine dealer has got a bottle of something for each and every one of your ills. You try this thing and that, but down, down, you go, and so you see a doctor. He gives you more of the same stuff in a little different form. But you are a drowning man and will "catch at a straw." They even say that you are a person of ability and common sense, but you don't display as much knowledge about your body and its needs as a wooden man.

Why not get right on the subject of Electricity? You know well enough that what you lack is Vitality, and animal vitality is Electricity—nothing else. It's this spark of life in your nerve cells, or keeps you going. It's the force behind the action of every organ of your body. It's the life in the blood—the motive power of the heart—stomach—kidneys—liver, and bowels; it's the mainspring of the sexual organism—it's life itself, to the whole body.

Dear Sir,—Having passed the critical time in which I expected to have the Rheumatism return on me, being a year ago since I was so bad, I thought I would let you know how I was getting along. Well, I am as well as I expected, and certainly feel that your Belt has done me a world of good. Wishing you continued success in your good work.

W. REYNOLDS, Paris, Ont.

I have cured thousands of men who have squandered the savings of years in useless doctoring. 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 tingle with the new life flowing into them. You get up in the morning feeling like a two-year-old.

CALL TO-DAY!

Free Consultation
BOOK
Test

If You Can't Call, Send Coupon
for Free Book.

DR. M. S. McLAUGHLIN, 112 Yonge St., Toronto, Can.

Dear Sir,—Please forward me one of your books as advertised.

Name

Address

Office Hours—9 a. m. to 6 p. m.; Wednesday and Saturday till 9 p. m. Write Plain.



BOOK REVIEW.

A QUEENSLAND DAIRY VOLUME.

The splendid condition in which Australian dairy produce, particularly butter, reaches the produce warehouse of England is a tribute to the excellence of the system of manufacture and supervision in vogue in that quarter of the Empire. That they do not propose resting upon past achievements is evident from Part I. of a new volume entitled "The Dairying Industry," published with the approval of the Queensland Minister of Agriculture, and written by one of the foremost authorities on the subject, G. Sutherland Thomson, well known both in Great Britain and in the antipodes. It is a volume of over 275 well-printed and liberally-illustrated pages, dealing with the milk and cream supply—city, farm and factory—starting with the formation and composition of milk. We notice that the author dissents from the advice usually tendered by dairy teachers, to milk with dry hands, advising that the hands should be moist, which will commend itself to most practical dairymen, who look upon the "dry" process as mostly theoretical. The very brief chapter on the milking machine was evidently written without special enquiry into its actual workings and assuming its claimed merits in respect to sanitation. Naturally, a great portion of the work is devoted to the practical steps requisite in the production of milk of good wholesome quality, and very properly considerable space to the details of the milk trade and butter shipments. Dairy teachers and experts will desire to add this book and Part II., when issued, to their libraries. It was published at Brisbane by Watson, Ferguson & Co., and in London, Eng., by the well-known house, Crosby, Lockwood & Son, 7 Stations' Hall Court, E. C., whose imprint appears upon many of the best modern works on technical subjects. The price is 10s. 6d. net.

GOSSIP.

Gibb's Woodfield Stock Farm, St. Catharines, Ont., advertises for sale in this issue five richly-bred Scotch Shorthorn bulls; one a yearling, described as a show bull, the others eight and ten months old. See the advertisement, and note the breeding of this offering.

Mr. James McArthur, Gobles, Ont., a station on the Hamilton to London branch of the G. T. R., advertises for sale, for want of stable room, twenty-six Shorthorn heifers and heifer calves, and three young bulls about fourteen months old, also three Clydesdale mares, one of which is in foal. Both the Shorthorns and the Clydesdales are described as a right good lot, and will be sold at very reasonable prices.

Messrs. Wm. Grainger & Son, Londesboro, Ont., write: "In changing our advertisement of Shorthorns, we wish to say we consider we are offering as good a lot of young bulls as we ever raised; they are big, strong-boned, growthy fellows, sired by Aberdeen Hero (imp.) =28810=, from first-class milking cows, and are of good color. We are pleased to announce the following sales this fall: To H. M. Snell, Londesboro, the imported bull, Aberdeen Hero. He has proved a grand sire in our herd, as we have some excellent stock from him, and hope that he will prove as successful to Mr. Snell. To R. C. McGowan, Blyth, the two-year-old heifer, Hawthorne Lass =80164=, by Romeo =51015=. This is a grand heifer, and will make a fine dual-purpose cow. To Robert Moorhouse, of Cairo, two calves (a bull and a heifer), both sired by Aberdeen Hero (imp.). The bull, Dairymaid's Hero, is a good, red, deep-bodied animal on short legs, with lots of quality, and, no doubt, will make a great sire. His dam is Dairymaid, by Beau Ideal =22554=, a Toronto prizewinner. The heifer is also a grand calf, a granddaughter of Dairymaid, and, no doubt, they will prove a good investment to Mr. Moorhouse."