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THE FARMER'S ADVOCATE

AND HOME MAGAZINE

PERSEVERE AND SUCCEED
FOUNDED 1866

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

PUBLISHED AT LONDON, ONTARIO. MARCH 16, 1905. WINNIPEG, MANITOBA. No. 651

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AND
ORGANS
ARE
FAVORITES EVERYWHERE
BECAUSE
THEY ARE THE BEST

THE
BELL
Piano and Organ Company,
LIMITED,
GUELPH, - ONTARIO.

Catalogue No. 40 tells more about them. It is free to all who ask. om

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Farmer Brighton Muzzle Swine V
Farmer Brighton Cattle Marker
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Write for circulars and prices.
Manufactured by
LOUDEN MACHINERY CO., Guelph, Ont.,
Who manufacture the largest and best-assorted
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Feed and Little Carriers, Barn-Door
Latches, etc., in Canada. Write for
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Has a list of real good improvements. It runs on ROLLER BEARINGS, no cutting, no grinding, no squealing. Has closed heads in all drums, and is built of extra stiff steel throughout. Adapted for use in all Provinces. Send us your name and address for full particulars.

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None genuine without the name "Bissell." o

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Fireproof and sanitary.
Easy to put on.
Hard to wear out.
Don't cost as much as shingles.
Made in Canada for 20 years.

Isn't that the kind of Roofing Material you're looking for?
For sale by hardware merchants everywhere. Samples, testimonials and other information from

The PATERSON MFG. COMPANY, Limited
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WHENEVER YOU SEE A COW
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Cream Separator**

Is next in importance to the Dairyman

THE DeLAVAL SEPARATOR CO.
77 York Street
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HIRST'S PAIN EXTERMINATOR
THE GREATEST PAIN LINIMENT KNOWN

SEED CORN Strawberry Plants and Seed Potatoes.

An early variety. Genuine Smut-nose Corn. Test seed. Write for prices. o

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SUPERIOR HIGH-GRADE
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Write now for our 1905 Illustrated Seed Catalogue. "The best of everything for Garden and Farm." We mail it FREE. Don't forget. WRITE NOW. : : :

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Maple Sugar Makers



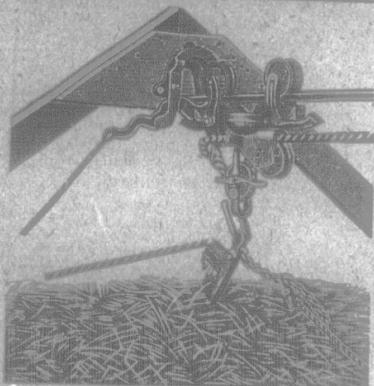
Learn how to tap the maple tree. The gain in sap will pay for Grimm Spouts and Covers in one season. Cultivate the bore by reaming. Save your trees and secure a better quality. Sample spouts and catalogue free. Your risk no risk; all is guaranteed.

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For MAPLE SYRUP and SUGAR. Has a corrugated pan over the box, doubling boiling capacity and saving fuel; small interchangeable syrup pans (connected by siphons), easily handled for cleaning and storing; and a perfect automatic regulator, which secures rapid and shallow evaporation, and produces the best quality of syrup. The Champion is a perfect evaporator for Sorghum, Elder and Fruit Jellies.

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Manufactured by THE OSHAWA HAY CARRIER WORKS, OSHAWA, CANADA.

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Sold direct from the manufacturer to the consumer.

For the past 20 years that we have been in business, agents' fees and collections have cost us between 35 and 40% of our sales. To farmers and others who contemplate using cement the coming season, we intend to make this saving for you, and sell strictly for cash. Cement put on cars here at our works for 70c. per barrel. Write us for freight rates and any other information you may require.

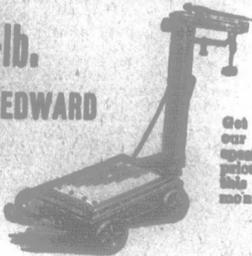
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Every Farmer Should Have a

2,000-lb.

KING EDWARD SCALE

Manufactured by



Get our special prices this month

G. Wilson & Son, Ltd., Toronto, Canada.

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SUGAR BEET CONTRACTS
THE ONTARIO SUGAR CO. LIMITED
1905
BERLIN, ONT.

SUGAR BEETS PAY.

OVER 800 GROWERS HAVE THUS FAR RENewed THEIR CONTRACTS FOR THE COMING SEASON.

WRITE US FOR CONTRACT FORM

AND WE WILL SEND ONE FOR YOUR SIGNATURE; OR, SEE OUR CANVASSER IN YOUR DISTRICT AND HE WILL GIVE YOU FULL INFORMATION.

SUGAR BEET PULP IS OF VALUE

for Stock feeding and is given to beet growers in proportion to amount of Beets delivered.

WE PAY 50 CENTS PER TON

in Berlin for pulp, to any grower who does not wish his pulp for his own use for stock feeding.

BEET SEED IS NOW READY

for growers and will be sent to the grower's shipping station.

SEND IN YOUR CONTRACT NOW.

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BERLIN, ONT.

"Carnefac Suits."

The users are the best judges, it is their recommends that has built our trade. They are delighted with Carnefac, because a small quantity and a short time's use gives entire satisfaction, they do not require to feed for months in order to find out whether it is going to be a benefit or not, a few weeks' use will put any animal's system in splendid form. Read what this well-known stockman writes us:

West L'Ardoise, Cape Breton, Jan. 27th, 1905.
The Carnefac Stock Food Co., Toronto.

Dear Sirs: Enclosed please find balance due on "1 pail" Carnefac, which duly arrived here Dec. 24th, 1904. Must say that Carnefac has proven very satisfactory. As a matter of fact, do not think I shall ever be without it again. I have recommended it, and you shall certainly hear from me when this pail is empty. Yours truly,
(Signed) JEFFREY MAUBOURQUETTE.

If further reasons are required than those already given as to why every man who feeds stock should use Carnefac, a card to our office will bring you our booklet containing the testimonials of the best veterinary surgeons and stockmen in Canada. No gifts or premiums, just Carnefac, the tonic that gives satisfaction. If your dealer has not got it, write direct.

THE CARNEFAC STOCK FOOD CO.
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THE OXFORD Cream Separator



Is easy to wash and turn, is a perfect skimmer, is durable, has no exposed gears, has low-down supply tank, and is fitted throughout with Ball Bearings.

Those are a few of the features that make the

OXFORD the most up-to-date machine on the market.

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The DURHAM MFG. CO., Ltd.,
Durham, Ontario.

Trees! Trees! Trees!

We have a full line of Fruit and Ornamental Trees for spring, 1905, at lowest possible prices.

Headquarters for packing dealers' orders.

Farmers wishing to buy first-class stock absolutely first hand and without paying commission to agents, should write to us at once for a catalogue and price list.

Don't wait until the last minute, as you will be disappointed. Place order early and secure the varieties you want.

Correspondence solicited.

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

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Director of Colonization, Toronto.

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FOR SALE

In the famous SASKATCHEWAN VALLEY. Splendid yields; good water; mild climate. Write for particulars to

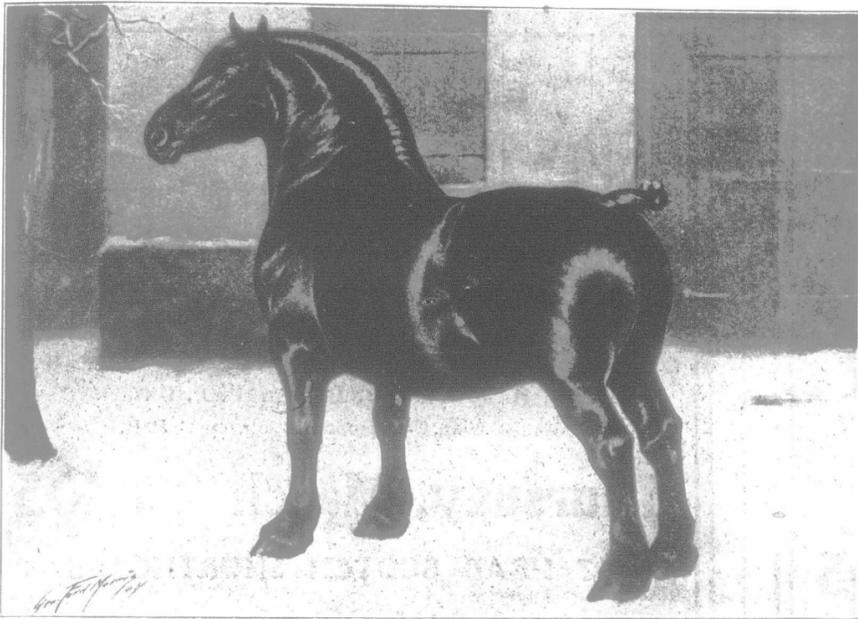
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Box 58, Saskatoon, Sask.

Stock Farm for Sale—Burnbrae Stock Farm, containing 149 acres, basement barn, dairy, hen house and enginehouse, two dwellings, up to date in all respects, together with all thoroughbred stock, implements, etc. Holstein and Jersey stock for sale. Write for particulars. Apply,
J. W. ROBERTSON, Vankleek Hill, Ont.

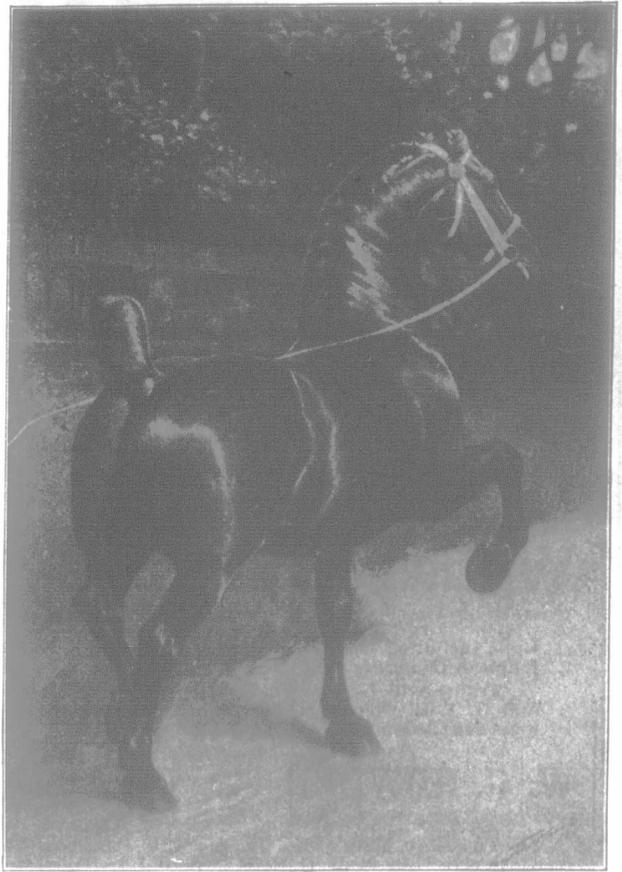
Choice Seed Grains—Mandscheuri barley, oats. All grains well cleaned and graded, at reasonable prices. Write for samples and particulars.
JAMES DICKSON,
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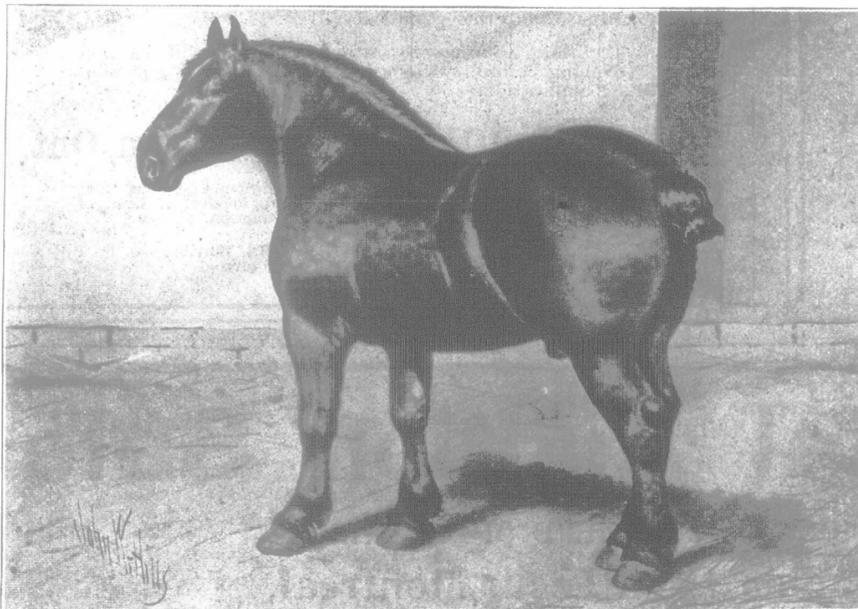
LAFAYETTE STOCK FARM, Lafayette, Indiana, J. Crouch & Son, Props.
 Largest Importers of OLDENBURG GERMAN COACH, PERCHERON and BELGIAN Stallions.



Type of our Belgian Stallions.



Type of our German Coach Stallions.

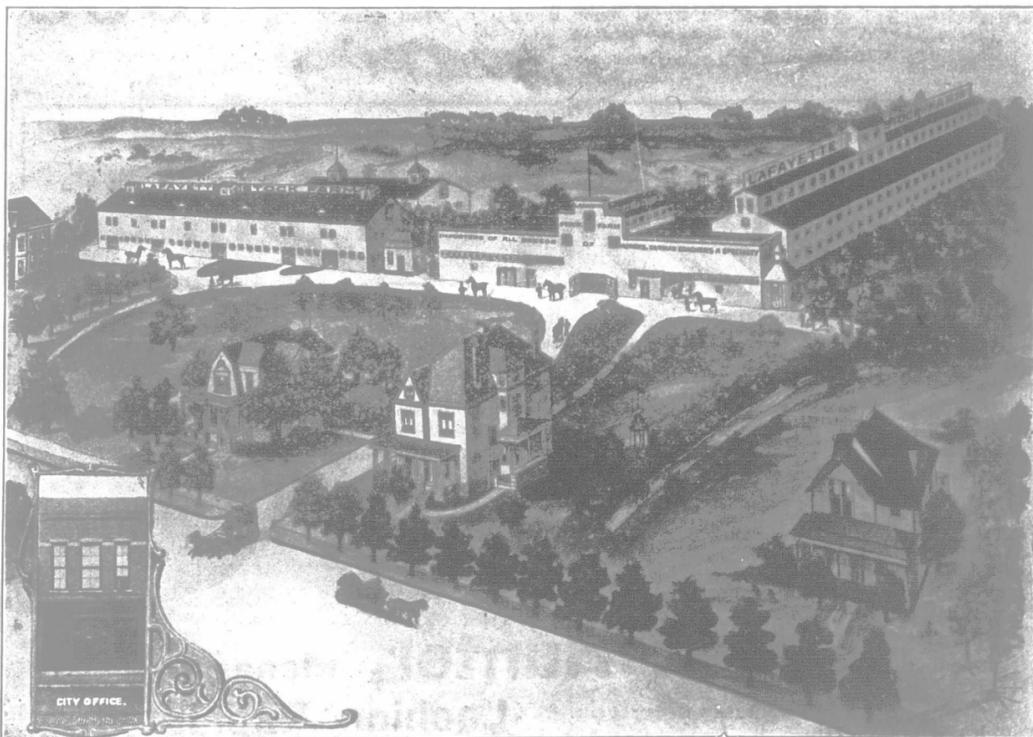


Type of our 3-year-old Percheron Stallions.

We have on hand at all times over 200 head of high-class Stallions, and can suit any buyer in horse and price. We won more prizes at the leading Stock Shows and Fairs in 1904 than all others combined. At the World's Fair in St. Louis, Mo., in 1904, we exhibited 100 head and won every first prize in the German Coach class and a large per cent. of the Percheron and Belgian, including Champion and Grand Championship.

If your community is in need of a stallion, write us, addressing J. Crouch & Son, London, Ont.

All stock guaranteed, and terms to suit buyers. Having a large trade in Canada for a number of years, and to make it more convenient for our customers, we, in September, 1904, opened a branch at London, Ontario, where we keep a large supply of Percheron, Belgian and Oldenburg German Coach Stallions. We import and sell more stallions than any importer in America. Terms to suit buyers. Every horse delivered to buyers.



Our Farm.

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U. V. O'Daniel,

Manager and Salesman, LONDON, ONT.

J. Crouch & Son

Lafayette, Indiana.

DISPERSION AUCTION SALE

OF

47 Scotch and Scotch-Topped Shorthorns

Clydesdale Mares and Fillies and
Farm Stock and Implements,

the property of

W. G. HOWDEN, Columbus P. O., Ont.
3 miles from Myrtle Station, on the C. P. R., on

Wednesday, March 22, '05

Bulls including the Imp. stock bull Meadow Lord of the
Kilblean Beauty family.

Trains will be met at Myrtle station on the C. P. R.
and G. T. R. evening before and morning of sale. Cata-
logues mailed on application.

W. G. HOWDEN, Columbus, Ont.

On Thursday, March 23rd, Mr. Geo. H. Johnston, Balsam,
Ont., near Claremont, C. P. R., will sell his entire herd of
Scotch and Scotch-Topped Shorthorns at auction.

Auctioneers (LEVI FAIRBANKS, Whitby.
T. E. ROBSON, Ilderton.

DISPERSION AUCTION SALE

OF

Scotch Shorthorn Cattle

WORK HORSES, FARM STOCK
AND IMPLEMENTS

THE PROPERTY OF

GEO. H. JOHNSTON, Balsam P. O., Ontario,
5 miles from Claremont Station, on C. P. R.

Thursday, March 23, '05

47 HEAD SCOTCH SHORTHORNS

9 particularly good young bulls, including the imported
two-year-old stock bull Choice Koral =50026=, 38
females, including Fames, Crimson Flowers, Miss
Ramsdens, Marr Stamfords, Kinellar Bessies, Kinellar
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Trains at Claremont Station, C. P. R., will be met
evening before and morning of sale. Catalogues sent
on application.

GEO. H. JOHNSTON, Balsam, Ont.

On Wednesday, March 22nd, Mr. W. G. Howden, Columbus, Ont.,
near Myrtle, C. P. R., will sell his entire herd of 47 head of
Scotch and Scotch-Topped Shorthorns by auction.

Auctioneers (LEVI FAIRBANKS, Whitby.
T. E. ROBSON, Ilderton.

First Biennial Auction Sale

of the produce of THE FAMOUS OGILVIE HERD OF AYRSHIRES,
to take place at Rapids Farm, near Montreal,

WEDNESDAY, MARCH 22ND, 1905

WHEN WILL BE SOLD

48 High-Class Young Ayrshires

including absolutely all the two-year-old and yearling heifers, numbering 26 head, and 17 young bulls, comprising
1 two-year-old and 8 yearlings fit for service, and 8 calves from 7 to 8 months old.

These young animals have already made a name for themselves, having won, last fall, 12 first prizes, 9 seconds,
8 thirds and two fourths, at the Dominion Exhibition at Winnipeg, and at Toronto, London and Ottawa.

There will, in addition, be offered 11 Grand Young Cows (imported and home-bred), from 3 to 6 years
old, including the Champion Ayrshire Cow at Dominion Exhibition at Winnipeg, imported Carsegowan March Bell.

All the animals offered, except those that are imported, are by the three well-known Champion Stock Bulls
Douglasdale (Imp.), Black Prince (Imp.) and Lessnessock Royal Warrant (Imp.)

SALE TO COMMENCE AT 1 P. M.

Mr. Ogilvie is very anxious to make these sales a success, and none but first-class animals will be offered.

For further information and Catalogues apply to

Walter M. Kearns,
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Robert Hunter, Manager,
Lachine Rapids, Que.

One mile from electric cars. Take Ontario and Wellington Line to Verdun. Cars will be met on day of sale.
LONG DISTANCE TELEPHONE MAIN 2228.

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The Farmer's Advocate

"PERSEVERE AND SUCCEED." and Home Magazine.

ESTABLISHED 1866.

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LONDON, ONT., AND WINNIPEG, MAN., MARCH 16, 1915.

No. 651

EDITORIAL.

Effective Remedies for Fruit-growing Conditions.

The letter, in last issue, by Mr. Linus Woolverton, who, by the way, is one of the best Canadian authorities on horticulture, raises a number of points which deserve further discussion. The unwarranted booming of land in fruit sections, the indiscriminate advice to plant orchards, and the readiness to advertise remarkable instances as a criterion of ordinary profits, are facts which it is high time to have clearly pointed out. Nothing but loss and disappointment can come of booming a business by exaggerating the chances of returns. The fruit industry has suffered from this cause in the past, not so much by excessive competition created, but because it has led to the payment of exorbitant prices for land, the hasty planting of injudiciously selected varieties, the planting of fruit by men lacking requisite experience and business capacity, and because it begot a visionary optimism, which always leads to miscalculation, with resulting disappointment and loss.

There are, in Ontario, two classes of fruit-growers—the farmers, who have apple orchards as a side issue, and the specialists in the recognized fruit belts, who make fruit their main source of income. It is hard to say which is the more dissatisfied. The apple orchard, for the past two or three years has not been very remunerative, and has been, accordingly, neglected—a very good way to make the worst of a bad situation. It is a pretty safe rule that the orchard which it will not pay to cultivate had better be cut down. There are many in this Province which need the axe, and most of the rest would be greatly benefited by a few judicious applications of the pruning saw. Then, there is no use disguising the fact that outside a few counties, or except in isolated cases, farmers have scarcely learned the A B C of approved orchard practice. Too many are using their orchards for grain fields and meadows, few have them underdrained, and he is an exception who gives his trees any intelligent manuring. Pruning is neglected or improperly done, and space is occupied with unprofitable varieties, which, top-grafted, might bear paying crops. Spraying has not been properly attended to, and the quality in many cases has been unmarketable at paying prices. Then, to crown all, the fruit has been marketed in a manner which consumed what margin there was between cost of production and selling price.

The special-fruit growers, who are devoting themselves mainly to small and tender fruits, have paid a little more attention to improved methods of culture, but most of them could do much better, both in production and marketing.

In view, therefore, of the admittedly unsatisfactory status of the industry, any practical suggestions toward improvement merit careful consideration. In Mr. Woolverton's letter there are several valuable ones. The advice to pay more attention to planting to the requirements of the export trade, to top-graft unsuitable sorts with uniform commercial varieties, agreed upon by groups of neighboring growers, and to profit by the information of the fruit experiment stations, should be acted upon generally by cultivators. Better grading, packing, and shipping, uniformity of packages and perfection of cold storage for export fruit, cultivation of local consumption and the Northwest trade, are rightly deemed impera-

five, while the best known remedy for marketing difficulties is indicated in the plea for co-operation. Some of the lines along which it is advised to direct this co-operation, however, strike us as questionable. As stated editorially a few issues ago, we have no faith in attempts at combinations of farmers to permanently maintain prices, though it might be done in special, isolated cases, like that of the tomato-growers for the canning factories. So far as co-operation can effect economy in raising, handling, transport and sale, it stands to benefit the co-operators, but any talk of organizing the immense and scattered army of farmers to agree upon and permanently adhere to a standard or minimum price can only divert attention from the solution of the economic problems involved. So far as apples are concerned, the folly of attempting to regulate a price necessarily controlled by the exportable surplus is obvious. In the case of small fruits, the production of which is supposed to be restricted to certain localities, the prospect of restricting production and then dictating values to consumers is more alluring, but, we are satisfied, will never be realized. While it is not wise to stimulate unduly any line of production, on the other hand, it is impossible to develop the country by concentrating efforts on attempts to decrease it. If fruit-growing is profitable, let the fruit area be widened, even though increased competition should lower inflated land values in sections formerly supposed to have a natural monopoly of small-fruit production. As a matter of fact, the residents of the favored districts need have not the slightest fear of being crowded out if they will address themselves energetically to eliminate some of the glaring sources of loss. Fruit-growing has been, and is, a business with excellent possibilities of profit, evidence, of which is seen in the palatial homes and affluence abounding in our great fruit district, the Niagara Peninsula. Of course, we will be pointed to the mortgages on some of these fine homes, but intimate acquaintance with conditions reveals that the incumbrances are due not to lack of reasonable opportunities for profit, but to that very human failing, lack of thrift, accentuated by a comparatively luxurious habit of living, acquired in the palmy days when the fruit business was a narrower monopoly and more opulent than it is to-day. There is still good money in it, if prosecuted on business principles. No other farmer is content with such one-horse, pottering methods of cultivation, no other content to accomplish so little in a day. Considering the amount of brains required by such an intensive business, there have been too many inexperienced men going at fruit-raising, thinking that anywhere in the fruit belt trees bore dollars. On the other hand, many of the better-informed class have sacrificed profits through overconservatism, especially in methods of cultivation. Vineyards have been set out in short patches, orchards in acre blocks, much valuable space has been wasted in headlands, and, what is worse, too little summer cultivation has been given, because, with the ridiculously small plantations, it could not be done economically. Again, in the wealthier sections, there is too much sitting-room and office management. There has been a painful conservatism and lack of thoroughness in adopting spraying, in thinning, in packing, too little enterprise in adopting individual brands, and too little regard for market reputation. The great need in the fruit districts is more of the thrifty energy of the progressive dairyman.

Economic conditions are changing, and, as is always the case, the transition stage is hard.

The exorbitant fruit prices of the past are being forced down. Wages are being forced up, and will be forced up, despite any combination the growers can effect. These closer margins are, naturally, unwelcome, but the new conditions are inevitable, and will redound to the general welfare. What we must do now is to produce more and better fruit in a more businesslike way, and then market the increased crop more economically and in a better condition, so as to create a greater demand at a price which, without excessive middlemen's profits, will still leave almost as good net returns and larger aggregate profits to the grower. This, rather than attempts to fix wages or prices, is the object to aim at. We must face the situation squarely. It is not discouraging if regarded in the right light, but we must apply in earnest the effective remedies, and not waste time chasing the shadows. What say our fruit-growing readers?

P. E. Island's Communication Problem.

The present winter has been an unhappy one for Prince Edward Island. To aggravate the hardship of crop shortage, she has borne with the sombre comfort of isolation, precluding the importation of feed, delaying transmission of mails, and jeopardizing ingress or egress of passengers. The two Government ice-breaker steamers, the "Stanley" and the "Minto," since the last week of January have been tied up in the ice somewhere in the Straits of Northumberland. What little mail traffic goes on is dragged in ice-boats between Cape Tormentine in New Brunswick and Cape Traverse in Prince Edward Island, between which points is the only route for passengers and mails. Letters are often a week delayed, while stacks of papers accumulate on each side. Upon our desk is a letter received March 3rd, post-marked Alberton, P. E. I., February 21st—ten days in transmission. And this is quite a common experience. It is impossible for the rest of Canada to realize what a grave handicap, socially, agriculturally and commercially, such uncertain and infrequent communication imposes. Imagine three counties shut off by themselves for days and weeks, with no freight, no mails, no outside intercourse. No wonder the population is decreasing! Nor is there any hope of genuine prosperity until some cheaper transport is provided for summer, and some reasonably regular and economical service is assured for the winter season. The conditions are acute, and demand instant attention on the part of the Federal authorities. The Island must be enabled to hold out to her young people some reasonable degree of the facilities of modern civilization, else the exodus to regions more favored geographically will continue apace. The question is, what shall be done? There has been talk of another and better winter steamer, but those experienced in Strait navigation are far from sanguine regarding the maintenance of a regular service by any vessel that ingenuity can devise. By the terms of Confederation, the Province is guaranteed continuous steam communication with the mainland, and the Islanders say that if, as experience seems to indicate, there is no other impletion of the terms of the contract, a tunnel should be constructed under the Straits of Northumberland, thus establishing a connection which will forever relieve the Province from the disability it now suffers. It is claimed there are no engineering difficulties, except the distance, about nine miles, and the cost has been estimated at ten or twelve

THE FARMER'S ADVOCATE AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE
DOMINION.

PUBLISHED WEEKLY BY
THE WILLIAM WELD COMPANY (LIMITED).

TWO DISTINCT PUBLICATIONS—EASTERN AND WESTERN

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WESTERN OFFICE:
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WINNIPEG, MANITOBA.

BRANCH OFFICE: CALGARY, ALBERTA, N.-W. T.

LONDON (ENGLAND) OFFICE:
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London, W. C., England.

JOHN WELD, MANAGER.

1. THE FARMER'S ADVOCATE is published every Thursday (52 issues per year). It is impartial and independent of all cliques or parties, handsomely illustrated with original engravings, and furnishes the most profitable, practical, reliable information for farmers, dairymen, gardeners, and stockmen, of any publication in Canada.
2. TERMS OF SUBSCRIPTION.—In Canada, United States, England, Ireland and Scotland, \$1.50 per year, in advance; \$2.00 when not paid in advance. All other countries, 12s.
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11. WE INVITE FARMERS to write us on any agricultural topic. We are always pleased to receive practical articles. For such as we consider valuable we will pay ten cents per inch printed matter. Criticisms of Articles, Suggestions How to Improve the ADVOCATE, 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.
12. 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.

million dollars. If so, it is argued, the interest would not amount to more than the cost of the present expensive and entirely inefficient service, while the capital would be more than recouped by the increment in real-estate value. Whether the work could be actually completed for the sum estimated is open to question, but the demand for official engineers to examine and report upon the feasibility and cost of the project should commend itself to the sympathy of the country. The Government of Canada is spending money freely in developing the West, and no Eastern voice is raised in remonstrance. The Government cannot confer any substantial benefit by promoting immigration to the Maritime Provinces, but may do much to prevent emigration by well-calculated public works of this kind, and in thus promoting their commerce, rendering conditions favorable to the exploitation of their excellent natural resources, we will be not only fulfilling our national obligations, but contributing in a rational way to the prosperity of the whole Dominion, of which these Provinces are a component part.

Not Farming, But—!!!

Your "Farmer's Advocate" is well worth the subscription price, and although not doing much in the farming line, and taking more periodicals than I can profitably read, I do not like being without it. G. A. DEACHMAN.
Huron Co., Ont.

Am well pleased with your paper, and just as anxious to see the "Farmer's Advocate" come in the house as the Toronto morning paper. JOHN W. RYMAL.
Sherbrooke St., Toronto, Ont.

I am a subscriber for your excellent weekly. I must say it far surpasses my most sanguine expectations. I feel delighted that Canada can furnish such a journal, rich and refreshing in all that pertains to the welfare of the up-to-date farmer. Success to your peerless weekly. Glengarry, Ont. JOHN WALTER BRODIE.

Organization in Agriculture.

We begin in this issue of the "Farmer's Advocate" a series of articles from the pen of Mr. A. L. McCredie on the subject of co-operation among farmers. When we consider the successful and gratifying results that are commonly believed to have attended co-operation in such countries as Denmark, and, in certain cases, on this continent, there are admittedly great advantages for the farmer wrapped up in the principle of co-operation, and any helpful contributions from one who has given the subject special study will be welcomed by our readers. It is well that we get clearly in mind the proper objects and scope of co-operation, the reasons why a great many attempts have resulted in failure, the conditions of success, and the directions in which it might be advantageously applied in this country in order that the net return to the farmer for his investment of capital, labor and intelligence be enhanced and his life conditions improved. We have thought that there is probably something in the environment and inborn mental characteristics and habits of the European peasant farmer that enable him to fall in line with the co-operative system more readily than is the case with the more restless spirit of the English-speaking farmer under the less circumscribed conditions prevailing on this continent. But the farmer here is also not so wedded to old methods as the European, and he is, presumably, quick to perceive and ready to adopt plans that commend themselves to his judgment as workable and likely to improve the returns from his farming operations. We trust that Mr. McCredie's articles will be closely followed, and believe that a discriminating consideration will result in a discussion at once enlightening and stimulating, particularly at this time, when Canadian fruit-growers and others are putting the principles of co-operation to the test.

Sugar-beet Pulp Feeding Essay Competition.

A large number of excellent essays were received in the competition for prizes recently offered in the "Farmer's Advocate" for statements of experience in feeding sugar-beet pulp. About twenty-five of them were entitled to rank as possessing pronounced merit. They were, as a rule, concise and practical, and written by men who evidently knew what they were talking about. Beet pulp is a new stock food in Canada, but these articles show clearly that it is one of very decided value. Most of the experience covered but the one season, though some had used it longer, one of them, a Michigan farmer, for five years. There appears to be no serious difficulty about keeping the pulp when received from the factory. Piled in bulk inside a building it heats and ferments slightly, something like ensilage, for about three weeks or a month. Cattle like it better when fresh, but several writers consider that it improves the quality by this "curing" process, as it might be termed. At that stage, if excessively fed, stock may be given a dislike for it, but with reasonable feeding, and particularly when fresh, the animals relish it keenly. It appears to have been fed to all classes of stock, including chickens, but mostly to cattle and pigs. For milking cows and fattening steers it is highly prized. For milk production it is reported as giving a gain compared with mangels, and most of the writers valued it about equal with corn ensilage, or roots, though a few more conservative feeders put it at about one-third less. About forty pounds per day in two or three feeds appears to be about the quantity recommended for a mature cow or steer. Out of the entire list of articles, there was but one unfavorable opinion regarding the use of pulp. Summed up, the verdict must be "IT'S ALL RIGHT," as one lad (Mr. Harvey Eby, Esq.), who told of pulp-feeding on his father's farm, tersely declared. It is valued at about \$2.00 per ton in the barn, though some put it higher, and some a trifle lower. The successful competitors are as follows, two additional ones being mentioned by the judge as "highly commended," being considered almost equal to the fourth-prize award:

- 1st—Oscar Dressler, Waterloo Co., Ont.
- 2nd—James Early, Peel Co., Ont.
- 3rd—James Wilcox, Bay Co., Mich.

4th—Arthur L. Currah, Oxford Co., Ont.
H. C.—Alfred Hutchinson, Wellington Co., Ont.
H. C.—J. G. Hurst, Waterloo Co., Ont.

A Huron Co., Ont., contributor became so enthusiastic on the subject that ordinary prose ceased to be sufficiently expressive, and he boldly launched into poetry, which helped him in some ways, but probably hindered him in others, from landing a prize.

The Organization of Agriculture.

This is an age of combinations. Artizans form powerful unions. Capitalists form trusts. Manufacturers have their aggressive associations. Intelligent organization for the sake of economy and profit is characteristic of every industry, except the greatest—agriculture.

Even the farmers have organized to some extent in nearly all advanced countries, and in some their organization is more complete and efficient than that of any other. This is true only of European farmers, however, the Danes, the Germans, the Belgians and the French especially. Strangely enough, the farmers of Canada and the United States are far behind these peasants in this, perhaps the greatest factor of profit-getting.

Co-operation has been repeatedly tried in Canada, nevertheless. We have co-operative cheese factories, and our cheese industry is the greatest of its kind in the world. We have tried so-called co-operative bacon-curing, and failed. By co-operative combination the farmers broke down monopolies in binder twine, salt, etc. They have overlooked all the other directions in which railways, manufacturers and others take the lion's share of the profits of agriculture. We have witnessed the rise and decline of the Grangers and the Patrons of Industry. The Patrons of Husbandry and the Farmers' Association we still have with us. The Farmers' Institute, a modest but effective institution, the dairymen's associations, the breeders' associations, the fruit-growers' associations, are all alive and working, and will live permanently. We must admit that Canadian farmers are capable of working together where anything may be gained thereby. But we must admit that there are right and wrong ways of going about the serious business of co-operation, that must be carefully considered by those who contemplate improving matters by forming various organizations. There are so many directions in which this principle of "each for all, and all for each" may be applied with great benefit, to say nothing of those problems that can be solved in no other way, that it is worth looking at the facts of experience, at home and abroad, in order to learn what are the methods of organization that are likely to prove effective, and in order to see just where and how the farmers of Canada may profitably organize themselves, having so studied the question.

I.—THE SCOPE AND OBJECTS OF CO-OPERATION.

Briefly, the scope of co-operative organization is limited only by the widest range of the farmers' business activities. Co-operation, properly carried out, may be applied to nearly every "operation" similarly engaged in by any number of farmers, from the buying of supplies to the sale of the finished product; as, briefly, the object of co-operation is to secure the greatest profits to the farmers, by increasing production, by reducing the relative costs of production, by reducing the expenses of putting farm products in the hands of consumers, and by ensuring that the farmers shall get every possible cent of what is paid by the consumers for those products. Profits are the object—first, last, and all the time.

It may be said at once that in every possible direction in which one might say co-operation could be adopted by Canadian farmers, it has already been experimented with, and successfully, either in Canada or abroad. This will be clearly shown later. It is not mere theorizing, therefore, to outline some of those directions, and state some at least of the purposes which would be best served by co-operative organization of the farmers. These purposes are somewhat as follows:

1.—The improvement of agricultural methods by the spread of practical scientific knowledge. This is being undertaken, and with encouraging results, by the Farmers' Institutes, the Dairymen's and Fruit-growers' Associations, and others, beside being well served by the various splendid agricultural periodicals. There is little to be done in furthering this work, unless, perhaps, by increasing the membership of the institutes and associations, and the subscription lists of the periodicals.

2.—The purchase of supplies, such as implements, machinery, fertilizers, seed grains, etc. This is one of the most important objects for which the farmers could organize, as is proven by the experience of the farmers' organizations of the various European countries. Where the Canadian farmers have co-operated for this purpose, even though their system has been imperfect of method, they have benefited largely—and "a penny saved is a

penny earned." The immediate objects of such organization would be to secure the lowest prices, and to ensure the highest quality to large and small purchaser alike.

3.—The improvement of farms by co-operative action against weeds and noxious insects. This is one of those problems that can be solved only by co-operation.

4.—Mutual fire and accident insurance, and the insurance of farm products in transit. This is partially done already in Canada, and thoroughly in Denmark and elsewhere, with a consequent large saving in expenses in these respects.

5.—The manufacture of farm products, as cheese and butter from milk, bacon (etc.) from hogs, beef and other meats preserved, canned fruits and vegetables, tobacco, the packing and export of eggs, etc. Cheese-making, as we know, is now done co-operatively, as is buttermaking in creameries. Bacon-curing was attempted, but on the wrong principle, failure being the result. The preservation of meats, fruits and vegetables, and the manufacture of tobacco have not been attempted by farmers' organizations in Canada at all, though most of them have been successfully carried on abroad by co-operation.

6.—Transportation of products to market in bulk, by refrigerator cars where necessary, and storage in cold storage warehouses. In these respects a great improvement in quality of our products, and a great saving in transportation expenses, would effect a material benefit in both ways.

7.—The adoption of uniform methods of packing and grading of the same products, and of a national trademark in each. This would secure a better reputation for our products, with a consequent increase of net profits on their sale.

8.—The elimination of commission men, both in this and in the foreign markets, and, therefore, the saving of a large share of the prices finally paid for our products. This is done by European farmers' organizations, which sell their members' products direct. In view of the complaints made against produce-purchasing companies, and in view of the existence in Great Britain of rings of commission men, who keep down the prices of Canadian produce by unfair means, this is a very important aspect of the question.

These are suggestive, some of unsatisfactory conditions, as recognized by every farmer; some of avenues of greater profits, where the farmers are already doing well. The question most will ask is: "How can all these objects be gained by co-operation, and what kinds of co-operation will secure them?" The answer will be given in articles to follow. The next of these will discuss "THE METHODS OF EFFECTIVE CO-OPERATION."

AUSTIN L. McCREIDIE.

HORSES.

The London Shire Horse Show.

(Our own special report.)

The 26th annual show of this society took place at the Royal Agricultural Hall, London, on February 21-24. The success which has attended the work of this society has been remarkable. Little did the writer think, when attending the first show twenty-six years ago, that such marvellous improvement in every direction would be witnessed during the next quarter of a century. Weight, type and substance have been retained, and, in addition, grand action, excellent feet, and almost perfect soundness has been secured. Surely this is a record sufficiently worthy to fully justify the progressive action of those who instituted these annual shows, many of whom are still alive to enjoy the result of their action. His Majesty the King and the Queen honored the show with a special visit on the second day, and witnessed the awards of the stallion championship, and at its conclusion presented Lord Rothschild, the owner of the champion stallion this year and last, with the society's gold challenge cup, of the value of 100 guineas, which now becomes his absolute property.

The entries this year numbered 381, as against 852 last year, and 600 in 1903. It must not be taken that the large falling off in entries is owing to decreased support; it arose mainly because, under the local regulations, the capacity of the Royal Agricultural Hall had been limited to 700 entries.

In the section for stallions of one year old, there was an entry of sixty-six, of which twenty-three were selected to compete for the eight prizes, and when the final awards were given, the whole of these appeared in it, namely, eight prizewinners, one r. n., eight h. c., and six c. The winner was Mr. F. Farnsworth's Ratcliffe Forest King, by Lockinge Forest King, 18867. Mr. J. H. Bryars took second place, with Dunsmore Commander, by that well-known sire, Dunsmore Jameson 17972.

The two-year-old stallion class had an entry of eighty-nine. This was a specially fine class of animals, and despite the fact that no less than ten prizes were offered, the judges felt fully justified in placing the other fourteen selected animals in the award list; that is, one r. n., six h. c., and seven c. The winner was a particularly promising horse, Childwick Champion, bred by the late Sir J. B. Maple, by Childwick Majesty, and exhibited by Lord Rothschild. Close up to him, however, came Mr. James Gould's Lynn Champion, who had to take second place after a keen fight for the premier place. The Earl of Egerton, who won third prize with Hendre Prince William, by Hendre Spark, owns in him a very promising stallion.

The three-year-old stallion class numbered ninety-six entries, and the competition in it was remarkably keen. No less than eleven prizes were offered in this class, and when these had been awarded, and the usual r. n., no less than five others were made h. c., and seven c., an indication which better than words describes the special merit of this large and excellent class. The winner here was Mr. Max Michael's Starborough Coronation, sired by Lockinge Albert. He has great power of movement, excellent bone, fine feet and substance, and fully deserved being made the junior stallion champion of the show. Mr. Chas. Bell's Norley Advance was second, and Mr. James Gould's Rithby Tom, third.

Four-year-old stallions had an entry of forty-one, nineteen of which appeared in the award list. The winner was Girton Charmer, about one of the best four-year-old stallions we have seen made champion at any of the series of shows. Unquestionably, Lord Rothschild owns in this grand horse a particularly valuable animal, and one that was generally conceded to be well deserving of the champion honors. Messrs. James Forshaw & Sons took second honors with Lincoln Lion, another excellent stallion. He might probably be of more masculine character than the winner, but, taken as a whole, the award was one generally approved. Hendrick, owned by Sir P. A. Muntz, the get of his notable stud horse Dunsmore Jameson, made an excellent third winner, whilst in Delamere Warrior, by Crofton Matchless, Mr. J. W. Kenworthy possesses a very superior and promising young sire.

The mature stallion class, between five and ten years of age, and under 16 hands 2 inches high, secured an entry of twenty-nine, sixteen of which were in the award list. A very fine lot of mature horses they were, particularly so Raydon Duke, Mr. James Forshaw's first-prize winner. The same remark applies to Lord Middleton's Normoor Victor, the get of that grand horse, Prince Harold.

In the corresponding class for stallions over 16

Buscot Senator, owned by Mr. T. Simpson Jay, has special merit, and very fine quality.

The three-year-old mare class, with forty-seven entries, had twenty-three of them placed in the award list; the winner in this class, Rickford Farewell, owned by Lord Rothschild, also took the r. n. for the junior mare and filly cup. Halstead Duchess III., by the champion, Menestrel, was brought out by Mr. John Bradley, in fine form, and ran the winner very close indeed. The third-prize mare, Tatton Aurora, from the Earl of Egerton's stud, by Buscot Harold, is also a very fine animal.

The four-year-old mares numbered twenty-one, fourteen being placed in the award list; Mr. H. W. Kearns, with that very fine mare, Knottingley Fuchsia, taking the first place. Mr. Walter Cunningham came in for second honors, with Starborough Catherine, but Poole Duchess, that won third for Sir A. Henderson, had none of the best of luck, to be put in this place.

The smaller class of mares, under 16 hands, five years old and upwards, numbered twenty-eight, exactly half of which appeared in the award list. Mr. Peter Coates won first, with the Duchess of York, being closely pressed by Danesfield Lively, from R. W. Hudson's herd.

The next class for mares 16 hands, and under 16 hands 2 inches high, five years old and upwards, had an entry of twenty-five, fourteen of which were mentioned in the award list. Lord Rothschild's Blythwood Guelder Rose, by Prince Harold, won a well-deserved success. Messrs. James Forshaw & Sons sent forward Beauty's Queen; her position as second could not well be questioned, but Rocks Madam, that won third honors for the Earl of Egerton, was very close up.

The last female class was for mares, 16 hands 2 inches high and over. Twenty-eight were entered, and fifteen appeared in the award list; the winner here being Princess Beryl, owned by Lord Rothschild, and the get of Prince Harold. This notably fine mare, which has

vastly improved since last year, won also the challenge cup, for the best mare in the show, and that for the older mares; Lord Rothschild thus taking both of the challenge cups—a success but seldom achieved by any breeder. It may be mentioned that the r. n. for the female champion cup was Sir P. A. Muntz's Dunsmore Fuchsia, and the r. n. for the senior mare cup was the second-prize winner in class fourteen, Mr. H. Towgood's Sheldford Pax, by that famous old sire Paxton.

The entry of geldings this year was slightly larger than last year, and it was noticeable all through the three classes that the owners of them had evidently come to the conclusion that there was more profit in a first-class gelding than in a second-rate stallion. Mr. A. O. Spark, who won first for the five-year-old gelding, also took the champion cup for the best gelding. Mr. R. W. Hudson's Danesfield Jim, winner in the four-year-old class, was made r. n. for the champion cup, whilst the winner in the three-year-old class was Mr. Peter Davis' Midlands Waggoner.

One of the most striking facts in connection with this year's show, is the large number of sires whose produce appears in the award list; Prince Harold being the sire of many of the leading winners, but Dunsmore Jameson was a good second, and in the aggregate sired more winners than the former horse. Prince Harold was, however, entitled to precedence, on account of the success of his produce in winning one of the champion prizes—that is, for mares—as well as two firsts, two seconds, a fourth, and a seventh prize. The list of winning sires includes eighty-nine horses as far down the award list as r. n.; then there were also sixty-eight sires whose produce secured either h. c. or c.

The interest and value of this information consists in its being able to show how large a number of sires there are available at the present time for breeding purposes, whose produce is able to pass the present-day strict veterinary examination, without which no prize or commendation can be secured at this show.

W. W. C.

Cicero J. Hamlin, multi-millionaire, successful business man, the world's greatest breeder of trotters and pacers, founder of the Grand Circuit, and one of the most extensive campaigners of light-harness horses, died at his residence in Buffalo, N. Y., February 20th, aged 85 years.

Cruickston Park Farm, Galt, Ont., property of Miss K. L. Wilks, is using some fast-record mares in the stud. Among the mares this leading Canadian breeding establishment is nominating in the Futurity Stakes are Eden, 2.19½, by Nephew; Vanity, 2.19½, by Haldane; Bessie Wilkeswood, 2.20, by Wilkeswood; Cressida, 2.18½, by Palo Alto, and Susie T., 2.09½, by Ambassador. All these mares are in foal to Orq Wilks, 2.11.



Shire Stallion, Girton Charmer 20515.

Champion stallion at the London Shire Horse Show, 1905. The property of Lord Rothschild, Tring Park, Herts.

Melanotic Tumors.

To the Editor "Farmer's Advocate":

In your issue of January 26th appeared an article on "Gray Horses Becoming White." A few years ago I had some experience with gray horses and melanotic tumors which I would like to give for the benefit of others, and to obtain your opinion, or that of others. They began to appear on a dark gray filly when she was about two years old. Tumors appeared on face, neck, body, and low down on hind quarters. They had the appearance of warts, which I at the time supposed them to be. When she was about ten years old, I noticed a small lump just inside the point of the shoulder, about where the end of the sweat pad ordinarily comes. This one was deeper than the other under the muscle, grew rapidly, and interfered with collar. I took her to a qualified veterinarian. He thought it a muscle tumor, operated, found it attached to a large artery. Tumor about the size of a hen's egg, color inside, brownish black. He then pronounced it a melanotic tumor. The wound healed rapidly, mare worked well all summer, kept in fine condition. In fall, tumor appeared again, by spring was as large as a man's fist, but this time outside the muscle, but under the skin. Mare became stiff and sore when worked. Had tumor removed again. Found, also, one or two smaller ones deeper in. Wound healed rapidly. Mare still in fine condition, but she never worked again. All her ambition was gone. Coat began to stare, face wore a haggard look, lost flesh. Tumor began to grow, and by fall was four or five inches in diameter; mare reduced to a skeleton, and moved with hind parts off to one side. Finally, as an act of mercy, I destroyed her. On opening her we found small bunches of brownish-black material, fast to the intestines, liver and lungs—hard and dark, apparently filled with the same black material. Is there no way of removing this coloring matter from the system? Is there no medicine that will break it up and cause it to pass out of the system. Are all the excretory organs doing their full duty when this coloring matter is deposited in certain spots about the horse? I would not like to have another touched with a knife. Some small ones about the head and neck, removed by ligature, did not reappear. J. H. D.
Welland Co., Ont.

Should Scrub Stallions be Tolerated?

To the Editor "Farmer's Advocate":

As one who has had some experience with horses, I have been noticing the number of poor scrub horses that are no good for the market or for home use. But is it to be wondered at when we find farmers breeding to any old scrub stallion travelled around from barn to barn, and serving for five dollars or less? If we are ever to have the right class of horses we must use the right class of sires. I would say use the best horse you can find, and do not, by attempting to save a few cents in fees, lose dollars in the end. There are plenty of good, sound registered horses, and men who want to see the horse stock improved, but cannot do much as long as men are allowed to travel all kinds of stallions, no matter what ails them. It is a question whether the Government should not take steps to prohibit the travelling of such stallions by appointing an official inspector who would allow none to travel unless sound and duly registered in the studbook of the breed to which he belongs. If any other breeder or interested person has anything to offer along this line, let us hear from him, as I think there is a wide field here for discussion. HORSE DEALER.

Elgin Co., Ont.

From the Start.

I have taken your paper from its origin, and believe you improve year by year. Think it is the best agricultural paper published in Canada for farmers. J. D. HOWDEN.

Whitby, Ont.

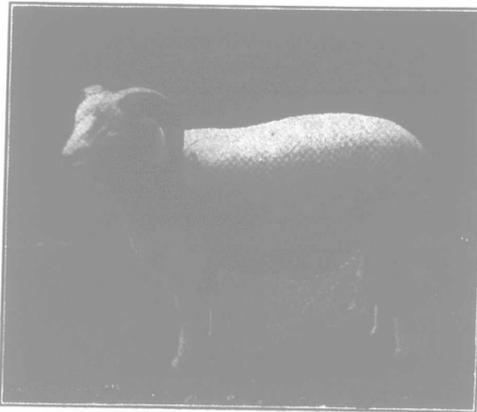
Mr. Fred Smith, Norfolk, Ont., says: This is my third year for your paper, and it cannot be beat for a farm journal. Wishing you a life-long success, I am, yours truly.

Mr. Octave T. Bourque, Westmoreland, N. B. says: I am sending you \$1.50 for the "Farmer's Advocate" for 1905. It is one of the best papers to take.

Mr. Theodore Weber, Waterloo, Ont., says: Please find enclosed \$1.50 for one year's subscription to the "Farmer's Advocate." We enjoy the paper very much, and would not be without it.

STOCK.**Exmoor Sheep.**

As with the Dartmoor, so with the Exmoor breed of sheep, time has wrought great changes during the last fifty years. They were originally a genuine forest or moorland breed, of a wild nature and roaming habits, small in head and neck, small in bone everywhere, the carcass narrow and flat-sided, and weighing, when fat, from nine to twelve pounds per quarter, of finest quality mutton, and carried a fleece of rather short middle wool, weighing from three to four pounds, of coarse and inferior quality. Even then, the Leicesters crossed upon them were working wonders with the Devonshire aboriginal sheep, and the result is seen in the remarkable improvement and complete change in size and appearance which has taken place. The modern Exmoor is much smaller than the Dartmoor, and is horned in both sexes, white-faced and covered with wool of the same character as the Leicester. The close affinity with the Dorset mentioned by Youatt is no longer apparent, although activity and hardihood are still retained, together with a superior quality of mutton, and the females are very prolific. One writer speaks of a flock of fifty-four ewes, thirteen of which each produced triplets in one season, while the whole fifty-four ewes brought up ninety-six lambs to weaning time. There were half a dozen pens of Exmoors competing at the Royal Show at Park Royal, London, last year, exhibited by three breeders, all from Devonshire and Somerset.

**Exmoor Shearling Ram.**

First prize, Royal Show, 1901.

Care of the Lambs.

Lambs that are born strong are generally able to help themselves, and need little attention if their mothers have been fed judiciously and have a sufficient supply of milk. But if a lamb is weakly when born it may need assistance to reach the source of nourishment, and an hour after its birth should be held up, the ewe being held by the attendant or tied by the neck while a little milk is drawn from the teat into the lamb's mouth to give it a taste, and then the teat placed in its mouth, when it will begin to suck. In the case of a very weak lamb that cannot stand, it may be well to put the ewe down upon her side, and with one knee on her neck the attendant has his two hands free to help the lamb as it lies upon its side or upon its knees while it draws its first nourishment. In this case the ewe and her lamb or lambs should be enclosed in a small pen by themselves, for which purpose it is well to have a few low, short hurdles provided, two of which will make a pen in a corner. In case a ewe gets separated from her lamb or from one of the twins, it is well to tie her, and keep her tied for a few days, until she gets used to her lambs, and they get strength to claim their rights. But first the disowned lamb should be rubbed well against the owned one, so that the smell of the two may be alike, or if the lambs have become dry, the afterbirth of the ewe may be rubbed upon the disowned, in order to give it the proper smell. When a single lamb dies, its mother may be made to adopt one of a pair of twins by taking the skin off the dead lamb and fastening it on the living one, the ewe being confined with it in a small pen, and, if necessary, tied for a few days. Even without the skin transference the ewe may be induced to accept her new charge, if she is kept tied and some of her milk smeared upon the hind parts of the lamb.

Docking the tails of the lambs should be attended to when they are a week or ten days old, and castration of the ram lambs at the same time, the latter operation being first performed. At two weeks old the lambs will begin to eat if some nice clover hay is within their reach, and a little oats and bran, and sliced roots. For this purpose a corner should be partitioned off for them by means of hurdles, with a creep, or

narrow passage, for them to enter, through which the ewes cannot go, and fresh feed given them every day, which will cause them to grow, and will be a relief to the ewes, as big, hungry lambs draw heavily upon their dams. It is well to be provided with a rubber nipple or two, in case a ewe is very short of milk, so that milk from a fresh cow and always from the same cow may be given in small quantities; but if milk from another ewe can be had by holding her while the lamb sucks, it is safer and better than cow's milk, and it is always safer to feed too little, than too much.

Our Scottish Letter.**THE PERTH BULL SALES.**

Perhaps it will be of chief interest to your readers if I at once begin with my tale concerning bull sales. We have been having a grand time, and the sales have simply eclipsed anything ever before known in these parts. Shorthorns have been the rage, and with prices like 600 gs., 500 gs., 360 gs., 350 gs., and anything from that down to 100 gs. in numerous instances only need to be mentioned in order to show how lively the trade is. Perth is the great center for the sale of the Shorthorn and Aberdeen-Angus bulls, but good demand is also experienced for both kinds at Aberdeen and Inverness. The reason for the great prices this year is to be found in the South American demand. Numerous buyers from that part of the world were forward, and they could alone have made a prosperous sale, but the home demand was also brisk, and all round the Shorthorn spring trade has been phenomenal. Perthshire breeders have come out well, and the north country men distinguished themselves to purpose. Two hundred and ninety-five yearling Shorthorn bulls were sold, at an average price of £49 11s. 11d., as against £36 13s. 3d. for about an equal number in the preceding year. The difference between the two averages was equal to a good selling trade. The highest price 600 gs., was made by a March calf, bred by Captain Graham Stirling, of Strowan, Crieff, whose sire was a Montrave-bred bull, of the Brave Archer race. The second-prize winner in the class in which the Strowan bull was first, made 500 gs. He was bred by Mr. Duncan Stewart, of Millhills, Crieff, who made an average of £302 1s. each for his three, which formed the first-prize group. The next highest prices, 360 gs. and 350 gs., were made by bulls bred by Mr. David Hume, Barrelwell, Brechin, who had the second-prize group, and made the highest average of the day, viz., £273 for the three composing the group. All of these high-priced bulls went to Argentine buyers. Mr. Hume's three were got by the Lovat-bred bull, Viking, and the Millhills first-prize group by the Uppermill bull, Proud Favorite. The second highest average was £245, made by Captain Graham Stirling, for three by his Montrave-bred bull. Millhills sold four in all, for which he got an average of £235 14s. 6d. The next best average was £173 5s., made by that noted breeder, Mr. James Durno, Westertown, Oldmeldrum, for five. A noted Ross-shire stock, that of the Messrs. Peterkin, Duglass, Conon Bridge, who made the best average at Inverness, came in with an average of £107 17s. 9d. for four, and their Inverness average was £57 8s. 0d. for three. Cromleybank herd, in Aberdeenshire, owned by Mr. Reid, made a capital appearance, with an average of £135 19s. 0d. for four.

Some things about this extraordinary Shorthorn demand are worthy of special note. The pedigree craze in a new form is asserting itself, and if it be not kept in hand it will end disastrously for the breed in this country. It is nonsense to affirm that no good Shorthorns exist except their pedigrees can be traced to a foundation prior to the number 10,000 in Coates' Herd-book. The pedigree qualification which suits the Argentine will not suit the United States, and it is difficult to say what the present attitude of the Argentine to the tuberculin test may be. It is rumored that the 1,200 gs. bull at the Uppermill dispersion has never been shipped, and that the reason is failure to pass the test. Some noted Shorthorn families are being neglected because of this pedigree craze. How an embargo on the Uppermill Missies can be regarded as conducive to the improvement of the Shorthorn breed we do not know, but possibly pedigree maniacs in North and South America may be able to explain.

Aberdeen-Angus breeders have not had quite such a run of luck as the Shorthorn men, but they have no need to complain of the Perth trade in their favorites. The sale took place in the week preceding that of the Shorthorns, when 266 bulls made an average of £26 3s. 5d., as against £23 14s. 9d. for something like the same number in the preceding year. The sale was one prolonged triumph for the Erica tribe. The best average was made by the Ballindalloch herd, which also made the two highest individual prices, 300 gs. and 205 gs. The Ballindalloch average was £192 13s. 9d., as against £172 10s. last year. Both the highest-priced bull and the highest-priced heifer were purchased by Mr. J. Ernest Kerr, of Harviestoun, Dollar, who has a rising herd, and is determined to have nothing but the best. The second highest price for a bull was 205 gs., paid by Mr. James Calder, of Ardargie, Bridge of Earn. The difference between the Shorthorn and the A-A demand was the difference between a foreign and an exclusively home trade. The Irish Department of Agriculture has practically banned black polled cattle, and for them there was next to no demand from Ireland. With Shorthorns it is altogether different. They hold the field in the Emerald Isle, where a movement is on foot to establish a register for milking

Shorthorns bred in Ireland. The idea is a good one, and by and by the results will be seen. But we are leaving our text. After Ballindalloch, in respect of an average came Mr. Kennedy's herd at Doonholm, a newly-founded herd, in which Erica blood has played a great part. The average for five bulls from Doonholm was £43 1s., and the next best averages were £41 12s. 2d. made by Auchorachan, and £41 6s. made by Colonel McInroy, of The Burn, an Angus breeder. All the Ballindalloch high-priced specimens were got by Delamere, one of the best bulls of the breed in recent years.

Highland cattle-breeders had a good bull sale at Oban this week. The highest price was nearly one-tenth that of the highest-priced Shorthorn, viz., £60. He was a bull stirk or yearling, bred by Mr. John Macdonald, Duntuilim, and was purchased by Sir William Ogilvy, Dalgleish, Bart., Errol, Perth. Other good prices were £59, for a magnificent four-year-old bull, bred by the Duke of Sutherland at Dunrobin, and sold to Lord Malcolm, of Poltalloch; £40 for the first-prize two-year-old bull; £56 for the third; £52 for the fourth; £50 for the fifth; while the second was withdrawn unsold at £62. He was the favorite among all the bulls offered. As illustrating the different points of view from which good bulls may be regarded, it may be mentioned that the third highest-priced Shorthorn bull at Perth (360 gs.) was only placed sixth in his class, and the Highland bull stirk placed sixth in his class made £40, being much more than any of those placed in front of him except the first. Sixty-eight Highland bulls at Oban made an average of £26 8s. 8d. each.

Clydesdales are again being sent to Canada for this season, and the report from the Toronto Show indicates that the trade is likely to be good this year. Mr. William Colquhoun, Mitchell, Ont., an old friend, has shipped two well-bred horses, calculated to take your market, and Messrs. Bawden & Macdonnell, from Exeter, have made a shipment since I last wrote. Mr. Colquhoun bought his horses from Messrs. Montgomery, Castle-Douglas, and the Exeter firm, as usual, made their trade with Mr. Peter Crawford, Dumfries.

Another matter of common interest is the effort to improve Cheddar cheese in this country. It has at length gone home to the understanding of the Galloway makers that Canadian cheese threatens their market, and there is no longer a disposition to treat the matter as one of little moment. The feeling at a well-attended conference, held in Castle-Douglas, was that the distance between the Scots and the Canadian cheddar might again be increased, and no doubt there are advantages in favor of the home maker which ought always to put him ahead a bit. It is idle to go on making cheese which only competes with oversea products. There is vast room for improvement, and one would feign hope that the lessons to be learned from other peoples will not be wholly lost on our makers at home.

Our English Letter.

The embargo on Canadian cattle is kept very much to the front just now in Parliament and in the press, but the Government, strongly backed by the agricultural papers, sit still and do nothing. They croak enough about the possibilities of disease being imported, whereby our valuable herds would be decimated, etc., etc., but no evidence of disease can they produce. They pretend to be frightened by a bogey of their own making, whereas the simple truth is they enjoy the protection the Act affords, and they won't let it go if by any means they can attain their end.

The season of horse shows in London has come round again, and, as usual, that of the Shire Horse Society is first on the list. Compared with last year, the entries show a decrease of 181—681, against 862 (which was a record entry). It seems certain that with the advance of mechanical traction the Shire horse will be the first to go. He is not beautiful; he is not speedy; his only virtue is his horse-power. Given an engine that will do the same work equally well, and do it cheaper, no sentimental considerations will save the cart horse from extinction. As a show, the animals are of rare merit, and the judges had no light task in awarding the prizes, which, by the way, are very generous. His Majesty the King, accompanied by the Queen, paid a visit to the Royal Agricultural Hall on Wednesday afternoon, and had a splendid reception. Both the King and Queen were looking remarkably well. The winner of the champion and challenge cups for Shire stallions was Lord Rothschild, who secured the trophies with the four-year-old stallion, Girton Charmer. As his Lordship won the cup a year ago, it now becomes his absolute property. Lord Rothschild scored another great success in winning the fifty-guinea (\$250.00) challenge cup, offered for the best Shire mare or filly, with his nine-year-old black mare, Princess Beryl. The success of Lord Rothschild, in securing both the male and female championships, was deservedly popular, for he has long been a steady and consistent supporter of the Shire breed, and is, moreover, the new President of the Shire Horse Society.

The wheat market at Mark Lane is in a very tranquil state. The past week's arrivals of foreign are large, nearly 100,000 qrs., and the demand is very quiet. The unfavorable crop news from India has had the effect of causing a smart advance in Indian wheats, and in a lesser degree this has been reflected upon La Plata descriptions, and Russians. Australians are also held rather high, but are difficult to sell at any advance. It is quite natural that any probability of a

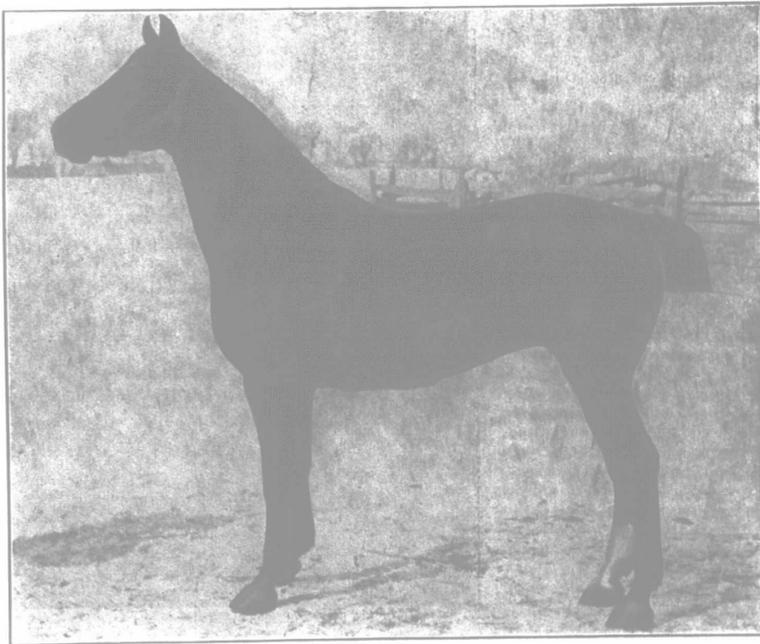
lessening supply of Indian wheat should have a strengthening effect upon the market, because it is necessary that we should have fully as much Indian and Russian wheat during the next six months as we have received in the past five, if our foreign supplies during this period are to equal our current requirements. Prices: No. 2 N., Manitoba, landed, \$9.48; No. 3, landed, \$9; No. 2 Calcutta, landed, \$7.68; Russian on the spot held up to \$8.64. For shipment there is little enquiry, except for the best. Argentine and Australian, quoted \$8.40.

Flour is the problem of the day. Minnesota and Illinois preserve an attitude of unabated firmness, and \$7.92 is the lowest price for their best spring wheat flour. This is regarded as a fancy quotation. For Australian flour, \$6.25 is paid, but it lacks strength, and does not move off well. Argentina sends some flour, which at \$6.72 is still cheap, but the poorer Argentine sorts are only fit for feeding purposes, and the same applies to low-grade American. There are a few samples of fine Russian in Mark Lane, for which \$7.40 is paid, but the supply behind the samples is small, and they do not in consequence affect values generally.

There has been a decided advance in spot values of maize at Mark Lane. La Plata is worth \$5.80, landed, and mixed American, \$5.04.

The live cattle trade is in a very depressed condition, which is not to be wondered at, when the very low prices ruling for beef at the central markets are taken into consideration. On Monday last 631 States beasts were sold at 10¢ to 11¢ per pound, and on Wednesday, although 1,730 were in the lairs at Deptford, only 815 were offered, and with difficulty were disposed of at Monday's rates.

Deptford, Saturday, 25th.—1,585 U. S. cattle, 10¢.



Minona—237—

Five-year-old Hackney mare. Winner of second-prize, International Show, Chicago. Sire Robin Adair 2nd, imp. In the Waverly Stud of Mr. Robert Belth, Bowmanville, Ont. To be sold by auction, March 23.

to 11¢; 315 Canadian cattle, 10¢ to 11¢; 329 Canadian sheep, no quotation; 1,200 States beasts were withheld from the sale. Trade very slow.

The beef trade in Smithfield is wretched; the low prices accepted for really choice Argentine chilled affects all other kinds. Scotch sides, 11c. to 12c.; English, 10¢ to 11c.; U. S. chilled hinds, 9¢ to 10c.; fores, 6c. to 6½c.; Argentine chilled hinds, 7c.; fores, 5c. per pound. Mutton is very firm, and makes good prices. Scotch sheep, 15c.; legs, to 17c.; English sheep, 14¢.

Bacon—It turned out this week that retailers were shorter of stocks than was generally supposed, and the bacon market has been further strengthened accordingly. Canadian cures have been in good demand, and supplies being only moderate, the opportunity has been seized of raising prices all round. Davies' bacon now makes 10¢ to 11¢ per pound, with seconds and parcels out of cold storage in proportion.

Hams attract little general notice, and although prices are much below those of last February, the dealers evince no desire to get into stock. Canadian long-cut green, 8¢ to 10¢; short-cut green, 9c. to 9½c. per pound.

Colonial butter (that is, Australian and N. Z.) continues to take the lead in the amount of business done, and finds its way into consumption as fast as it arrives. The prices mostly paid are 21¢ to 22c., with an occasional 22½c. for best brands, and 20c. to 21c. for inferior, which are daily getting scarcer.

In the market for Canadian cheese a little more life has been manifested, and larger contracts have been completed; but the forward movement has been scarcely strong enough to influence values in favor of holders, and the purchases have not gone much beyond

11c. to 11½c. per pound on the spot. On c.i.f. terms, 11½c. is about the nearest value for coolest makes, with no great disposition shown to buy thereat. New Zealand cheese is selling well, and is running the Canadian makes very close, at 10½c. to 11c. per pound.

Apples—Values are, if anything, a shade higher, and as shipments last week for the U. K. were the smallest since the commencement of the season, a further important improvement is looked for. Baldwins realize \$2.90 to \$3.90, according to condition, and Russets from \$4.30 to \$5.30.

Eastern Ontario Winter Fair Lectures at Ottawa.

MAKING BABY BEEF.

The lecture-room was crowded when President G. C. Creelman, of the Ontario Agricultural College, opened the meeting for the discussion of beef topics. Prof. Gridale was the first speaker, and gave an excellent address on the advantages of finishing beef cattle so that they could be marketed at the age of two years. Calves of good beef type and breeding, if pushed along rapidly, could be made to gain two pounds a day, and weigh from 1,200 to 1,400 pounds at 24 months. The three great advantages were economy of gain, saving in time, and saving in interest on investment. Experiments at the Central Experimental Farm had shown that up to six months old a calf would put on flesh at a cost of three cents a pound; from six to twelve months, at four to five cents; from one to two years, at from five to six cents; and from two to three years, at from seven to ten cents. Therefore, the greater the amount of flesh put on before the age of two years the greater the profit. There was also a great saving in

time, as it was possible to feed 15 steers to the age of two years as easily as to feed 10 to the age of three years. In this way, too, there was a saving of one-third of the interest on the investment.

He advocated feeding calves on skim milk, with a little flaxseed jelly; adding a little grain as soon as they would eat it. Plenty of green or succulent food was essential to success; oats and vetches, alfalfa and turnips were most satisfactory. The second winter they should eat about ½ pound of grain per 100 pounds live weight, gradually increasing the quantity to double that amount. In feeding, uniformity in quantity, quality, temperature, time and cleanliness were all important. In the discussion which followed, Mr. John Davidson

instanced the case of a calf weighing 1,000 pounds at twelve months, which was sold for \$60.

HOW TO IMPROVE OUR EXPORT CATTLE.

Mr. Robert Miller, Stouffville, gave some capital advice on the improvement of our export cattle. Cows should be free from dairy blood, and the sires used should be pure-bred Shorthorns, Herefords, Aberdeen-Angus, or Galloway. Some of the desirable points were short legs, deep bodies, well-sprung ribs, thickness through heart, legs wide apart, medium bone, good coat of hair, and natural thickness of flesh. These points were common to the good cattle of all these breeds, and it was wise to choose the breed best suited to one's conditions and fancy. If breeding cows were of uniform type, it was much easier to have a nice even lot of steers to attract the buyers. The best buyers for export go to Chicago, because at such a center they can find large numbers of uniform type to fill orders. Cattle should be marketed as soon as ready. Mr. Miller said he did not believe in feeding grain to calves that were getting whole milk. Messrs. N. F. Wilson, M.P.; W. H. Taylor, R. R. Sangster, A. W. Smith, J. M. Gardhouse, and others favored the grain ration, but Mr. Miller cited the experience of Messrs. Duthie and Marr, of Scotland, and Robbins, of Indiana, to show that the practice was not only unnecessary, but injurious.

CANADIAN CATTLE IN BRITISH MARKETS.

Prof. G. E. Day said that personal investigation had led him to believe that there was no line of demarcation between Canadian and other beef in Britain. Frozen and chilled beef were, of course, in different classes, but outside of those beef was classified accord-

ing to quality, no matter by whom fed. Probably a good deal of the best Canadian was sold as Scotch, which had a high reputation; while the poorer grades were classed as Canadian, to the injury of our good name as feeders. Lack of finish, the necessity for slaughter within ten days after landing, and the lack of great abattoirs to establish a dressed-meat trade were mentioned as great drawbacks to the export trade. Western cattle were landed in bad condition owing to lack of grain feeding, the long journey, and their wild nature. Ontario cattle were too often sold in December or January for May delivery, and the feeders were then likely to grow careless about finishing them properly. Another trouble was that shippers rather preferred heavy cattle, as the ocean freight was the same, but these were not in greatest demand in Britain.

STOCKMEN'S INTEREST IN GOOD SEED.

Mr. G. H. Clark, Seed Commissioner, told of the bearing good seed has on the live-stock industry. Inherited capacity to produce large crops, and freedom from noxious weeds, were the chief characteristics of good seed. The efforts now being made through the Canadian Seed-growers' Association to provide in large quantities selected or pedigreed seed were explained, and the purport of the Pure-seed Bill now before Parliament was given. A large number of copies of this Act would be printed for distribution, and could be had on application to the Department at Ottawa. Seed fairs were being held, with the co-operation of the Seed Branch, at thirteen points in Canada this year, and the good effects of such fairs were pointed out. Noxious weeds were largely introduced from foreign countries in packing materials around merchandise. The trade in grass and clover seeds was the chief medium of distribution, while railroads, streams, and threshing machines had a large share in carrying weeds from farm to farm. Ex-Warden Boyce, of Carleton County, made a good speech in favor of farmers using only good seed. He told of a visit to the Temiskaming country, where the soil was wonderfully rich, but he referred to the regret he felt at seeing impure seed being taken into that district.

TRADE WITH ARGENTINA.

Mr. W. S. Spark, of Canterbury, Eng., gave a very interesting account of his recent trip to Argentina. He had visited nearly all the leading agricultural countries of the world, but Argentina had the richest soil he had ever seen. The climate, however, was very warm in summer, and the country was full of foot-and-mouth disease. He did not see much prospect of its being stamped out, either. The best class of beef bulls brought very high prices there, and it might be worth while for Canadian breeders to send down some shipments, but considering the risks and the lack of return cargoes, he did not think it advisable for the Government to assist in establishing a trade. Grade cattle were not wanted, and would not bring more than enough to pay the freight. There was no chance for Canadians to buy horses there, as had been suggested, as outside of a few show horses, they were of a very nondescript class. The Palermo Show was the greatest show of cattle in the world, in numbers if not in quantity. At this show last summer there were 3,130 bulls on exhibition, and all were put up for sale at auction. A photo was shown of the bull Newton Stone, which sold for \$14,960 in gold; also of the La Plata Freezing Works, with a daily capacity of 4,000 sheep and 500 cattle.

THE LIVE-STOCK INDUSTRY.

Hon. Sydney Fisher emphasized the importance of the educational features of the live-stock shows, and said that the Ottawa show must go on, in spite of the second unfortunate collapse of the building intended for it. Live-stock raising was the most important industry in Canada, as without it it would be impossible to maintain the fertility of the soil, and make certain the permanent prosperity of agriculture in Canada. The live-stock interests would find their best and surest markets for the future among our own people in Western Canada. There was to-day in Ontario a group of live-stock breeders who had hardly an equal in the world. These should do their best to improve the class of stock reared by other farmers, as the more there were in the business the better would be the demand for the best stock.

(Additional reports elsewhere in this issue.)

To Prevent the Retention of Afterbirth.

A Norfolk County reader sends a recipe for prevention of retention of afterbirth, which, he says, he read in the "Farmer's Advocate" about twenty years ago, and has used with satisfaction ever since. It is to feed a quart of wheat, boiled, at intervals of ten days, for a month previous to date of calving. The experience cannot, of course, be regarded as conclusive, since there is nothing to show that it warded off any threatened attack. Probably a quart of bran would have proven equally efficacious. Any more positive experience is solicited.

An Old Friend in Africa.

I enclose herewith money order for \$3.00 for my subscription for 1905. When one gets the "Farmer's Advocate" here it is like meeting an old friend, even if it is a month behind.

THOS. BRADSHAW,

Director of Agriculture, Bloemfontein, Orange River Colony, S. A.

The Sow at Farrowing.

To the Editor "Farmer's Advocate":

Noticing in your issue of March 2nd, 1905, page 295, article on care of sow and litter, I could not improve on the feeding of the sow, but I do think I have an easier and more profitable way to care for her while parturition is taking place. Remove the sow to a warm, dry place, and fill it entirely with white straw a few days beforehand, so that by the time she is sick she has made for herself a comfortable bed, and is contented. Do not disturb the sow while parturition is taking place, and she will lie there till the pigs are all born. If any of the pigs attempt to stray from the nest they are kept by the high wall of straw around the sow, so do not get cold and squeal to worry the mother.

When she starts to move about in the nest it is marvellous how carefully she crowds them out of the way to make room to lie down, and also when the pigs get older she will lie down, a little distance from the nest, and call the pigs to her.

The main thing is to give her lots of straw beforehand, and not disturb her while parturition is taking place. If you are crowded for room, give her the straw stack or straw mow, and let her have her own way. The Creator has given her an instinct that cannot be supplied or improved upon by any substitute. The mother generally knows best how to care for her family.

Northumberland Co., Ont.

B. S.

years the first week in May, according to the earliness of the season. The second plot was sown with similar seed two weeks later. The soil in the two plots was as nearly alike as it was possible to have it. The average results of the experiments with turnips at Ottawa for five years showed a difference in yield of over ten tons per acre per year in favor of early sowing.

The average results of the experiments at Ottawa with mangolds for five years showed a difference in favor of early sowing of 12 tons 125-pounds per year.

The difference in the yield of carrots was not so marked, though it left no doubt as to the advisability of early sowing. The average results of experiments for five years at the Experimental Farm at Ottawa, showed a difference of 3 tons 979 pounds per acre in favor of early sowing.

Between the early and late sown crops of the garden sugar beets there was an average difference in favor of the former of 8 tons 1,660 pounds per year.

"On the whole," said Dr. Saunders, "there's a difference in favor of early sowing on the average of from 25 to 40 per cent."

Dr. Fletcher's Evidence.

(Ottawa correspondence.)

Dr. James Fletcher, Dominion Entomologist and Botanist, furnished evidence regarding the work of his division before the Agricultural Committee of the House of Commons on Friday, March 3rd. The principal phases of the work of the Botanical and Entomological

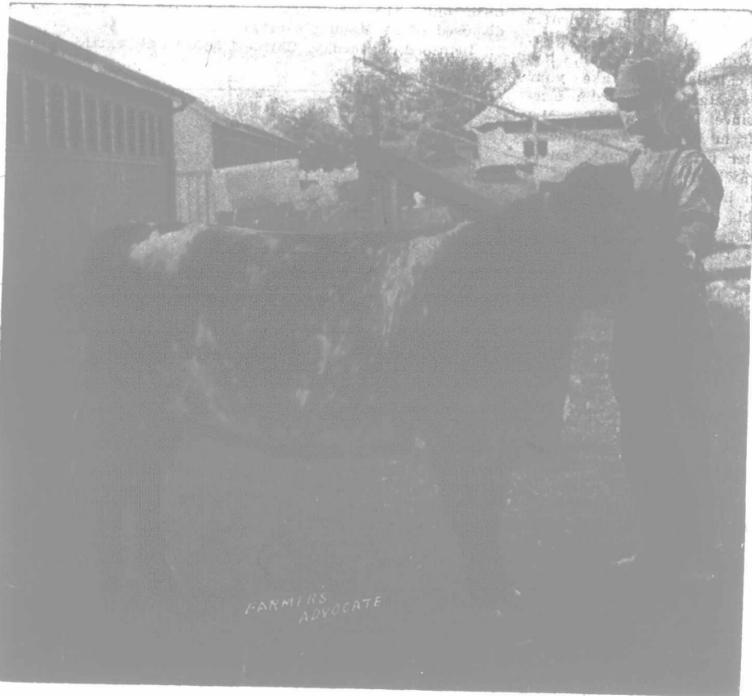
Division, Dr. Fletcher explained, were the study of insects, both injurious and beneficial, and the study of plants; the diseases which affect them, and how they may be prevented. That their work was being appreciated, the speaker said, was evinced by the fact that during the past year over 3,000 letters had been received from farmers, asking for information along various lines.

Taking up the subject of insects, Dr. Fletcher said that fully ten per cent. of every crop grown was destroyed by insects. This was a very conservative estimate. The pea weevil alone caused an estimated loss of over \$1,000,000 per year to the farmers of Canada, while the San Jose scale also did great damage to the fruit-growing interests. There was also great loss from the ravages of fungous diseases on certain crops. The botanical division had also given considerable attention to the subject of noxious weeds, and had collected and disseminated valuable information along this line.

Eighteen years ago, continued the speaker, when the division over which he had charge was established, the word "spray" was unknown in the sense that it is usually now associated. By the adoption of spraying certain crops for the prevention of fungous diseases the yields were increased fully fifty per cent.; or, in other words, fully fifty per cent. damage was prevented.

"How to kill the pea-weevil," furnished material for a considerable portion of Dr. Fletcher's address. The present year, he said, was a most opportune one for the farmers of Canada to make a determined effort to clean the weevil out of the country. He believed that the number of weevils in Canada at the present time was less than for many years, owing to weather conditions during the past few seasons, and certain other reasons. Dr. Fletcher recommended the following method of treating peas in order to kill the weevil: Place the quantity of peas to be treated in an ordinary coal oil barrel, which will hold about five bushels of peas; then take three ounces of bisulphide of carbon, place it in a saucer and set it on top of the peas in the barrel, and at once cover the latter closely. The chemical may be poured on the peas with equally good results. Carbon bisulphide is a colorless liquid, which turns into vapor when exposed to the air. It is heavier than air, and, therefore, when it volatilizes the fumes sink quickly to the bottom and permeate the contents of any tightly-closed receptacle. Every weevil will be killed by this treatment.

To kill cutworms, Dr. Fletcher said the most effective method was to mix one pound of Paris green with fifty pounds of bran, slightly moistened with water, to which a little sugar has been added, and scatter this mixture around on the spots infested by the worms.



Water Lilly (Imp.) = 436280=.

At 18 months old, first as junior yearling and gold medal as best female in junior class, Toronto, 1912. Included in dispersion sale on March 21st of Shorthorn herd of Giffelto # B-03, Mcville, Ont. See Gossip.

FARM.

Early Seeding.

(Ottawa correspondence.)

In concluding his evidence before the Agricultural Committee, Dr. William Saunders, Director of Dominion Experimental Farms, dealt especially with the advantages of early seeding. The average results of ten years' experimental work conducted by the experimental farms, he said, demonstrated that sowing wheat, barley and oats as soon as the soil was in condition to receive the seed, resulted in a substantial increase in the yield of grain, compared with the crop when the seed was not sown as soon as the soil was in condition to receive it. In the tests at the experimental farms, Dr. Saunders said plots were sown with wheat, barley and oats at intervals of one week, the first plot being sown just as soon as the soil was in condition, the second a week later, etc. The average results for the years proved conclusively that the earlier the grain was sown the larger crops would be obtained. The difference between the yields from early and late sowing were more marked in Ontario, Quebec and the Maritime Provinces than in the Northwest; still, the average results showed that it also paid to sow as early as possible in the Northwest.

A similar series of experiments, Dr. Saunders explained, had also been carried on with field roots during the past five years. The results also showed that the seed of field roots should be sown as early as possible. Experiments were conducted with turnips, mangolds, carrots, and garden sugar beets. The first plot of seed was sown about the middle of May, and some

They actually prefer the bran mixture to green vegetation, eat readily of it, with, of course, fatal results. Fifty pounds of the mixture, the speaker said, would be sufficient to treat an acre of land.

To protect cattle from the ravages of the horn fly, Dr. Fletcher recommended mixing one pound of pine tar in five pounds of lard, and applying the mixture to the parts affected with a rag or brush.

One of the members of the committee wanted to know if choss would develop from the wheat. The question gave rise to an interesting discussion. Dr. Fletcher affirmed that there was no possibility of wheat degenerating into choss. Several members of the committee could not agree with this, and cited instances to prove their contention. "I am absolutely positive," said Dr. Fletcher, "that wheat and choss are two entirely different plants. To prove this, next season when you have wheat and choss growing together, pull up a stem of each, and you will see that the seed from which the choss plant has sprouted, and the one from which the wheat plant is growing, are entirely different."

A number of years ago, the speaker continued, the "Farmer's Advocate" had a cut of a choss plant growing from a grain of wheat. Examination proved, however, that the seed from which the choss grew had only adhered itself to the grain of wheat, and was entirely different in formation to the latter. In concluding his evidence, Dr. Fletcher said that he defied the world to prove that he was wrong in regard to the point at issue.

Nitro-culture for Test.

To the Editor "Farmer's Advocate":

Sir,—The Bacteriological Department of the Ontario Agricultural College intends to send out this year small quantities of nitro-culture for the inoculation of seed of the various legumes (peas, beans, vetches, clovers, and lucerne or alfalfa). Whilst the distribution will largely be confined to Ontario farmers, the Ontario Department of Agriculture are permitting us to send a number of samples to other provinces. The use of these cultures is not advised on those farms on which the various legume crops grow well, as such soils are already well inoculated with the needful bacteria which draw the nitrogen out of the air and feed it to the plants. But on those soils upon which legumes do badly, and where there are no nodules on the roots, the use of these nitro-cultures is advised. When soils are deficient in other necessary plant food, as potash and phosphorus, these cultures will not give good results. Applications for these nitro-cultures should be sent to the Bacteriological Laboratory without delay, stating the kind of legume the farmer desires to plant and the amount of the seed that he intends to use.

F. C. HARRISON.

Bacteriological Department, Ontario Agricultural College.

Emmer.

To the Editor "Farmer's Advocate":

Now is the time to think about what we are going to sow this spring, and I think every farmer would do well to give emmer at least a thought, and many a trial. Emmer is not a new grain, but was, we are told, grown by the ancient Egyptians, and was carried to Russia, whence we got it a few years ago.

The first seed we had we got of W. G. Douglas, Winnipeg, in the spring of 1900, and paid four cents a pound for it. We sowed it on a piece of soil, of a limestone gravel nature, which was hardly in fair condition, but got a yield of seven bushels and a half from a half bushel, at the rate of forty pounds to the bushel.

The following spring we sowed about three acres, and had one hundred bushels. In 1903, we sowed eight acres, and had a yield of 345 bushels, or 43 bushels per acre. The condition of the soil was not good either, as it was plowed from sod, and cropped with oats the two years previous, and had had no application of fertilizer of any kind. This is better than either barley or oats will do here.

As feed, we have found emmer excellent; would consider it better than barley or oats for cows or fattening cattle. For hard-working horses we have found it good; we feed whole, same as oats. Have never fed it to hogs alone, but have found it all right mixed with barley or rye. For laying hens it is good, and we have fattened our turkeys on it, and they were as good as when fed on corn. They actually preferred it to corn, and hens did also.

Emmer, it is claimed, will stand more drought than other grain, but this we are unable to prove, as we have had a great deal of rain every season since we have had it. The straw is not so good as the seedsmen claim it to be. It is inferior to oat or barley, and about equal to wheat straw.

The cultivation for emmer is about the same as for any other grain. We have found that two bushels is about the right quantity to sow per acre. It does well on nearly any soil. We have had it on limestone gravel, sandy loam, and clay. We thought it was a little better on the sandy

loam than anywhere else. We also noted that it ripened earlier there.

It should be sowed early, as, like any other grain, if late it is apt to be light in weight. However, it will stand as late sowing as oats, and be all right.

In threshing, be sure to have your thresher open the cylinder of his machine, for if threshed close like other grain it will be badly hulled, and it should not be. It does not need to be run through the bearder like barley, as the beards thresh off without. Forty pounds is about the weight per measured bushel.

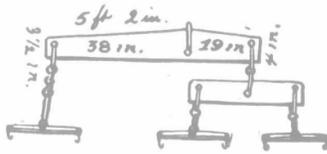
Prince Edward Co., Ont. A. S. W.

Three-horse Enever.

I would be pleased to have you inform me the way to make a three-horse attachment that I can put on my wagon, cultivator, or any implement with the tongue in the center; or, perhaps, if you cannot inform me how to make one you can tell me how or where I can procure one.

A SUBSCRIBER.

The accompanying self-explanatory cut of a three-horse enever appeared in the "Farmer's



Advocate," in our first March issue, 1897, it having been made from a drawing sent by a subscriber. Anybody having an enever which he considers better than this one is requested to send us a plain pen-and-ink drawing, with necessary description.

Drainage and Ventilation.

A letter of inquiry addressed to W. A. Dryden, Ontario Co., regarding the ventilation system in use in their new barn, and also the purpose of the tile drains indicated in the plan as published in our issue of February 23rd, elicited the following reply. We would like to hear from others who have systems that are satisfactory:

We built our stable on the level ground, and as we had no bank to build into, you can, of course, see the necessity of the drains, especially seeing that the land has a slight tendency to slope towards the building. You may also notice that the drains that run through the stable are each behind a row of cattle, so that if any moisture whatever works through the cement the drain is there to catch it. And you will also notice that two of the drains run under the silos to carry off what extra moisture there may be at the time we fill them.

The object of the drain around the outside is to keep the wall perfectly dry and the foundation free from wet. All foundation should have at least a drain around the outside. This drain also carries off the roof water.

Our system of ventilation is very simple, consisting of ten ventilator shafts running from the ceiling of the stable up to the peak and out through the roof from five vents. The shafts run up nearly to the purline plates, one on the north side and one opposite on the south, crossing and joining to go out through the roof. This is a very simple system for taking off the foul air, and we have found it to be entirely satisfactory. We have never yet had any down draft, and never have we failed to find that a strong current was running up.

We depend entirely on the windows for the inlets. Besides the regular windows in the wall, we have a window in each door. Our doors are all on rollers, and the window slides also. The windows in the wall are hinged in the center, the top half falling backward, so that we can allow them to be only slightly opened, or we can put them back and allow an open window on a warm day. In cold weather we find that by having a few windows partly opened we get plenty of fresh air, and also that with this style of windows the draft is upward, and has no tendency to drive on the backs of the cattle.

I believe that the scientific way would be to close the windows, and have some complicated intake that would supply each cow with so many cubic feet of air in a given time. I would just say about this system that "it works," and does it well, and that if properly regulated our stable is very free from foul air and bad odors. With our Shorthorn cattle we do not desire to keep the stable so warm as some of the dairymen would wish for their milking cows.

The Best Printed.

I think the "Farmer's Advocate" is the best paper printed to-day. I am well pleased with it. Durham Co., Ont. FRED J. CAMPBELL.

The Seed Control Act, 1905.

Following are the provisions, stripped of legal verbiage, of the much-talked-of seed bill, reprinted as amended in committee of the whole at Ottawa. The bill has since been slightly altered in clause 11, on its third reading in the House of Commons, and is, of course, subject to whatever amendments the Senate may be prevailed upon to make.

PROVISIONS.

Clauses 1 and 2 provide that the Act shall be known as the Seed Control Act, 1905, and come into force September 1st, 1905.

3. No person shall sell, or offer, expose or have in his possession for sale, for the purpose of seeding, any seeds of cereals, grasses, clovers or forage plants, unless they are free from any seeds of the following weeds: Wild mustard or charlock (*Brassica sinapistrum*, Boiss), tumbling mustard (*Sisymbrium sinapistrum*, Crantz.), hare's-ear mustard (*Coringia orientalis*, Dumort.), ball mustard (*Neslia paniculata*, L. Desv.), field pennycress or stinkweed (*Thaspi arvense*, L.), wild oats (*Avena fatua*, L., and *Avena strigosa*, Schreb.), bindweed (*Convolvulus arvensis*, L.), perennial sow-thistle (*Sonchus arvensis*, L.), ragweed (*Ambrosia artemisiaefolia*, L.), great ragweed (*Ambrosia trifida*, L.), purple cockle (*Lychnis Githago*, Lam.), cow cockle (*Vaccaria Vaccaria*, L., Britton), orange hawkweed or paint brush (*Hieracium aurantiacum*, L., and *Hieracium praealtum*, Vill.), ergot of rye (*Claviceps purpurea*, Tul.), unless each and every receptacle, package, sack or bag containing such seeds, or a label securely attached thereto, is marked in a plain and indelible manner:

- (a) With the full name and address of the seller.
- (b) With the name of the kind or kinds of seed.
- (c) With the common name or names of the aforementioned weeds, the seeds of which are present in the seed.

(2). The provisions contained in this section shall not apply to the sale of seed that is grown, sold and delivered by any farmer on his own premises, for seeding by the purchaser himself, unless the purchaser obtains from the seller at the time of sale a certificate that the seed is supplied to him subject to the provisions of this Act.

4. The sale is forbidden of any seeds of timothy, red clover, alsike, or any mixture containing the said seeds, in or from any receptacle, package, sack or bag upon which is marked "No. 1," or any other designation which represents such seeds as of first quality, unless they are free from the seeds of weeds named in section 3 of this Act, and are also free from the seeds of white cockle (*Lychnis vesportina*, Sibth.), night-flowering catchfly (*Silene noctiflora*, L.), false flax (*Camelina sativa*, Crantz.), Canada thistle (*Cnicus arvensis*, Hoffm), ox-eye daisy (*Chrysanthemum Leucanthemum*, L.), curled dock (*Rumex crispus*, L.), blue weed (*Echium vulgare*, L.), ribgrass (*Plantago lanceolata*, L.), chickory (*Cichorium Intybus*, L.), and contain out of every one hundred seeds not less than ninety-nine seeds of the kind or kinds represented, or seeds of other useful and harmless grasses and clovers, of which ninety-nine seeds ninety seeds must be germinable.

5. The Governor-in-Council may make regulations determining the maximum proportion of seeds of the weeds named in sections 3 and 4 of this Act, that may be tolerated, in any seeds without affecting their character as being free from the seeds of the said weeds.

6. No person shall sell, or offer, expose or have in his possession for sale, for the purpose of seeding in Canada, any seeds of timothy, alsike or red clover, or any mixture containing the said seeds, if the seeds of the weeds named in sections 3 and 4 of this Act are present in a greater proportion than five to one thousand of the seed.

7. The provisions contained in this Act shall not apply to—

- (a) Any person growing or selling seeds for the purpose of food.
- (b) Any person selling seeds direct to merchants to be cleaned or graded before being offered for sale for the purpose of seeding.
- (c) Seed that is held in storage for the purpose of being recleaned, and which has not been offered, exposed or held in possession for sale for the purpose of seeding;
- (d) Seed marked "screenings," and held or sold for export only.

8. Every person who, by himself or through the agency of another person, violates any of the provisions of sections 3, 4 and 6 of this Act shall, for each offence, upon summary conviction, be liable to a fine for the first offence not exceeding one dollar, and for each subsequent offence not exceeding five dollars, together with the costs of prosecution, for each receptacle, package, sack or bag in or from which seeds are sold, offered, exposed or had in possession for sale contrary to such provision; provided that the total amount of the fine shall not exceed, in the case of a first offence, five dollars, and in the case of a subsequent offence, twenty-five dollars, and in default of paying such fine and costs, shall be liable to imprisonment, for a term not exceeding one month, unless such fine and the costs of enforcing it are sooner paid.

(2). Nevertheless, if the accused proves to the magistrate before whom he is tried that the package containing the seed respecting which the complaint or information is laid, was purchased by him directly from a seed merchant domiciled in Canada, and was not opened, or the state of the seed was not altered while it was in his possession, and he had no reason to believe that the seed did not comply with the provisions of this Act,

he shall, upon disclosing the name of the person from whom he purchased the seed, and the place and date of the sale thereof, to him, not be liable beyond the costs of prosecution.

9. The person on whose behalf any seed is sold, offered, exposed, or had in possession for sale, contrary to the provisions of the foregoing sections of this Act, shall be prima facie liable for the violation of this Act.

10. Any person charged with the enforcement of this Act may enter upon any premises to make any examination of any seeds with respect to which he has reason to believe that any provision of this Act is being violated, and may take any samples of the said seeds, for which samples the owner of the seed shall be paid in accordance with its current value; and any person who obstructs or refuses to permit the making of any such examination, or the taking of any such samples, shall, upon summary conviction, be liable to a penalty not exceeding five hundred dollars, and not less than twenty-five dollars, together with the costs of prosecution, and in default of payment of the said penalty and costs, shall be liable to imprisonment for a term not exceeding six months, unless the said penalty and costs are sooner paid.

11. Any inspector, informant or complainant who finds or has good reason to suspect seeds to be sold, or offered, exposed or had in possession for sale for the purpose of seedling in violation of the provisions of this Act, shall take a sample from the said seeds and forward it to such person as the Governor-in-Council appoints as an official seed analyst to examine and report upon any seed submitted for analysis under the provisions of this Act.

12. Any sample of seeds taken from any seed which are found or suspected to be sold in violation of the provisions of this Act, shall be taken and forwarded to an official seed analyst—

(a) From seeds that are sold in sealed packages, at the time of the breaking of the seal thereon; and

(b) From seeds that are not sold in sealed packages, within seven days from the date on which the seeds entered into the personal possession and became the property of the purchaser.

14. It shall be the duty of any official seed analyst to examine any seeds sent to him in accordance with the provisions of this Act, and to send one certificate of analysis of the said seeds to the inspector, informant or complainant from whom they were received, and one certificate to the seller of the said seeds, and to place one certificate on file in the Department of Agriculture.

15. The certificate of analysis of any official seed analyst on any sample of seeds forwarded to him under this Act shall be accepted as evidence in any prosecution under the Act.

17. The Governor-in-Council may make such regulations as he considers necessary in order to secure the efficient enforcement and operation of this Act; and may by such regulations impose penalties not exceeding fifty dollars on any person offending against them, to be recoverable on summary conviction.

18. Any prosecution against any person, pursuant to a report made to the Minister of Agriculture respecting that person, under subsection 3 of section 8 of this Act may be commenced within twelve months from the time when the matter of complaint or information arose, and not later.

Experience with Emmer.

To the Editor "Farmer's Advocate":

Having read an article on the growing of spelt in your issue of February 23rd, I thought I would give your readers my experience on growing emmer, a grain which resembles spelt very much, but which I believe is far superior. In fact, I am of the opinion that our spelt friend is really in possession of emmer, as I read in a report or pamphlet from the Ontario Agricultural College that two-thirds of the so-called spelt throughout the country was not spelt but emmer.

Perhaps it would be well here to point out a little difference between the two grains. Spelt is not so bright a grain as emmer, and possesses considerable more hull, otherwise they are very much alike, if I remember right, as it is a good while since I have seen any spelt, not having any experience with it, only learning to distinguish it from emmer. Perhaps, Mr. Editor, you can give the difference between the two grains better than I can, as I believe a good many of your readers do not know one from the other.

Well, in regard to our experience with emmer, three years ago I sent to the O. A. C. for an experimental sample, and received one pound, which I sowed as instructed by the experimental department. When it first came up I thought, "Well, that grain is not going to amount to much, anyway." It came up very thin, but in two or three weeks I changed my mind. The way it stooled out surprised me.

I don't remember what we took off that one pound, but I took the third crop off last summer, and it yielded us 58 bushels to the acre; quite a percentage of it hulled before threshing. It is very easily threshed. Last year we let it get a little too ripe, and it shelled quite a lot while drawing it in, and, besides, the straw did not make good feed, as it got hard, but the previous years we cut it a little on the green side, and the straw made good feed for cattle—they preferred it to oat straw; neither had we any trouble with it shelling.

For feeding purposes I think it is ahead of barley, and I believe it has given fairly good results where tested.

Next year we intend sowing some mixed with oats

and wheat, as it ripens about the same time, and we want our ground to produce as much as it can without breaking down. The grain all goes through the grinder, so it might as well be mixed one time as another.

Grey Co., Ont.

L. B. N.

Preparation of the Soil.

The requirements for the germination of seeds are a proper degree of moisture, air, and a suitable temperature, and the preparation of the soil must be directed to bringing it into such condition as to furnish these requisites—each to the most favorable degree. Since both water and air are essential, it must be clearly perceived that seed will not grow in a water-logged soil. There it finds water enough, but not sufficient air, and it rots. On the other hand, it will not grow in a soil that is over-dry. A soil which is fairly mellow, which contains a little more than one-half of the total amount of water it is capable of holding, and in which a considerable proportion of the interspaces is filled with air, is in the condition most favorable to the germination of seeds. The initial step in the process of germination is the swelling of the seed, which is due to the absorption of water, but, as stated, the seed must not lie in water. It must, however, be in close contact on all its sides with the particles of the soil, in order that it may take from these particles a portion of the capillary water which they hold. Soils, then, in preparation for seed, should be thoroughly fined. If lumpy, there is danger that large air spaces between the lumps may lie close to the seed, and thus prevent it from obtaining the needed moisture. There is much difference in the amount of care which it may pay to use in the preparation of the soil for different seeds, though, as a rule, farmers are apt to be too careless, rather than otherwise. Still, it is self-evident that less careful preparation will be essential in the case of crops such as potatoes, corn and beans, than for those where the seed is smaller, the young plantlets more delicate, and the growth at the start more feeble and slow. In the case of the crops just designated, the store of food for the nutriment of the new plant is large, and it may succeed in getting a good start under conditions in which more delicate growths would fail to do so. The utmost care in fining the soil is essential for such crops as onions, carrots, celery, and many others with similar characteristics. There is, further, great individual difference between plants, in respect to the degree of compactness of soil favorable to growth.

With some (among which Indian corn is an example), soil which is very loose and friable should, as a rule, be plowed but a short time before the seed is planted. At the other extreme is wheat, which thrives best in a somewhat compact soil. In preparation for this crop, it is best to plow some weeks before the seed is put in, and the later operations in preparation for seeding may well be such as to tend to make the lower strata of the soil quite firm and solid. The depth of preparation must vary for the different crops. For sugar beets, the soil must be mellow the full depth to which the beet root extends, in order that it may develop wholly underground, and produce the smooth root which the sugarmaker desires. For Indian corn, on the other hand, it seems unnecessary to work the soil to a very great depth. Notwithstanding the fact that certain crops may thrive with shallow preparatory culture, it is, without doubt, the more frequent fault among farmers to plow and work the soil to insufficient depth rather than the reverse. Though many crops will grow in soils not deeply worked, there are few which will not do better in deep than in shallow soils.

The quantity of seed required per acre, which it will pay to use, may vary with the object for which the crop is to be grown. Cereal grains and corn, when grown for fodder, are more thickly sown than when grown for grain. Sugar beets, when grown for sugar factories, should be more closely planted than when grown for stock, because the sugar manufacturers demand a root of comparatively small size, which experience has shown to be of a better quality than large roots. A sugar beet grown for seed stock is still more thickly planted. The quantity of seed required varies with the soil. The poorer the soil, the greater the quantity of seed which should usually be used. Individual plants on a poor soil are relatively small, and they do not require so much room as individual plants on a richer soil. Many of the grains stool vary abundantly on rich soils, but little on poorer or drier soils. Far less seed, therefore, suffices on those soils which are of such a character as to favor the development of large individual plants. The quantity of seed required may vary with the season when it is planted, with few exceptions. If any crop is planted out of season, whether too early or too late, but especially if planted somewhat too late, more seed is required than if planted in season. Oats should be sown, for example, as early in the spring as possible. If sown at that time, the individual plants stool abundantly. From a single root a large number of stems are produced. A comparatively small quantity of seed suffices. If sown late, the weather being warm, oats stool far less, and more seed is required. The seed required may vary with its quality, especially as regards percentage of germination, and, to some extent, no doubt, with variety. Where the percentage of germination is found by trial to be low, or is reported by the seedsmen to be low, it is self-evident that the quantity of seed used must be relatively large.

The depth to which seed should be covered varies with the soil and with the season. In soils retentive of moisture, or early in the season, when the amount

of moisture in the soil is likely to be large, comparatively shallow covering should be the rule. In proportion as the soil is light, sandy, inclined to be dry, or the season hot and dry, the deeper should be the covering. No invariable rule as to the depth of any single seed, therefore, can be given, but, of course, the depth of covering required by different seeds varies widely. It will, however, generally be found that a depth of covering equal to from about three to five times the short diameter of the seed will be suitable.

It has been pointed out that seed must be planted under conditions which insure close contact between the soil particles and itself. To make this contact as close as possible, many recommend compacting the soil above and about seed which has been planted. In the case of all the lighter soils, soils which are exceedingly mellow and loose at the time of planting, soils which have little capillarity, this process is useful. It makes it the more certain that the seed will be able to get the water it needs. In the case of soils with great capillarity, soils which contain a great deal of clay, and which incline to form a crust which becomes very compact and solid after rains, it is better that the soil about the seed be left as light as possible. Most of the planters used in putting in the ordinary field and garden crops are provided with a roller, and its use is somewhat necessary for covering the seed, but in the case of soils inclined to crust formation, it is better that the rolling be omitted, or that it be made as light as possible. Whether or not the field which has been sown to one of the cereal grains should be rolled should be determined by similar considerations. On all the lighter, drier soils, rolling is quite certain to be beneficial.

Perth Co., Ont.

H. E. H.

Oat Smut, and How to Check It.

A Wisconsin bulletin on smut in oats says: "The black dusty matter often found in the heads of oats at harvest time is made up of the tiny seeds or spores of a fungus which has lived on the oat plant during the growing season. When this rusty material, made up of an almost infinite number of spores, is blown about, some of the spores, which are the same as seeds of higher plants, become attached to oat grains. The smut spores so attached go along with the grain into the oat bins, and follow it into the field, and are sown with it at seeding time. When the oat grains sprout, the smut spores also sprout, and soon send suckerlike tubes into the young oat plants. These fungous plants spread inside the oat stems, sucking the juice, and thus injuring the host plant. Finally, that part of the fungous plant which has grown up into the head of the oats matures into spores, which are formed in what would otherwise be useful oat grains. Thus we find, as the oats ripen, smut heads. The spores from such heads, blown about by the winds, scatter the trouble.

"It is equally important to know that practically all of the oat smut spores which lie out of doors over winter in the wet and cold, are killed by such exposure, and do no harm to subsequent crops of oats. It is only the oat-smut spores which adhere to the grains of oats, and stay with them during winter in the grain bins or grain sacks, that do harm, and if these can be killed before seeding time, then the fields of oats will be practically free from smut when harvest time comes.

"Affected oat plants make a sickly growth, and generally head lower and somewhat later in the season than the healthy plants; therefore, the extent of damage to the crops is not noticeable by casual observation. It is largely due to these facts that smut has been able to invade the oat fields of the State almost unnoticed by the farmer, until it has gained its present strong foothold.

HOW TO TREAT SEED OATS TO PREVENT SMUT.

"If the desire is to sow fifty bushels of seed oats, or less, secure from your druggist one pint of formaldehyde. Put into a barrel or tank thirty-six gallons of water, and pour in the pint of formaldehyde liquid, and stir thoroughly. Next fill a gunny-sack with the seed oats, and submerge it in the solution for ten minutes, then lift the sack from the barrel, and allow it to drain for a minute or two, in order to save the solution. Empty the oats on a threshing floor, or on some outside platform, to dry, and repeat until all is treated. Shovel the treated grain over at intervals until dry or nearly dry before sowing.

"If a large quantity of seed is to be treated, the work will be facilitated by having several barrels or a large tank which will hold a number of sacks of oats, so as to treat several bushels every ten minutes. The time saved by having an abundant supply of the solution in the tank or barrels will more than repay the extra expense of the formaldehyde purchased.

THE OATS MUST ALWAYS BE COMPLETELY SUBMERGED FOR TEN MINUTES.

"It is well to treat seed grain several days before sowing, in order to give it ample time to dry, or difficulty may be experienced when sowing with seeder or drill. If sown while damp, the seeder or drill should be set so that it will sow

about one bushel more per acre than when sowing dry oats.

"The formaldehyde solution here recommended is not poisonous to farm animals, and will not injure sacks or clothing coming in contact with it. Oats treated with formaldehyde solution and not used for seed may be fed to stock, but when so fed should be mixed with other oats.

"The treatment of oats here recommended facilitates the sprouting, and gives the grain a healthy appearance, readily distinguished by any observer. It is possible that the treatment kills other disease germs, of which we, as yet, have no knowledge."

About Industrial Exhibitions.

To the Editor "Farmer's Advocate":

Expositions, McKinley said, are the "timekeepers of progress." But expositions are, or should be, more than that. They do more than merely reveal a few years' progress of a nation or nations. They instruct the people in the means by which progress is made. Expositions are world-teachers, and the more distinctively educational they are, the nearer they approach to being ideal.

It is true that a comparison of products creates an incentive for the producer to attain greater excellence in his products. But the excellence of a product depends upon the skill and effectiveness with which the process of its production is carried out.

If you exhibit to an art student a beautiful and technically correct painting, you will, no doubt, stimulate, elevate and refine his ideal, and encourage him to renewed efforts, but you would render him more valuable assistance if you performed in his presence the process from beginning to end, by which the painting was evolved.

This principle of uniting theory and practice, of teaching by object lessons, as well as by objects, is coming to be the ruling one in the great expositions. The same principle should dominate our agricultural fairs. Like national and international expositions, they should be essentially educational. If they are not educational they fall short of achieving the purpose for which they are supposed to be organized.

It is true that a large proportion of the people who attend fairs look upon them as institutions for entertainment, and give them their approval or condemnation according as they do or do not find them entertaining. Whence arises this evil? Some will say the fault lies with the public. This, in part, no doubt, is true. Yet I do not hesitate to say that local show managers are largely responsible for the defection. It is a fact too well known to require proof that a public taste can be cultivated for almost any form of diversion. The commoner and baser instincts of mankind call for amusement, and it is to these instincts that local show managers usually appeal. They get out large posters, advertising in glaring and prominent type races, fireworks, acrobatic feats, or balloon ascensions; in every case the sensational is given prominence over the rational and the useful. I have no special condemnation for racing contests, fireworks, tight-ropes, balloons, etc. They are all right on appropriate occasion, and, if kept within proper limitations, may even be useful and instructive; but if you are going to have an industrial fair, let it be an industrial fair, and not a horse-race or circus parading under that name. It would be quite as sensible to bring a cageful of monkeys into a school to get an increased attendance of children, that you might more effectively teach them reading and writing, as to bring sensational features into an industrial fair, thinking thereby to make the industrial part of the fair more effective. Large gate receipts are essential to a successful exhibition, but they do not necessarily indicate that the purpose of the exhibition has been successfully carried out.

Agricultural societies make a mistake in handing over the management of their exhibitions to race-horse men, or men of sporting proclivities. The management should consist of rational, thoughtful men, with plenty of energy and clear-cut ideals of the real purpose and functions of an industrial fair.

It is asserted, and very widely believed, that without racing events, side-shows, etc., it would be impossible to awaken sufficient interest in an exhibition to make it a financial possibility. This is a mistake. In the first place, the racing and side-show features do not increase the interest in the agricultural and live-stock exhibits any more than the monkeys would stimulate a desire on the part of the children to study their lessons. On the contrary, these sensational events monopolize the attention of the people, thus frustrating the real purpose of the exhibition. In the second place, if the directorate consists of the right men, if the show is well organized and properly carried out, the people will respond without the inducements of sensational amusements.

To arouse interest—I mean sane, healthy interest—the industrial part of a show should be well advertised. The managers should address personal letters to prominent men in the various communities in their districts, inviting them to co-operate in making the show a success. Let the people feel that they have a responsibility in the matter, that the success of the show depends upon their attitude toward it, upon their personal

efforts. Invite them to come and help make the show, rather than to come and enjoy a show someone else has made. Comprehensive prize-lists should be got out and circulated well beforehand, and the directors in charge should see that the exhibits are placed in positions conspicuous and convenient for inspection. The judges should be men who are specially qualified to judge the exhibits under their particular departments. The live-stock judging might well be accompanied by instructive lectures; for while it is well to know that an animal is superior to other animals in its class, it would be a much greater advantage to know why it is superior, and how such superiority may be attained.

There should also be lectures on practical grain-grading and scientific agriculture, bearing on soil fertilization, rotation and adaptation of crops, noxious weeds, etc. In short there is, to my mind, no more appropriate time or place for instructive lectures on agricultural subjects than at an agricultural fair.

There should be practical demonstrations by actual process in as many as possible of the industrial and household arts. Buttermaking contests, with both the dairy and creamery processes, would be interesting and attractive features, and, where practicable, plowing matches might be held.

The same hackneyed programme should not be carried out year after year. New features, new methods, interesting and instructive, should be introduced; but care should be taken that all changes are in the line of progress. There are reasons for the existence of the exhibition besides a public craving for amusement. It has purposes besides that of affording entertainment. Exhibitions advertise the resources of a country or district, educate the people in methods and processes, show the results of experiments, and help to decide as to the adaptation of products. Exhibitions reveal the deficiencies of the past, and measure up the possibilities of the future. Only by keeping in view their intrinsic values, acting under the best motives founded upon the highest ideals, can promoters of exhibitions achieve for them a success worthy of the name.

ALTA. F. W. HUNT.

First-prize Essay on Beet-pulp Feeding.

The advent of the beet-sugar industry in Ontario has, among other things, directly affected the farmer, by means of introducing a new stock food, called pulp, which is simply the pulped beets after the sugar has been extracted. It consists of narrow V-shaped strips, about as thick as an ordinary pencil, and from two to five inches long.

We have now been feeding it to our cattle for the last three years, and I shall endeavor to briefly give you and such as are interested, our experience as regards handling, feeding and results obtained. The first thing to be considered in using pulp is storing it. To begin with, it should be mentioned in regard to storing fresh pulp:

1. That it will, in a month or so, settle down to about one-half of its original depth.
2. That in so doing it will leach considerably, and become quite soft.
3. That if kept for any length of time, the

top, or part exposed to the air, will not keep as well.

In short, it undergoes about the same process as green corn in a silo, and when cured will have a somewhat similar acid taste. Under such conditions, it will be seen that any compartment that has sufficient underdrainage, keeps the pulp in compact form and where it can be got at and taken from the bottom and side will make a serviceable place for housing pulp. In our own case, we just temporarily partitioned off a part of the cattle stable of adequate size. The incline of the floor toward the gutter afforded ample drainage, and as a pulp-room it answered the purpose well. Silos and turnip cellars have also been used in this locality, and where no other space was available it has been found to keep perfectly well if thrown in a heap in some convenient place outside.

In feeding, pulp has given excellent satisfaction, and by results it has proved itself, as a succulent food, to be well adapted for feeding purposes.

We feed it about as we would feed turnips or mangels, from twelve to fifteen pounds to a matured animal, three times a day, mixed with their other feed.

Other parts of the ration being equal, our cows each produced about one-half pound more butter per week than if fed the same weight in mangels. In regard to feeding pulp to cows, let me say that it must be of good quality, fresh, or properly stored, to insure it against tainting the butter, as has been the case where neglected, half-decomposed pulp was fed.

In feeding to fattening cattle and "dry" stock it has also given good results. It keeps the animal in prime, healthy condition, in proper shape to assimilate and make the best use of the dry feed it gets in connection. One very marked feature of beet pulp is that there is no danger of cattle scouring when fed in considerable quantities, as is the case with roots and ensilage. With swine, however, we still prefer mangels or turnips. We have fed pulp, but hogs do not relish it as they do other roots.

Taking everything into consideration—that is, when it is once home from the factory, it is pulped ready to feed, very digestible, no danger of overfeeding—with the results obtained, we prefer it to any other succulent food we have used, such as turnips, mangels and ensilage.

In valuing it, we would rate it about the same as turnips; that is, if turnips are worth six cents a bushel, pulp would be worth two dollars per ton.

In conclusion, let me say that one of the strongest proofs of the value of beet pulp as a stock food, as manifested in this vicinity, is the fact that all the pulp from the thirty or forty thousand tons of beets received annually at the Berlin sugar factory is either drawn away or shipped to the growers of beets for feeding purposes. OSCAR DESSLER.

Waterloo Co., Ont.



Doesn't Like His New Pants.

Why Grow Sugar Beets?

To the Editor "Farmer's Advocate":

Sir,—The beet sugar industry is one in which every farmer should interest himself, for several reasons. First, for patriotic reasons. Why send our money out of the country for an article which we can produce ourselves, and thus build up a foreign country instead of our own.

There is no industry which benefits such a large percentage of the people amongst whom it flourishes as the beet-sugar industry. The money for the finished article—the pure white granulated sugar—comes to the factory, shared by the host of employees and officials having a hand in its manufacture, as well as by the farmer and those employed by him in the culture of the beet. In fact, a very small part of the money realized on the product of a sugar factory goes out of the community in which it operates. This gives also indirect benefits to the farmer, as well as to the merchant.

The cultivation of sugar beets improves the land, and prepares it for larger yields of crops following beets than those following grain crops. I don't think, as is alleged by some, that the beet crop is a hard one on land. If the tops are left on the field, and the pulp returned to the farm and fed (beet pulp, by the way, is an excellent feed for stock), there is really very little taken away from the farm. The yield of crops following beets is ample proof, I think, that the beet crop is not an exhaustive one. I have taken particular notice of this for the last two years, and find that fine crops are invariably grown after beets. Then it is a crop that gives a farmer an opportunity to clean his land without losing a crop, as in summer-fallowing.

It is a profitable crop in itself. There is no other crop grown which gives the farmer such large returns for his labor and trouble as the beet crop. Ample figures have been published to prove this.

The number of acres a farmer should grow depends on the help he can obtain. No more should be planted than can be well taken care of. An average hoer can easily keep two acres in good condition throughout the growing season, if they are sown at two different dates, and pull and top them in from twelve to fifteen days. In 1902 I grew forty-five acres (39 of which were on rented land); I had an irregular gang, but the thinning, hoeing twice, pulling and topping, cost me \$637.11. In 1903 I had 25 acres (all on my own land), and a permanent gang of ten hands (boys and girls, from 13 to 20 years old). This force kept the twenty-five acres in good shape, hoeing the entire crop three times. This would give each hand 2½ acres to handle. Now, I think almost every farmer might grow at least one acre without engaging any extra help, and not find it overly burdensome, but very convenient when the tax collector calls. Five acres I consider a proper acreage for a farm of one hundred acres, provided the help to take care of them is available. Then you can get beets, along with your other hoe crops, into your rotation of farm crops.

Waterloo Co., Ont.

J. G. HURST.

DAIRY

Experimental Work, O. A. C. Dairy School, Guelph.

In the Dairy Stable.—The experiments with cows receiving 4, 8 and 12 pounds of meal per day indicate that about 8 lbs. of meal per day is sufficient for the average cow giving three to four gallons of milk daily. Two calves on hay, silage, skim milk, bran, oats and oil cake, gained 101 pounds in 21 days during February. Two other calves fed on a similar ration, except that the oats and oil cake were replaced with "Blatchford's Calf Meal," gained 76 lbs. in 21 days. The two lots have been reversed for the second period, in order to make allowance for the individual characteristics of the calves.

In the Testing Department.—Cream having 25 to 30 per cent. fat, tested in a Turbine tester, and read at a high temperature, produced a reading of from .5 to 1.5 per cent. higher than that tested in a hand machine. The practice of adding the hot water after mixing the cream and acid, and whirling once, seems to produce quite as satisfactory results as the usual method of adding the hot water at one or two intervals. This plan saves time in testing cream. The use of an 18-c. pipette for sampling cream produces relatively lower results in ripe than in sweet cream. Where the Babcock test is used it places a premium on sweet cream. There is a strong desire on the part of owners of cream-gathering creameries to have the spring balance made a legal scale. We have used one of these for weighing milk in the dairy stable for about fourteen years. In a recent test it was only one ounce short on twenty pounds. So far as we can see, there is no objection to its use.

Cheesemaking.—In making cheese with pepsin as a coagulating agent, we find that it takes double the quantity recommended by the manufacturers to equal the strength of rennet. In milk with normal acid, pepsin does not give as good a coagulation as rennet. In milk with a high per cent. of acid, or overripe milk, the results compare more favorably. We also tested cutting curds at different stages of firmness, and found that cutting curd very carefully when slightly tender gives the best results. Three brands of cheese color were tested, and found to be all of equal strength, and the general results were alike, so far as could be determined by examining the curds. The cheese are too green for testing at this date.

Butter Department.—Pasteurization of ripened cream at 185 degrees F. vs. heating of similar cream to 130 degrees F. The cream was a mixture of cream-gathered and that obtained from whole milk. It contained 35 per cent. fat. The cream was allowed to ripen naturally for 24 hours. The acidity was .54 per cent., and the flavor was poor and typical of this class of ripening. Half of the cream was pasteurized at 185 degrees F., and the other half was heated to 130 degrees F. The Farrington pasteurizer was used in both cases, and the covers were left off. The flavor was improved in each case by the heating. The cream was cooled to 52 degrees, and churned 18 hours after this treatment. No culture was added, and, practically, no further development of acid took place in either cream. When the butter was examined a few days after being made, there was a difference of opinion as to which was of better quality. When examined again in about two weeks time, there was still a difference of opinion as to the relative value of the two samples. Most of the judges thought the butter made from heating to 185 degrees F. was "cleaner" in flavor. Both lots were inferior butters.

Farm Dairy.—Several trials were made, comparing temperatures of 75 degrees F. and 95 degrees F., for separating milk with the hand machines, and it was found that the loss of fat in skim milk was nearly double by running the milk through at the lower temperature. In most cases the milk was "old," and the loss greater than would be the case with fresh milk. However, these tests indicate the importance of having the milk at a temperature of 85 to 95 degrees in winter for good results.

Three experiments have been lately made to test the churning quality of sweet and sour cream. Cream from the same source, exactly of the same weight, per cent. of butter-fat and temperature, was put into the same sized churns, and the work carried on as nearly alike as possible.

In two of the experiments the sweet cream churned each time five minutes sooner than the sour, while in the third trial the sweet cream was ten minutes longer than the sour. In none of the churning was there an excessive loss of butter-fat in the buttermilk, the loss being practically equal in the experiment where the sweet cream was the longer in churning, while in the other two it was slightly greater in the buttermilk from the sweet cream.

From other similar experiments, Miss Rose is of the opinion that the ripening of cream is not an important factor in the length of time required for churning, and if the churning temperature be properly controlled, very little extra loss of butter-fat is sustained in the buttermilk.

Keeping the Stable Clean.

One of the greatest needs on ninety per cent. of the farms to-day is more care and taste in keeping the cattle stables clean and in better condition. A great many stables are so low and dark that one can scarcely see the animals when he first enters. Besides lacking ventilation, the ceiling and walls are covered with cobwebs, dust and dirt; the passages behind the cattle (a great many are plank floors) are covered with manure, much of which is carried on the boots of those who do the work to the feed passage, and is mixed in the feed which the stock eat.

Then, again, on nearly every farm there are cows giving milk, and as the cows lie down their udders get covered with manure and filth; then think of the hands of the milker as he gets up from drawing the milk from the cow, to say nothing of what has dropped into the pail while the process of milking was going on. This milk is taken to the house for the family to drink, or to be made into butter. Surely this state of things is shameful. Why not pull out the half-rotten plank floors in summer-time, when stock are out, put in cement floors, then get a broom and brush down the cobwebs and dust? Get a whitewash brush, or spray pump, or both, and give the walls, stalls and mangers a good coat of lime; then buy a good stable broom—such as the blacksmith uses—and sweep up the passages, both behind and in front of cattle, not only once a day, but three times a day. When you go to milk, take some warm water, or a damp cloth, wipe off the cow's udder, and when you get through milking you need not care if the preacher comes into the stable, as you can shake hands with him.

Bruce Co., Ont.

W. H. R.

Cheesemaking.

(Continued.)

By C. N. Ralph.

After it has set awhile, I would press my hand on the curd, and if the whey comes to the top I would cut it down the center of the drainer, then crosswise, making pieces about six or eight inches wide. Turn these over. After they have faced up well, usually in 10 or 15 minutes, turn again, and pile two deep, and I would keep turning every ten or fifteen minutes, but do not turn the top piece upside down, as it gets dry and yellow on top, and by not turning you prevent this, and your pieces mature evenly. If you find it is coming on slowly, or not "flaxing" up good, I would pile three deep, and at the last turn before milling, leave the pieces together, as I think you will get an even curd when milling.

When your curd shows .75 or .8, mill it. This usually takes about two hours. It should be done with a mill that will cut the curd into pieces about ½ inches square, and you should have a mill that the blade comes against the curd, not one that forces the curd against the knife, and I would keep a file on hand, and occasionally sharpen your knife up a little, and you will be surprised at the results. I do not think it matters whether you cut your curd with the grain or crosswise, although it is stirred much easier in the latter case, but if your curd was slow and extra dry I would then mill lengthwise.

Stir thoroughly for 15 or 20 minutes after milling, then let stand a short time. Stir frequently from now until salting time; pile quite high a short time before salting; then air out thoroughly.

If your curd was cooked well, and has a good body, you will usually find it will be ready to salt in about 2 or 2½ hours from time of milling.

A curd that is dry, well cooked and has good body can safely be salted with 1.1 per cent. acid; but a wet or gassy curd I would give 1.25. Before salting see that there are no chunks in your curd, as the salt does not get into these, causing holes in your cheese, which are very objectionable. Use some good brand of salt. The amount to use will vary somewhat, but I think 2½ to 2½ lbs. per 1,000 of milk sufficient in summer, and 2½ in the fall. I would recommend putting the salt on four times, ¼ each time, then turn your curd over. When you have it all on, stir your curd five or six times, then pile as high as you can get it, as this causes the pieces to flatten, and they unite better when pressed. If your curd had a bad flavor at salting time, I would spread it out after it has been salted 10 or 15 minutes, and then let stand a while longer; you will find this will help your flavor.

When the salt is thoroughly dissolved, weigh your curd into the hoops, and have enough cheese to fit your boxes nicely.

Do not put much pressure on at first; just enough to let the whey run off freely. Keep up the slack. When they have been pressing 50 minutes or 1 hour, take out and bandage. Have plenty of hot water, and be sure to keep your cheese clean. Pull your bandage up at both ends, leaving about ¼ in. lap over each end of the cheese; see that the seams are straight, and that there are no wrinkles. I would advise the use of circles and also skirts. I think that a lot of our cheese are taken out to bandage before they are pressed sufficiently; the consequence is the curd is still loose, and when you pull the band you will pull curd out also. This will leave a small hole in the side of the cheese, and cause a wrinkle in the bandage. I do not think the curd will unite so well again if it has not been pressed sufficiently in the first place. There is no excuse for badly-finished cheese. Do not press too tightly at first, but see that your press is tight before you go to bed.

In the morning turn the cheese, and see if you can make any improvement on the finish. Do not let a cheese go into the curing-room that is not properly finished. After pressing 18 or 20 hours, take them in the curing-room, and mark each vat and the day of the month on the cheese. Then, if you have a batch that is not first-class, you can refer to your book, which each cheesemaker should keep, with a record of each day's work, and find out what was the cause, and probably you can get a remedy.

Try to keep your curing-room as cool as possible, not higher than 60° F.; turn your cheese every morning; keep your curing-room tidy, and when the buyer comes around and finds a nice tidy factory and surroundings, and good cheese finished fancy, it will be a pleasure for him to inspect them, and for you to show. You may not think so much of it at the time, but the picture of your tidy factory and the fancy article you have on your shelves in the curing-room will be in that buyer's mind, and when he has an order for a fancy lot of cheese he will know exactly where to go for them, and probably will have a little more money to pay for them.

I would like to go into the curing-room, and cooling of same, but time and space will not permit, but I would urge when getting cheese ready for shipment to give good weights. Have your cheese fit the boxes—not sticking 2 or 3 in. above or 2 or 3 in. below—and have nice clean boxes, and I am sure you will be surprised at your reward.

The Ottawa Dairy Test.

Fifteen cows, including Ayrshires, Holsteins and grades, were entered in the dairy test at the Eastern Ontario Winter Fair, March 6-10, and made up a fair average lot. There was no outstanding winner, like Mr. Sangster's Lady Colantha De Kol, of last year's show. The highest position this year was taken by a grade Ayrshire, owned by T. A. Spratt, of Billings' Bridge, a good cow of characteristic Ayrshire type and markings. J. G. Clark, of Ottawa, was the chief winner in Ayrshires, and his first-prize cow, Clarissa, made a very creditable showing, when it is taken into consideration that she only calved the day before the test started. The Holsteins, as usual, stood high in the test, being second and third in the general standing. The first-prize cow was of excellent dairy form, and showed a nice udder. She is owned by Neil Sangster, Ormstown, Que., and was sired by a son of Artis Peer's Poem, a well-known cow in Ontario show-rings.

The following table gives the details of the test:

	Lbs. milk.	Per cent. fat.	Total points.	Prize awarded.	Gen. st'd.
Ayrshire Cow.					
1. Clarissa—J. G. Clark, Ottawa	88.1	3.6	96.3	1	4
2. Ethel Ayr—J. G. Clark, Ottawa	76.2	3.4	79.6	2	5
3. Polly of Woodroffe—J. G. Clark, Ottawa	88.1	3.3	78.9	3	7
4. Maple Cliff Lady—R. Reid & Co., Hintonburg	59.8	3.6	65.3	4	10
5. Jess of Maple Cliff—R. Reid & Co., Hintonburg	46.2	4.0	63.9	5	11
Ayrshire Heifer.					
1. Bess of Maple Hill—J. G. Clark	68.1	3.8	71.6	1	8
2. Maple Cliff Blossom—R. Reid & Co.	61.0	3.4	63.8	2	12
Holstein Cow.					
1. Audrey—Neil Sangster, Ormstown, Que.	116.2	2.8	105.7	1	2
2. Jane—T. A. Spratt, Billings' Bridge	91.9	3.6	102.9	2	3
Holstein Heifer.					
1. Madeline—Neil Sangster	90.2	2.7	79.3	1	6
Grade Cow.					
1. Carrie—T. A. Spratt	89.7	4.2	110.7	1	1
2. White Face—R. Reid & Co.	57.2	3.7	70.0	2	9
3. Mollie—R. Reid & Co.	57.0	3.4	59.4	3	13
Grade Heifer.					
2. * R. Reid & Co.	49.0	3.4	51.2	2	14

* Did not qualify for a first prize.

Management of Babcock Tester.

We desire cheese factory to be run by Babcock tester:

1. Could our cheesemaker do the testing, he has a ten-bottle tester?
2. If not, who would, and who would have to pay?
3. Is the same test used for cheese and butter?
4. Can samples be kept sweet, so as to test once in two weeks?

Ans.—1. A ten-bottle tester would be suitable for testing milk in a small cheese factory, although, if there are many patrons, the steam-turbine machine is much more convenient, and the saving of labor would more than pay for the machine in one season. The machine should have a capacity of not less than twenty-four bottles.

2. There is no reason why the cheesemaker should not be able to do the testing of the milk, if he has had a training at a dairy school. If he has not had a training, then he should attend one before starting to test the milk. A cheesemaker should be paid either so much for the season or so much per patron for doing the testing. The usual charge is one dollar per patron, or, where there are more than one hundred patrons, from \$75.00 to \$100.00 is a fair allowance for doing the testing for the whole season.

3. The same test is used for both cheese and butter, although we advise adding two to the percentage of fat when dividing proceeds among patrons of cheese factories, as this is more nearly correct than the fat alone for cheesemaking.

4. Samples may be kept sweet for two weeks or a month by adding a mixture of potassium bichromate, 7 parts, and bichloride of mercury or corrosive sublimate, one part, in the proportion of about what will lie on a ten-cent piece for each patron's pint sample. In hot weather it may be advisable to add slightly more at the end of two weeks.

H. H. DEAN

O. A. C. Dairy School.

Wyandottes gave me fifty eggs; twelve Rocks, one hundred and ninety-three. Further, the Rock eggs are dark brown and even in size. The Wyandotte eggs vary very much in color, often being a dirty white, and the birds themselves have the same variation in size, both, doubtless, attributable to Hamburg blood. I find the Rocks more active; they are "rustlers," the Wyandottes are indolent. I never breed for feathers, but I think all will admit the Rock has a good business coat, and as regards size and shape of Rocks, let the breeder breed from blocky birds, and he'll have as good birds as any other breed.

Further, I find the Wyandotte skin is more tender than the Rock, tearing very easily when plucking. I might add, as an aside, a white bird is looked upon as a mark for hawks. From my experience with various breeds, I have concluded you cannot get all the good points in any one kind of fowl; and, also, until I find a better substitute than the White Wyandotte I'll stick to the Barred Rocks.

WALTER RIGSBY.

London, March 2, '05.

Leghorns vs. Wyandottes.

To the Editor "Farmer's Advocate":

May I say a few words in reference to Mr. Bell's reply to my article, "Are White Leghorns Best for the Average Canadian Farmer?"

Mr. Bell wants to know if I have ever heard of Australia. I have a dim recollection of having heard of such a place, but don't think it is in Canada, neither is New York. Now, in Mr. Bell's first article, I was led to believe that he was advocating Leghorns to Canadian farmers, and not to Australians or New Yorkers. I also admitted that they were best for egg farms in New York, but because they are best in New York and Australia is no reason that they are best for Canadian farmers. Perhaps Mr. Bell does not know that there is a slight difference between the climate of Australia and that of Canada. Mr. Bell wants to know why a rose-comb White Leghorn will not stand as much cold as a Wyandotte. I will tell him. The Wyandotte's feathers are much longer and softer than a Leghorn's and consequently keep out the cold better. A Leghorn's feathers are short and hard compared with a Wyandotte's. Further than that, a Leghorn's wattles, of any variety, are long and pendulous, and freeze, even if their combs do not. Mr. Bell will probably say that I got fancy prices for my eggs. So I did, but there is nothing to prevent anyone else from getting fancy prices if he can produce the article. As to the difference of producing eggs in winter and summer, Mr. Bell quotes three authorities, one of whom says it will cost five cents per dozen more, another one-third more, and still another fifty per cent. more. Allowing that it costs five cents more per dozen, or even twice as much, there is a vast difference in the profit on a dozen eggs at sixteen cents and a dozen at fifty cents, or even forty cents. If

POULTRY.

Rocks vs. White Wyandottes.

To the Editor "Farmer's Advocate":

Having been testing Rocks and White Wyandottes side by side, I must differ from Messrs. Goulding and Langelier. I have had Barred Rocks during past fifteen years, White Wyandottes two. I have bred and cared for them under exactly the same conditions, and the result of my test, so far, has been that I put the Barred Rocks first as a general-utility fowl, especially suited for the farm. My reasons are these:

I admit the Wyandotte has a good form, nice comb and attractive plumage, and possibly feathers a little earlier than the Rock, and, sometimes, lays earlier in fall, but the Rock makes first-class broilers, roasters and mature birds, and lays more eggs in the cold weather. During the past month eleven White

Cooling Separator Cream.

A correspondent of the "Farmer's Advocate," describing his way of making butter, states that in the case of centrifugal separator cream it must be cooled down to below 50, and kept at that temperature for from six to eight hours, in order to insure good firm butter that will "stand up," to use his words. In the deep-setting system, he adds, that is not necessary.

Miss Laura Rose, the well-known home-dairy expert, writes us as follows on this important point:

Your correspondent is right in his method of handling cream from the separator. If the cream is to be churned sweet, I would cool to below 50 degrees, and hold it at that temperature for two or three hours, as that is sufficient time to allow the fat globules to firm up. If the cream is to be added to that in the cream can, and allowed to sour, I would cool it to between fifty-five and sixty degrees. Many people are not making as choice a butter as they could, from the fact that they do not quickly and thoroughly cool the cream immediately after it is separated. It is not sufficient to set it in a cold place, but it should be set in cold water, and be frequently stirred while cooling.

Cheapest and Best.

I feel quite certain the "Farmer's Advocate" is the cheapest and best paper published in the Dominion. I enjoy reading it very much, and receive from it a great deal of valuable information. Wishing you success,

EDGAR GIBSON.

Waterloo Co.



Minnie of Lessnessock, Imp.

First-prize Ayrshire cow and champion female, Toronto Exhibition, 1902. A model dairy cow. Owned and exhibited by W. Watson Ogilvie, Lachine Rapids, Que., who will sell 50 Ayrshires at auction on March 22nd. See advertisement.

it costs five cents to produce a dozen eggs at sixteen cents, we have a profit of eleven cents. Allowing that it costs twice as much to produce them in winter, we have still a profit of from thirty to forty cents per dozen. In conclusion, the breed that brings the most profit will, of course, be the most popular. Let us turn to the reports of two of the largest shows in America and see which were the most popular breeds. At the last New York Show in Madison Square Garden, we find White Wyandottes heading the list with 483 specimens. Further down we see White Leghorns, S. C., 171. Right away down at the bottom of the list we find R.-C. White Leghorns, 26. At Boston, we find White Wyandottes again heading the list with 236 specimens. There were 14 breeds at Boston ahead of the S.-C. Leghorns (White), which had only 40 birds. There were no R.-C. White Leghorns reported at Boston. There is a reason. Mr. Bell goes on to say that the cost of producing eggs in winter is greater than in summer. Of course it is, but you have got to feed those Leghorns in winter, whether they lay or not, unless you have a strain that goes to sleep all winter and sucks its paws like the bears. The figures quoted in the market report in newspapers are very different from those received by private individuals who ship eggs to town, as you will see by those quoted in the Montreal papers, and those offered by grocers. The Gazette of Saturday quotes fresh eggs at 24c. to 25c. per dozen. Mr. Graham, of St. Catharines St., is giving me 35c. per dozen for all I can send him.

Now, for a few actual figures on White Wyandottes: During November and December of 1903 and the early months of 1904, from 100 April and May hatched White Wyandottes and Buff Orpingtons (50 of each variety), I got \$14.30 worth of eggs in November. In December, they laid 1,141 eggs. In January they laid 1,385, about 115 dozen. In February they laid 1,393 eggs. The prices received per dozen were: November, 40c.; December, 50c.; January, first two weeks, 45c., last two weeks, 40c.; February, 40c. for the first three weeks, 35c. for the last week. The total amount received by me from Mr. Graham was \$149.41. This is to the 1st of March.

It is only fair to the Wyandottes to say that most of the Orpingtons were broody during January and February, while only one or two Wyandottes offered to sit. At the same time, there were about 20 late-hatched Wyandotte pullets, besides the 50 early ones that started to lay about the last week in January, and the eggs from this pen were shipped with the rest, but as near as I can come to it, and to the best of my belief, those 50 early-hatched Wyandotte pullets laid about \$1.50 worth of eggs each before the first of March. Now, the same number of Leghorns would take some time to catch up to the Wyandottes, even if the Leghorn eggs were worth 16c. per dozen, and, at the same time, the Wyandottes would be laying almost as well during the summer.

I think these figures go to prove pretty conclusively that early-hatched Wyandotte pullets will lay from \$1.00 to \$2.00 worth of eggs before a summer-laying variety has started. At least, this is my experience, as I have kept both rose and single-comb Leghorns, and discarded them because they were not winter layers. Of course, if Leghorns can be got to lay as well in winter as the Wyandottes, that alters the question.

Compton Co., Que. E. C. PARKER.

Poultry at Ottawa Winter Fair.

Notwithstanding the emergency nature of the accommodation (the result of the unexpected collapse of the large fat-stock show building), the poultry show was well placed in three commodious sheds, used in fall exhibition times for the display of cattle. The show was an excellent one, and the quality of the birds ahead of any previous exhibit here. There can be no doubt that the late date at which the show was held on this occasion mitigated against it, although the number of entries was considered most satisfactory. A local paper remarks, "that the important part that the poultry exhibit plays in going to make up the show, may be realized when no less than three out of the nine sheds devoted to show purposes are found filled with birds." This being the case, the local poultrymen, as well as many of those from outside, are of opinion that their interests are entitled to better consideration than they have received. A late show is not desirable in any locality, and its inconvenient effects are felt in more ways than one, especially by those exhibitors who had to hold back the "making up" of their breeding pens, in order to have their birds in the best possible condition. The lateness in the season has told severely on the show of dressed poultry, which is saved from being simply ridiculous by the large display made by a Western breeder. Farmers are not inclined to hold over their birds for spring showing, either alive or dead.

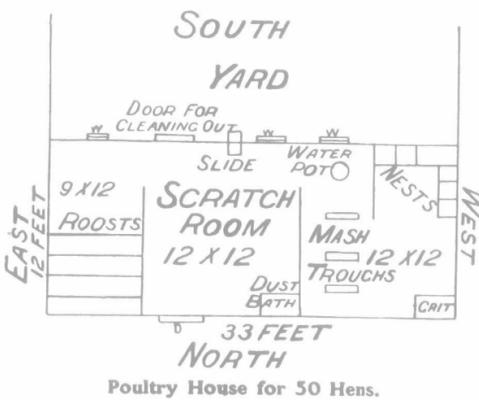
NATURE AND NUMBER OF THE ENTRIES.

In the utility classes—that is, birds good for eggs, these progeny make suitable types of market chickens. The showing is as follows:

White Wyandottes (which head the list)	62
Silver Wyandottes	28
Buff Wyandottes	18
Golden Wyandottes	17
A. O. V. Wyandottes	8
.....	128
Barred Plymouth Rocks	44
White Plymouth Rocks	23
Buff Plymouth Rocks	12
.....	79
Buff Orpingtons	28
White and Black Orpingtons	8
.....	36
Rhode Island Reds	14
.....	14
Silver-Gray Dorkings	14
Colored Dorkings	10
White Dorkings	7
.....	31
Light Brahmas	29
Dark Brahmas	10
.....	39
Cochins, different varieties	26
Houdans and other French varieties	15
Langshans	20
Javas	19

Of the more strictly egg-laying varieties, White Leghorns were 42 in number, being only two behind Barred P. Rocks; Brown Leghorns followed, with 33. The total entry of the Leghorn family numbered

Black Minorcas, a strong class	42
White Minorcas	10
.....	32
Andalusians	18
Hamburgs, including Redcaps	55
Polish	45
Games—all varieties	56
Sundry varieties of fowls	8
Bantams—different varieties	155
Turkeys—a very fine lot	31
Geese, do	42
Ducks—uncommonly good	44
Pigeons, of all varieties	185



Poultry House for 50 Hens.

The foregoing will give the readers a fair idea of the composition of the show. A selling class—in which were birds for sale, with price of each bird on coop—was well filled, and numerous specimens changed hands. An excellent arrangement, which originated with the local exhibition, was a neat circular label. This label was red for first prize, blue for second, and white for third. They were gummed, and on the prize being awarded, were pasted on a card. On this card was also the name of the exhibitor and the description of the bird which won the prize. Thus, a passer-by could see, by glancing at the card, the name of the exhibitor, the kind of bird exhibited, and whether the prize awarded was first, second or third. It was actually a whole school of instruction in itself, and was most favorably commented on. Judging was by score-card, and some remarks were heard as to its being slow. In recent years judging has been by comparison.

DRESSED POULTRY.

This show was in limited numbers, but embraced some very nicely dressed turkeys and geese. Ducks were poor and did not show to advantage. Among the chickens there were far too many with crooked breast bones. There were several pairs of nicely-dressed Wyandottes and Plymouth Rocks. Strange to say, an exhibit of Black Minorca chickens looked well among the best. They had by far the straightest breast bones and roundest breasts. A pair of Indian Game chickens were the best I saw. Buff Orpington breeders should see

that better specimens are exhibited as dressed birds, or the reputation of the variety as a market fowl will suffer.

THE POULTRY MEETINGS.

The poultry meetings were held on Tuesday evening, 7th inst., in the lecture-room attached to the offices of the Live-stock and Seed Commissioners, in the Imperial Building, Queen St. The first speaker was Mr. Victor Fisher, Assistant Poultry Manager at the Experimental Farm, and his subject was "Poultry Houses." He claimed that an up-to-date poultry-house must be cheap, well constructed, well lighted, well drained, and should be kept scrupulously clean. It should be large enough to contain 25 fowls, allowing eight square feet to each bird. A fairly large window, double in cold sections, should be in front of the house, which should face southwards. He would keep it at a temperature of 35 degrees. He showed diagrams of a house with scratching-shed attachment, and another without the latter. The scratching-shed need not be more than one board thick, well battened. Every house should contain a small pen, wherein to place the male bird after the breeding season is over. It should be a cast-iron rule to keep no male bird with the hens which lay the eggs that are sold for eating purposes.

Mr. W. R. Graham, Manager, Poultry Department, O. A. C., Guelph, next spoke on "Obtaining Eggs in Winter." Factors in the procuring of eggs in winter were proper fowls, proper food and house accommodation. He had found Plymouth Rocks, White Wyandottes and Buff Orpingtons his best layers, but after all it was very much a matter of strain. Pullets hatched in late April or early May made the best winter layers. Earlier-hatched pullets were apt to moult when they should be laying. Pullets should not be forced to lay at too early an age. Of grain food, wheat took first place, barley next, then oats, and last corn, which should be used with discretion. The method adopted at Guelph for feeding was: 8:30 a.m., whole grain, 1½ lbs. to 20 hens (this grain is thrown among the litters always on the floor of the pens, to the depth of six inches, so as to make the hens search for it); noon, cut-bone or meat waste from the college; p.m., oats or sprouted grain. It was beneficial to pour boiling water over the oats at times, or on all occasions if found satisfactory. If mash was used, it was immaterial when it was fed. Clover hay, steamed or dry, but cut into small pieces, was given at times, and when so fed less meal was used. He kept meat scrap in front of their fowls all the time. Drinking water was kept clean and sweet. This could not be done unless the dishes containing the water were also clean.

Mr. A. G. Gilbert, Manager Poultry Department, Experimental Farm, Ottawa, spoke on "The export poultry trade and home poultry development." He said the British market was tantamount to an unlimited one, to supply which Canada has as yet made only slight effort, to judge from the value of poultry and eggs sent to that market. The value of the imports of eggs and poultry into Great Britain last year was nearly forty million dollars. Of this amount, Canada sent only \$645,000 worth of eggs, \$160,518 worth of dressed poultry, and \$41,716 worth of live poultry. This afforded a great opportunity for developing a large export trade. A remarkable feature of the situation was the fact that the home demand was rapidly increasing, showing that our people were better appreciating eggs and poultry as wholesome and nutritious food. Again, we had increasing prices in the face of an increased production, so giving proof that year by year the home market was becoming more valuable. The speaker explained the requirements of the different markets, and showed how they could be met with profit by the farmers of the country, from whom must come the great bulk of both eggs and poultry.

APIARY.

Italian Queens, and Learning Beekeeping.

1. Would it be advisable to introduce Italian queens if the common bees are doing well?
2. How should they be introduced?
3. I have kept a few hives of bees for a few years, would it be advisable to go and work in an apiary before keeping a great number?
4. Could a person get a job in an apiary, so as to learn beekeeping? Could you get good wages?
5. Would raising poultry be a good business to go along with beekeeping, keeping both in a moderate way?

J. A. P.

1. Yes; get one or two to requeen the poorest colonies.
2. Full instructions are given on mailing cage of queens received from all dealers.
3. Yes, by all means.
4. Yes and yes; the wages given the first season are paid mostly in instruction and experience. The student does not expect very high wages while he is learning to be a doctor or a lawyer. He pays out hundreds of dollars in hard cash, and finishes with a profession more arduous and less pleasant and healthful than beekeeping.
5. Yes; one of the best.

MORLEY PETTIT.

Mr. Holtermann's Criticism Endorsed.

"The 'Farmer's Advocate' of February 2nd publishes, in its 'Apiary,' an admirable article from the pen of R. F. Holtermann. Mr. Holtermann heads his communication, 'Nature Study—The Story of the Bees,' and takes exception—very sensibly—to much misleading information about bees that is published and passes for the truth. The article is, in fact, a plea that even in nature study, the truth and nothing but the truth (if not the whole truth) should be taught in our schools. Several letters from nature students of authority are published in connection with Mr. Holtermann's contribution."—[Our Animal Friends.

GARDEN AND ORCHARD.

Making a Hotbed.

The making of a hotbed is usually looked upon as a very complicated piece of business. A small one is not, however, very difficult to make, and should be a most invaluable addition to any farm where early vegetables are desired, as, not only may cabbage, cauliflower and tomato plants be started in it, but also beets, carrots, parsnips and salsify, which stand transplanting very well, and thus may be induced to "come in" some weeks earlier than when planted out in the open. A small portion, also, set apart for lettuce will supply the table with a dainty salad when not a leaf of green is to be seen outside of the favored spot.

In making a hotbed, the first step is to choose a good situation at the south side of a building, wall, or close-board fence, where the cold winds from the north will be broken, and all the sunshine possible may be obtained. That settled, the next question will be the kind of frame to construct, cement, brick, or plank, overground or underground. As regards material, cement or brick used for walls, with an air-space between, is, undoubtedly, best, forming a frame at once rat-proof and permanent. Having such a frame, one may go on still further if one chooses, and fit it up with sashes run on grooves, and burlap coverings fitted on rollers, so as to be rolled up conveniently when not in use. A much simpler and inexpensive frame, made of stout planks, will, however, answer the purpose quite as well, although it will probably have to be renewed more frequently. About three feet by six feet is a handy size for the sashes.

Two kinds of hotbeds are in use, the one above, the other below ground level. The high one should be built in any situation where the water is likely to lie; but if the ground is well drained, the low one is, perhaps, preferable. To make an overground bed, first dig a shallow excavation, say, a foot deep, the size of the bed required, and build into it your wall, or fit into it your frame, which, if made of planks, should be securely fastened to posts sunk at the corners. A double plank wall with an air-space between is good. In any case, the frame should be about one foot higher at the back than at the front, in order to provide a good slant for the rain to run off. In case the hotbed is made at this season with frost in the ground, no excavation can be dug. The manure must be piled on the ground, a little larger than the frame.

Into this bed now put fresh manure (from horse stable preferred), and tramp it down very thoroughly to a depth of two feet. If the manure be not made very firm, there will be danger of too rapid fermentation, and consequent waste of heat, if not of positive damage by scorching, to the sprouting plants. If it does not heat up quickly, turn it over with a fork and tramp down again. Now spread about four inches of good rich soil, made very fine, on top of the bed; put on sashes, which should be glazed, and bank up all around the frame with straw manure. Keep the sashes closed until the heat of the bed is at about 90 degrees, then sow the seed, and do not neglect to raise the frames and ventilate thoroughly whenever steam appears. If this be neglected, no matter how cold the weather, the young plants are likely to be damaged. At night, and during exceptionally cold snaps, the sashes must be covered with matting, old carpet, anything, in fact, which will keep out the cold. Old newspapers placed next the glass and under the matting will be found invaluable. It is well also to keep a piece of oilcloth on hand, to cover the matting with at a time of cold rains, as nothing is more provoking to handle than wet, half-frozen coverings that persist in taking every shape but the right one.

All of these directions will apply to the sunken bed, the only difference being that in case of the latter, the excavation should be about three feet in depth, so that the front of the bed will be about at ground level, the back of the frame still be elevated a foot or more, so as to give the sashes the necessary slope toward the front.

When the first plants have all been taken from the hotbed, its usefulness will not be over, as melons may be planted in it, and will, if watered frequently, be found to grow riotously in it, seeming to forget that they have strayed away from their semi-tropical home.

Results of Co-operation at Ilderton, Ont.

The Ilderton Apple Association is a co-operative organization of eighteen members, who last year had their fruit packed and shipped under a common brand. About 1,200 barrels were handled, two carloads being consigned to Ottawa and the balance to Nottingham, England. The apples were sold on their merits, and separate accounts kept of each variety. The returns to growers ranged all the way from \$1.06 per barrel for Golden Russets down to a loss of fourteen cents on Cabasheas. The average net price on all varieties was 62 cents per barrel, and on the five old standard winter varieties, Baldwin, King, Spy, Greening, and Russet, 82 cents, clear. Most of the work and business was done by the Secretary-Treasurer, A. O. Telfer. Barrels cost 38 cents each; packing and shipping, 13 cents a barrel; freight to England, and sale expenses, \$1.49 per barrel. The returns, though not large, are much greater than could have been otherwise secured, a great deal of other farmers' fruit having been absolutely wasted. The patrons are, therefore, well satisfied with their proceeds, and glad to continue co-operatively. The officers for 1905 are: President, A. C. Atwood, Vanneck; Secretary-Treasurer, Ed. Caverhill, Ivan; Manager, Neil Graham, Ivan; and a Board of Directors comprising the foregoing officials, together with E. Guest, Elginfield, and A. O. Telfer, Ilderton. Below are the prices received on the crop of 1904:

WINTER APPLES.

	Net.
Baldwins	\$0.69 3-4
Spy .....	.81 2-5
King .....	.92 2-3
Greening .....	.58 1-4
Ben Davis .....	.32
Russet	1.06 1-5
Stark .....	.05 1-6
Mann .....	.15
Scott's Winter or Best .....	.38 4-5
Phoenix .....	.43 1-3
Seek-No-Further .....	.21 1-3
Spitzburgh .....	.51
American Pippin .....	.15 1-2
Wagner .....	.28
Canada Red .....	.51 3-4
Cranberry Pippin .....	.38 2-3
Falkwater .....	.39 1-2
Average for Winters .....	.65 3-4

FALL VARIETIES.

Ribston Pippin .....	.30 1-4
Winesap .....	.30
Cabashea	Loss .14 3-4
Blenhelm Orange .....	.44 1-2
Twenty-ounce Pippin .....	.54 1-2
Average price for Falls .....	.30 1-2
Average for all apples.....	.62 1-6

The Seedless Apple.

A subscriber asks if the seedless apple referred to some time ago in the "Farmer's Advocate" has proved a success, or if there is any inherent fault, or weakness, about an apple of that description.

The seedless apple is by no means a new thing. This time, however, it has developed in the hands of an American, and with American push and enterprise, it has created a furore. From all the accounts I have seen, however, none have attributed to this new apple any particular value in the way of good quality, and this is really one of the first requisites in any new variety. Unless the new variety is superior in quality, or in some other marked particular, to those already in cultivation there would be little or no use in introducing it as a new variety simply because it was seedless. All the seedless apples which have been produced so far have not sufficient value to warrant their propagation, and I would not recommend growers to rush after the Spencer seedless apple until it has been introduced and tested at some of our Fruit Experiment Stations. As soon as stock is obtainable, it will be given a thorough trial, and its quality reported upon.

H. I. HUTT.

Ontario Agricultural College.

Preserve the Forests.

The question of forest preservation was given considerable prominence at the recent Farmers' Institute meeting at Maxville. Rev. Mr. McKay, of Sherbrooke, N. S., who gave a short address, said that he had known several farmers who had taken out annually from small wood lots from 30 to 40 cords of wood for the past twenty years, and yet at the present time the forests did not show the least effect of the woodman's axe. Mr. McKay pointed out that the reason for this was that only the decaying, fallen, and fully-matured trees had been cut. The young and growing trees had not been touched, and in the course of a year made sufficient growth to make up for what was taken out the previous year.

NEWS OF THE DAY.

Canadian.

One thousand four hundred British emigrants have arrived in Canada by the steamship Bavarian. The greater number will take up land in the West.

A sturgeon weighing 247 pounds has been caught near Picton, Ont.

At 'Niagara-on-the-Lake, Messrs. Thos. May and Robert Patterson were presented with medals for heroism in saving the life of Jas. Black on the Niagara river last January. With the aid of a small boat and two planks, the men made a perilous journey over the floating ice to the rescue of Black, who had become fast in the ice while attempting to cross the river in a canvas boat.

Eleven hundred emigrants from Old Ontario left Toronto for the West on March 7th.

Lord Strathcona has arrived on a short visit to Canada.

British and Foreign.

Father Gopon, who led the Russian workmen in the demonstration of January 22nd, has fled to England.

President Roosevelt was inaugurated as President of the United States, at Washington, on March 4th.

The Japanese steamer Natoriwa ran against a breakwater while entering Osaka during a dense fog, and sank immediately. Only 16 out of the 123 who were on board were saved.

Monotombo, the great Nicaraguan volcano, after a rest of 25 years is again active. The eruption has been attended by severe earthquake shocks, which have been felt as far as Costa Rica and Honduras.

The Right Hon. George Wyndham has retired from his post as Chief Secretary for Ireland, and Mr. Walter Hume Long has been appointed in his place.

Russia has paid England \$325,000 in settlement of the North Sea claims.

India is again plague-stricken, the deaths last week numbering 34,000. The Government is making every effort to prevent its spread, by isolating the sick as far as possible, and burning down affected districts in the towns.

Part of Admiral Togo's squadron has been seen sailing past Hong Kong, and it is surmised that he is on his way to Madagascar, to rouse up Admiral Rojestvensky.

Russia is secretly massing troops in Turkestan, near the Indian frontier. The only possible explanation of the movement is that it may be intended as a demonstration to impress Afghanistan.

There is great destitution and suffering on the islands of St. Pierre and Miquelon, owing to the fact that the fisheries for the past three years have proven a failure. The French Government is taking steps to relieve the situation.

What would seem to be the Magna Charta of Russia, though as yet in a crude, unfinished form, has been signed by the Czar at the Tsarskoe-Selo Palace, in the form of a rescript, in which he practically guarantees a legislative assembly to the people. "I am resolved henceforth," the decree runs, "with the help of God to convene the worthiest men possessing the confidence of the people, and assisted by them to participate in the elaboration and consideration of legislative measures. In undertaking these reforms I am convinced that local needs and experiences of life, well weighed, and sincere speech of those elected, will ensure fruitfulness to legislation for the real benefit of the people. At the same time I foresee all the complexity and difficulty presented in the elaboration in this reform, while preserving absolutely the immutability of the fundamental laws of the empire. . . . May God bless this good beginning; may God help you successfully to secure the welfare of the people confided to me by God." The publication of this edict has been received with the greatest enthusiasm by the majority of the people, and may do much toward relieving the frightful pressure of present conditions in the Czar's dominions.

"I am surrounded," telegraphed Kuropatkin to the Czar upon the morning of March 10th. "Have entered Mukden and Fushun," was the message simultaneously wired from the Japanese lines. In the meantime, nowhere else on earth in the history of recent times had been seen a sight so pitiful, so weird, so full of triumph and defeat and horror as that upon which the grey morning was breaking in Northern Manchuria. From Mukden northward toward Tieling every road was filled

with troops, artillery and baggage, pressing forward with feverish rapidity in the face of a dust storm, which blew into the eyes of the fugitives and rendered their cadaverous faces yet more cadaverous. In the rear, slowly retiring from the field, whereon lay thousands of dead and wounded, fighting step by step to cover the fleeing army, came the rear guard, personally commanded by General Kuropatkin, who, it is said, with haggard face and uniform yellow with dust, seemed to be everywhere when needed. In the meantime, while dense clouds of smoke showed where the vast storehouses of Mukden were being consumed by fire, the men under command of Generals Stackelberg and Zambaff were attempting to guard the retreat along the line between Fushun and Mukden. As nothing has been heard of these corps since, it is feared they have been annihilated. So ended the battle of Mukden, the most horrible in carnage of the whole war, which cost the Russians nearly 200,000 in killed and wounded, 500 guns and 40,000 prisoners. In addition, 10,000 severely wounded and a complete medical staff in the hospitals of Mukden were left to the mercy of the Japanese. The Japanese losses have been roughly estimated at 60,000 men. In spite of this terrible defeat, however, there is no word of peace. The immediate response to it was a despatch from St. Petersburg, to the effect that a new army will be at once raised, and that the war must go on. General Kuropatkin has, it is reported, asked permission to give up his command, urging the necessity of mental and physical rest. For the present, it is expected, he will retire to Harbin, but as the Japanese army is in hot pursuit, another fierce engagement may be fought before that point can be reached.

THE FARM BULLETIN

"New Ontario Farmer," Uno Park, Ont., who sent in a drainage enquiry, omitted to give his name.

Prince Edward Co. farmers propose starting a \$10,000 canning factory at Millford.

The Temiscaming district is to have a local telephone system, a company being organized for that purpose.

It is proposed to establish a flax mill and revive flax growing in Haldimand Co.

A Peterboro correspondent writes, advising that Farmers' Institutes take up the question of instituting seed fairs. He wishes also to emphasize the fact that farmers who would be successful should sow only good plump seed.

The Swift Company, who control Fowler's business in Hamilton, Ont., will double their capacity in the near future, and will kill 6,000 hogs a week. In addition, sheep and cattle will be slaughtered for market.

The third part of the Farmers' Institutes report, which has just been issued, shows that up to June of last year the Institutes showed a membership of 21,267. During the year they held 833 meetings in all, with a total attendance of 106,719, received \$25,990, spent \$16,440, and had a balance on hand when the returns were made of \$9,550. The institute having the largest membership in July last was South Waterloo, with 720.

Fruit Institute Meetings.

Meetings have been arranged—delegates, D. Johnston, Forest, and A. Gifford, Meaford—to discuss orchard management and co-operation, at Tupperville, Ont., March 20th; Northwood, March 21st; Dutton, March 22nd; Sparta, March 23rd; Appin, March 24th; Ilderton, March 25th; Parkhill, March 27th; Goderich, March 28th; Blyth, March 29th; Brussels, March 30th; Lucknow, March 31st; Walkerton, April 1st; Paisley, April 3rd, and Port Elgin, April 4th.

Delegates, A. E. Sherrington, Walkerton, and P. J. Carey, Fruit Division, Ottawa, at Ingersoll, March 22nd; Norwich, March 23rd; Cainsville, March 24th; Oakville, March 25th; Clarkson, March 27th; Islington, March 28th; Churchill, March 29th; Collingwood, March 30th; Thornbury, March 31st; Meaford, April 1st; Owen Sound, April 3rd, and Allanford, April 4th.

Lincoln Co., Ont.

A greater acreage of oats will be sown here this year than usual, as there is at present a scarcity for marketing. The principal varieties grown are American Banner, Australian, Twentieth Century, and White Ligowo; the latter variety yielding very heavy grain on our soil. Peas did exceedingly well last year, a yield of 25 bushels per acre being very common, and in many cases 36 bushels per acre was not uncommon. The pea-bug did not affect the crop at all. Good seed peas will be in great demand this spring, and many who have them for sale have been offered \$1 per bushel.

Dominion Shorthorn Breeders' Association.

A special general meeting of the members of the Dominion Shorthorn Breeders' Association will be held at St. George's Hall, Toronto, on Friday, 24th March, at 1.30 p.m., for the purpose of considering proposals submitted by the Department of Agriculture, Ottawa, for uniting the Shorthorn records now issued in different parts of the Dominion, and for establishing the record office at Ottawa. A full attendance is requested.

H. WADE, Secretary.

Want to Sell or to Buy?

The "Farmer's Advocate and Home Magazine" is the most popular and effective channel through which is given trustworthy, high-class information for the farmer and his family. It is also the medium through which people make known their wants by advertising, or what they have to dispose of. The "Want and For Sale," "Poultry and Eggs," and display advt. columns are widely used at this season. If you have really good pure-bred live stock, poultry, eggs for setting, seed grain or seed potatoes, a farm to rent or sell, or any other article to dispose of; if you are in need of employment as a farm manager, worker or herdsman; if you are a farmer requiring help, or a cheese or butter factoryman needing a dairyman, or a maker wanting employment, make the fact known by an advertisement in the "Farmer's Advocate," which circulates among the best farmers all over the northern half of this continent, more especially in every locality in Canada. Send at once for an advertising rate card, giving particulars as to rates and space.

Eastern Ontario Live-stock and Poultry Show.

This show, held at Ottawa, March 6th to 10th, was an improvement on all previous events of the kind held at the Capital, notwithstanding that the new building erected for the show had collapsed a few weeks before, which was perhaps fortunate, as it might have gone down at the time of the show, when filled with people. The exhibit of live stock was largely from Western Ontario, and the entry was considerably larger in numbers than usual, a number of new exhibitors competing, and was generally of good quality. The attendance of farmers and stockmen was fairly good, but the attendance of city people was rather disappointing. It almost looks as though if an annual Winter Fair is to be held at the Capital it will be necessary for the city authorities to erect a substantial building, somewhat central, if they expect the city people to patronize it. There is no good reason, however, why they should not patronize it where it is at present located, if the necessary accommodation for comfort were provided. The management are to be congratulated, however, upon the accommodation supplied to all this year under existing conditions. The weather was ideal throughout, and there was nothing to prevent people interested from attending the show. The lectures in connection, which are also of great benefit to those attending, were, however, better patronized than ever before, the assembly room being comfortably filled at each session.

In the pure-bred cattle classes, Shorthorns were shown principally by Senator Edwards, Rockland, Ont., and a grand lot they were. Missie of Pine Grove, daughter of the great Missie 153rd, was in right form to meet any competition and win. In the two-year-old class, Missie of Pine Grove 5th, the fourth-prize winner at Toronto last fall, was easily first over Zoe of Pine Grove 3rd, which won first the last two years at Toronto. In the yearling class, four from the Edwards contingent faced the judges. Nonpareil of Pine Grove 2nd, the red heifer that was a close competitor for first place at the Central (Ottawa) last fall, was an easy winner of first in her class here, and was pronounced by the judges to be quite equal to anything they had seen in a show-ring for some time. Next in order came White Feather 4th, a roan, of approved Scotch conformation, beating Pine Grove Clipper 7th, a good roan of more substance, but not quite as good a handler, but one the average looker-on would expect to see placed second. Jos. Armstrong, Fergus, showed a two-year-old Shorthorn steer that won first alive and second dressed. Geo. Armstrong, Fergus, showed a yearling Shorthorn steer that won first. Pritchard Bros., of the same place, had a pure-bred Shorthorn steer calf that won first. All the above were good. No Herefords or Angus were on exhibition. A bunch of good Galloways were shown by D. McCrae, Guelph, winning all he showed for. Grades were championed by Jas. Leask, of Greenbank, the invincible showman. Jas. Wilson & Sons, Pritchard Bros., D. B. Scott, Jas. Lindsay Lewis, Geo. Armstrong, and Jas. McQueen, all from the Guelph district, had out a very good exhibit of grade cattle, the latter winning first with a strong, thick-fleshed trio of steers in the export class, with Jas. Leask second with a trio of more quality, but scarcely fed long enough to win first; the third-prize lot was not very smooth, but fairly heavy, evidently not quite so well bred, and somewhat unfinished; they were shown by T. J. Graham, Mosgrove, near Ottawa. Jas. Wilson & Sons won first on a very nice quality, mellow-fleshed, clean-cut, three-year-old heifer, a first-prize winner at Toronto and Guelph in 1904. The remainder of the prizes were taken by Mr. Leask, winning championship on the red yearling steer that won third at Guelph as a calf in December last. This is a calf that will stand some beating if he continues to go on for another year.

The sheep department was rather sparsely patronized. The Shropshires were the center of attraction, and quite the largest exhibit. Senator Edwards had an exhibit of ewe and wether lambs that would surprise many of the older Shropshire exhibitors, both as to size and quality, some of them close to 200 lbs. each, which, with the care in handling that we would expect from Shepherd Bradburn, ought to be heard from

again. In wether lambs the judges hesitated considerably before placing the ribbons, but finally gave first to Lloyd-Jones Bros.' Chicago champion, a lamb not so large as his Rockland competitor, but a trifle firmer; the Edwards Co. winning first and second in pen of three, against Lloyd-Jones Bros.' pen. A few Cotswolds of very good quality were shown by D. McCrae, Guelph. Oxfords were out in small numbers and average quality, shown by J. A. Richardson, South March, and J. H. Jull, Burford. Southdowns were few in number, but good in quality, shown by Telfer Bros., Paris, Ont. The same may be said of the Dorsets exhibited by R. H. Harding, Thorndale, his Chicago and St. Louis champion wether being quite the equal of any sheep in the show. Hampshires and Suffolks were shown by Telfer Bros., Paris, and Jas. Bowman, Guelph. Grades were shown by only Lloyd-Jones Bros., and the quality was very good, but the exhibit was small.

The swine exhibit is improving in quality, as well as in numbers. Yorkshires were out reasonably strong, shown by J. E. Brethour, Burford, and Jas. Wilson & Sons, Fergus; the former winning the greater portion of the prizes on excellent quality stuff, viewed from the bacon standpoint.

Tamworths were out much stronger than usual, R. Reid & Co., Hintonburg; J. A. Richardson, South March, and A. M. Stewart, Dalmony, being the exhibitors, the former winning a fair share in the bacon classes against all breeds, while Richardson scored well in the breeding classes on stock of nice quality; Mr. Stewart's exhibit being rather young for the company, although of fair quality.

Berkshires were well brought out by Wm. Wilson, of Brampton, and R. Reid & Co., some of them having won at the Guelph Winter Fair under six months, and have done well since that time.

Grades were as usual a strong exhibit, Hiram Stewart (Burford), R. Reid & Co., Jas. Wilson & Sons, W. Wilson and A. M. Stewart being the exhibitors, the first named winning most of the principal prizes on Yorkshire grades. In the dressed carcass class, overfat stuff was conspicuous by its absence, scarcely anything being hung up that should not command the highest prices. The swine carcasses, while largely of good quality, otherwise seemed to be somewhat soft, which perhaps can be traced largely to want of exercise, of which pigs will not take enough during very cold weather. The prize-list appears elsewhere.

Although the horse show was called off this year, owing to lack of accommodation, the attendance has been equal to that of last year, when the horse show was held in connection with the fat stock and poultry show, still it is just possible that if the show were held in some less pretentious town in Eastern Ontario the attendance would be larger.

THE SEED EXHIBIT.

The seed department was instituted a year ago, and although the exhibits were not numerous last year, great interest was manifested. This year the exhibits were trebled in number, and vastly improved in quality. This department of the show seems certain to grow and do good service for the farming interests. The judging was done by Mr. G. H. Clark, Seed Commissioner, who gave every exhibit close study, and was impartial in placing the awards. The class for Banner oats brought out 14 entries, thus showing the degree of favor in which that variety is held in Eastern Ontario. In the class for any other variety of oats, there were 18 entries, with the Ligowo most in evidence. There were some excellent exhibits of spring wheat, barley and timothy, but peas and potatoes were poor. Five members of the Canadian Seed-growers' Association had a splendid collection of specially-selected seed of oats, barley, spring wheat and fall wheat. These exhibits served to illustrate the benefits to be derived by following a systematic method of selection year after year; the more so as exhibits of ordinary seed were at hand for purposes of comparison. Altogether this department was a great success, and the opinion was freely expressed that greater financial assistance should be given another year, to encourage growers to bring out their seed, and thus further enhance the usefulness of this worthy institution. The awards were as follows:

Fall Wheat.—1st, C. R. Gies, Heidelberg; 2nd, Wm. Murray, Avonlea.

Spring Wheat.—1st, S. J. Woods, Metcalfe; 2nd, Wm. Mulligan, Merivale; 3rd, F. E. Caldwell, Manotick; 4th, D. Cumming, Russell.

Banner Oats.—1st, John Wilson, Marsville; 2nd, Geo. Boyce, Merivale; 3rd, Dugald Cumming, Russell; 4th, Wm. J. Savage, Stittsville.

White Oats, any other variety.—1st, G. R. Bradley, Carsonby; 2nd, S. J. Woods, Metcalfe; 3rd, Dugald Cumming, Russell; 4th, P. Madden, Jockvale.

Barley, six-rowed.—1st, Wm. Mulligan, Merivale; 2nd, Edward Boyce, Merivale; 3rd, D. Cumming, Russell; 4th, Geo. Boyce, Merivale.

Small Field Peas.—2nd, P. Sullivan, Waller.

Potatoes of Rose Type.—1st, G. R. Bradley, Carsonby.

Timothy Seed.—1st, D. Cumming, Russell; 2nd, P. Madden, Jockvale.

Handsome and Useful.

I beg to acknowledge receipt of the premium knife, which I am highly pleased with. Besides being a useful article, it is something nice to look at, and well finished. Wishing your paper every success.

N. B.

ARCH'D CAMFRON.

Eastern Ontario Winter Fair [Lectures at Ottawa.

(Continued from page 378.)

THE BACON QUESTION.

Prof. J. H. Grisdale gave the results of some recent experiments at the Central Experimental Farm. He had been endeavoring to find a satisfactory substitute for skim milk, and had found four parts of shorts to one of oil meal the most satisfactory mixture. In economy of gain produced this ranked next to shorts and skim milk, and mixed meals and skim milk. The feeding of pigs outside had not proved economical, as the cost of feed was nearly double that of inside feeding, and the pigs did not gain so quickly or so economically when kept on pasture as when housed.

Several tests had been made with the leading kinds of stock foods on the market, but results so far indicated that for economical pork production such foods were not desirable.

THE SHEEP SESSION.

Reasons why sheep should be raised on every farm were given by Mr. Robert Miller. He pointed out almost any farmer could keep a small flock of sheep with almost no extra labor. He never knew a time when it was not profitable to raise a few sheep. They consumed a lot of stuff that was of no commercial value, and cleared the fields and fence corners of weeds. Weed seeds eaten by sheep would not germinate. The market for mutton was a great and growing one, and this market should be met by breeding and feeding more and better stock. Sheep thrive well on nearly all soils, rich and poor alike. While mutton was the chief object in Canada, the wool was always salable at a time when money was most needed. The veteran Southdown breeder, Mr. Joda Jackson, led the discussion on this address.

Wintering breeding ewes was thoroughly discussed by Mr. A. W. Smith, Maple Lodge. Ewes should have plenty of run for exercise, and should have dry, clean pens, free from drafts. No grain should be fed until a short time before lambing. A mixture of peas, oats and bran was a very good grain ration. Pea straw and roots, turnips before lambing, and mangels afterwards, were his chief winter feeds. From three to five pounds of roots per day was a proper amount, according to the size of the sheep. Sheep should be watered regularly twice a day, as snow was by no means sufficient to satisfy their needs.

Mr. J. M. Gardhouse spoke strongly in favor of kind treatment for the ewes, and advocated dipping in the fall and shearing before turning on grass in the spring.

THE BACON HOG.

Prof. Day visited England and Denmark last summer, and the results of his observations were given to the meeting. The chief characteristic of Danish bacon was its uniformity. Only one sort of pigs was raised for bacon, a cross of the Yorkshire boar on the native sow; the latter York in body and the Tamworth in neck and head. The bacon factories were co-operative, each lot of hogs was killed separately, and the farmer paid according to the quality. The lean quality was due both to breed and feed. Every farmer keeps cows, and has skim milk, which he feeds with barley and some corn. Prof. Day does not think the production of bacon in Denmark is likely to increase much, and at any rate we can produce that article more cheaply in Canada, and will be able to compete with them. Our best bacon is in high favor in Britain, but there is a good deal that is not as good as it should be, particularly in finish. Short sides, thick shoulders and thick necks were quite common among Canadian goods.

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THE DAIRY COW.

In discussing the "Economic Production of Milk," Prof. Dean said that to make a success of dairying a man must have a real liking for cows. No one who lacked this could get the most out of them. The capacity of the individual cow must be studied, and the animal fed accordingly. He instanced a Holstein cow, officially tested under his supervision, that consumed 26 pounds of grain per day for 30 days, yet produced milk at a cost of 52.3 cents per 100 lbs., and butter at 11.2 cents per lb. Her total yield for 30 days was 2,329 1/2 lbs. of milk, and 90.8 lbs. of fat, equal to 105 1/2 lbs. of butter. Illustrating the vast difference in cows, he mentioned that one cow in the college herd produced milk at 31 cents per 100 lbs., and butter at 7 1/2 cents per pound, while another yielded milk costing 79 cents per 100 pounds, and butter costing 17 cents a pound.

Cement floors and good ventilation were very necessary for health and cleanliness. Recent personal observations in New York had convinced him that the problem of milking by machinery had been solved, and he expected to see milking machines quite common in a few years.

Mr. D. Drummond, Ottawa, sketched the possibilities of dairy improvement, and quoted census figures to show the mediocre capacity of the average cow. By way of contrast, the records of several herds, averaging over 8,000 lbs. of milk and 300 lbs. of butter, were mentioned. The cow census taken by the dairy branch in the vicinity of Cowansville showed one herd to have averaged about 85 lbs. butter in five months, while a near-by herd produced an average of about 240 lbs. in the same time. Accurate yearly tests, weeding out of poor producers, and breeding from producing strains would lead to wonderful improvement. The Danes had two co-operative associations, testing 300 cows in 1895, while in 1903 they had 367 associations, with 142,847 cows under test for the whole year. By such means they had increased their export of butter from \$19,000,000 to \$29,000,000 in the eight years. The cost in Denmark was from 45 to 60 cents per cow, but even at \$2 per cow in Canada it would be money well spent.

Prof. Grisdale concluded the session with a short address, emphasizing the points made by the previous speakers. Breeding, feeding and weeding were the watchwords. He offered to supply blank forms for keeping records free to all who applied; also a spring balance for weighing milk at cost.

THE CARCASS CLASSES.

The good and bad points of the beef carcasses were pointed out by Prof. Day, and of the mutton carcasses by Prof. Grisdale. Mr. C. W. Bowman, manager of the new Lovell & Christmas packing-house in Montreal, and Mr. W. E. Matthews, of Hull, told the audience just what the packer wanted in the bacon hog.

The carcasses here sold well, the beef carcasses averaging about 9c.; swine, 8c.; and the lambs sold at 9c. to 29c., averaging about 15c. per pound, one Dorset carcass selling at 16c., and a Shrop.-Southdown grade at 29c.

Wants Rams Castrated.

A man well versed in the Buffalo and New York live stock markets writes that the trade there very much objects to the number of bucks among the Canadian lambs. The buck, he says, is not worth within seventy-five per cent. of the ewes and wethers. Their trade has no use for bucks. There is no reasonable excuse for this great loss, as castration is a safe and simple operation, if attended to at the proper time, namely, when the lambs are a week or ten days old.

New Fairs Association.

(Ottawa correspondence.)

At a largely attended meeting of delegates of agricultural societies and farmers' clubs of Eastern Ontario and Western Quebec, in the City Hall, Ottawa, on Thursday, March 9th, the Eastern Ontario Fairs' Association was organized, to be run independently of the Ontario Fairs' Association, now established at Toronto. Over 100 delegates were present, and the proceedings were most harmonious, the general feeling being that there was room for such an organization in the eastern part of the Province. The object of the new association, as outlined in the constitution, is to promote the general welfare of agricultural societies in this part of the Province, by holding meetings annually, and exchanging ideas. The following officers were elected: President, R. H. Field, Brockville; Vice-Presidents, J. G. Clark, Ottawa, and N. F. Wilson, M. P., Cumberland; Secretary-Treasurer, R. B. Faith, Ottawa. Board of Management—John Brown, North Renfrew; R. W. Hodgins, Pontiac; W. J. McNaughton, Glengarry; B. C. Hughes, Grenville; J. G. Harkness, Stormont.

Forest Managers.

Dr. Judson F. Clarke, Provincial Forester, whose series of articles on forestry in the "Farmer's Advocate" have awakened widespread interest, stated recently that Canada was certain to take a leading place in forest products, as the woodland areas were so vast as to almost stagger the imagination. The spruce alone would, thirty or forty years hence, practically control the paper market of the world. Dr. Clarke urges the training of men in practical forest management, in order that the great reserves might be perpetuated by wise use. There was no reason why, under rational management, the present revenue from the forest lands should not be increased many fold, not only without injury, but with actual benefit to the forests, which were chiefly coniferous and having the highest producing capacity. The Ontario Agricultural College, at Guelph, is the place where the Ontario forestry experts of the future should be trained.

Want More for Tomatoes.

The Ontario canning factory people have been in the habit for some years of paying 25 cents a bushel for tomatoes for canning purposes, but the gardeners are now demanding 30 cents, and they seem determined to force the increase. Last week the vegetable growers of the township of Grantham formed an association and pledged all the members not to grow tomatoes for less than 30 cents a bushel. A large meeting of the growers in the vicinity of Hamilton was held recently, when a similar position was taken. It was also decided not to sell tomato plants to any person desiring to grow tomatoes in large quantities unless he was a member of the association.

The Western Fair.

The directors of the Western Fair, held at London, Ont., have decided to make the opening date of this year's fair, Friday, September 8th, the exhibition to continue until Saturday, September 16th, inclusive. They also decided that Saturday should not be simply a "closing-up day" as formerly, but on Saturday this year the whole exhibition, with all its attractions, will be in full swing, thus practically adding another day to the fair. Exhibitors will be allowed to remove cattle on Friday, but the final clear-up will be left for Monday. The directors have also decided that no member of the Western Fair Association shall act as a judge. A liberal course in regard to tickets to members has been agreed upon. There will also be a "Press Day."

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MARKETS.

Toronto Markets.

LIVE STOCK.

Receipts of live stock at the Western cattle market last week totalled 164 cars, and included 2,475 cattle, 761 sheep and lambs, 2,286 hogs and 245 calves. At the Union Stock-yards, receipts amounted to 78 cars, including 1,208 cattle, 50 sheep, 1,843 hogs, and 20 calves.

Export Cattle—Quotations are nominal. Choice are quoted at \$4.40 to \$5; good to medium, \$4.25 to \$4.40; good cows, \$3.25 to \$4.

Butchers' Cattle—Prices about steady. Good to choice are quoted at \$4.25 to \$4.65; fair to good, \$3.50 to \$4; mixed, \$2.50 to \$3.75; common, \$2 to \$3, and cows at \$2.50 to \$4.

Stockers and Feeders—Feeders are quoted at \$2.50 to \$4.40, and stockers at \$1.30 to \$3.40.

Milch Cows—\$30 to \$60 each.

Calves—Prices are nominal and steady at 9¢. to 6¢. per pound, and \$2 to \$10 each.

Sheep and Lambs—The tone of the market continues firm. Export sheep are quoted at \$3.50 to \$5.12½, and mixed at \$3.50 to \$4.50. Grain-fed lambs are steady at \$6.50 to \$7; barnyards, \$5.50 to \$6.50, and springs, \$2 to \$3 each.

Hogs—Are quoted at \$5.75 per cwt. for selects, \$5.50 for fats, and \$5.25 for lights.

FLOUR AND FEED.

Wheat—Ontario has an easier tone, with red and white quoted steady at \$1.05; spring, 98c. to 99c.; goose, 90c. to 91c. Manitoba steady; all rail, No. 1 northern, \$1.10; No. 2 northern, \$1.07; No. 3 northern, \$1.01, delivered. Flour—90 per cent. patents, \$4.40 to \$4.50, buyers' sacks, east and west; 15c. to 20c. higher for choice. Manitoba, \$5.50 to \$5.70 for first patents, \$5.10 to \$5.40 for second patents, and \$5 to \$5.30 for bran exports.

Millfeed—Firm, \$15.50 to \$16 for bran in bulk; \$17.50 for shorts, east and west; Manitoba, \$20 for shorts, and \$18 for bran exports.

Barley—46c. to 47c. for No. 2; 44c. to 45c. for No. 3 extra, and 42c. for No. 3, malting outside, Toronto freights.

Rye—78c. to 74c. for No. 2, f. o. b., outside. Corn—Canadian firmer, 46c. for yellow, and 45c. for mixed, f. o. b., Chatham freights; American firmer; No. 3 yellow, 54½c. to 55c.; mixed, 54½c., on track, Toronto.

Oats—No. 2, 40c. to 41c., outside. Rolled Oats—\$4.15 for cars of bags and \$4.40 for barrels, on track, here; 25c. more for broken lots, here, and 40c., outside.

Peas—66c. to 67c. for No. 2, west and east.

Buckwheat—55c. to 56c., east and west.

COUNTRY PRODUCE.

Butter—Continues about steady. Receipts of dairy are not yet heavy enough, but there is a fair movement in creamery. Prices are quoted unchanged.

Creamery, prints 27c. to 28c.
Dairy, tubs, good to choice..... 19c. to 20c.
do, medium 17c. to 18c.
do, inferior grades 15c. to 16c.
Dairy, lb. rolls, good to choice..... 22c. to 24c.
do, large rolls 20c. to 22c.
do, medium 18c. to 19c.

Cheese—The market continues to hold a steady tone, and prices for job lots here are unchanged, at 11c. for large and 11½c. for twins.

Eggs—New laid are coming forward fairly plentifully, and are quoted at 21c. to 22c. There is little inquiry for limed, and they are quoted steady at 18c.

Potatoes—Are very steady, and quoted unchanged. Ontario, 65c. to 70c., on track; 75c. to 80c., out of store. Eastern, 75c. to 80c., on track; 90c. to 95c., out of store.

Beans—The market is stronger, having recently advanced. Handpicked, \$1.75 to \$1.80; prime, \$1.65 to \$1.70; and undergrades, \$1.25 to \$1.50.

Hops—Trade is very quiet. Canada crop are quoted at 32c.

Maple Syrup—Good stock is arriving fairly well. Prices are steady, at \$1 per Imperial gallon.

Baled Hay—There is plenty offering, and the market is easy in tone, at \$8 per



Capital Authorized,
\$2,000,000.00.

Head Office, Toronto, Ont.

Edward Gurney,
President.

EVERY DESCRIPTION OF BANKING BUSINESS TRANSACTED

Special attention given to accounts of Cheese Factories, Drovers and Grain Dealers, and all out-of-town accounts.

Farmers' Notes discounted, Farmers' Sales Notes collected and advances made against their security.

Municipal and School Section accounts received on favorable terms.

SAVINGS BANK DEPARTMENT Deposits of Twenty cents and upwards received, and interest at 3 per cent. per annum, compounded four times a year, without presentation of passbook. No delay in the withdrawal of any portion or the whole of the deposit.

G. de C. O'GRADY, General Manager.

ton for No. 1 timothy, and \$7 for mixed and clover, on track here.

Baled Straw—Easy in tone and unchanged, at \$6 per ton for car lots, on track here.

Seeds—The demand is active, and prices are firm in tone. Red clover, \$6.50 to \$7.65; alsike, common, \$3.50 to \$5.50; timothy, \$1 to \$1.50; all f.o.b., Toronto. Dressed Hogs—Are steady, and quoted unchanged at \$7.50 per cwt. for choice light weights, and \$7.25 for heavies.

Montreal Markets.

Eggs—Feature of the Easter market is the decline in price of eggs. Held stocks are small, but fresh stock is arriving in increasing quantity. Wholesalers paid 21c. last week at country points, but tendency is downward. Limed and cold storage obtainable at 18c.; fall, fresh, at 20c. or 21c.

Butter—Perhaps for the first time in the history of Canada, Australian butter, to the tune of some 300 packages, was ordered from the London market, but has been detained in New York on account of containing a small quantity of a harmless kind of preservative. Stocks here are almost nil, and arrivals—with the exception of an occasional car of dairy butter from Manitoba, most of which, or all, goes through to New York—are extremely light. Some are talking lower prices, but if these exist it is difficult to find them. New-milk creamery is selling at about 29c. to 30c., while fine old creamery sells at around 27c. or 28c. Sales of other qualities of creamery are being made at 25c., but this is not very desirable. New-milk dairy rolls are selling at 23c. to 24c., and are in demand.

Cheese—Market looking up. Cables from England indicate improvement in the situation there, and it is generally thought here that as soon as English importers find out how light stocks are everywhere in this country, there will be a scramble for the remainder of the stock. Already prices have advanced, sales having taken place at rather better than 11½c. for mixed, colored and white, some of them being June makes, it is said; holders are asking 11½c. to clean out their stocks.

Potatoes—Rather easier; deliveries freer than for some time. Dealers have been paying all the way from 65c. to 70c., on track, for choicest stock, in car lots, and selling the same in broken lots from store at 75c. to 80c. per bag of 90 pounds. The general opinion is that the stock of potatoes throughout the country is large, and that the high prices of former years will not prevail this coming spring, save perhaps for choice stock, which is very scarce. There is a great deal of poor frozen stuff which is selling all the way down to 20c. lower than the prices mentioned.

Beans—Holders and buyers apart. For choice beans, \$1.75 to \$1.80 per bushel is being demanded by some, but it is more than probable that others would be prepared to accept less for the same quality. There is a very wide range in the quality of the stock, and some poor beans may be picked up as low as \$1.30 or \$1.35 per bushel. There is a great scarcity throughout Canada, and there is no end of export demand for everything offering at slightly less than prices mentioned.

Live Stock—Everything considered, the export markets are somewhat more encouraging this week. Choice States cattle were high in London, selling 4c. up, at 12½c., Canadians being, however, only

11c. States were only 11½c. at Liverpool, while Canadians were 11c. The Glasgow market was firm, at 11½c. to 12c. for States. Shipments of cattle from the ports of West St. John, N.B., and Portland, were 3,788 head, against 2,271 the previous week; those of sheep being 505 head, against nothing the previous week. The local market showed few changes. Spring lamb is commencing to come in, but still very scarce, dealers paying high prices for it, probably \$10 to \$12 each on the average. The retail price is \$2 per front quarter, dressed, and \$2.50 per hind quarter. Hogs hold about steady. Demand for hogs continues very good, and prices are \$6 to \$6.10 for select stock, off cars; mixed and heavy stock selling down to about \$5.85 or \$5.75. Choice cattle are steady, at 4½c. to 4½c.; good, 3½c. to 4½c.; medium, 3c. to 3½c.; common, 2½c., and inferior, 1½c. to 2c. Old sheep are 3½c. to 4c., and yearlings, 5c. to 5½c. Calves are improving in appearance and in demand, and prices range from \$6 to \$12 for good, and \$3 to \$5 for poor.

Dressed Hogs and Provisions—The market for provisions shows considerable change, the advance (due to the higher cost of hogs) having taken place in the price of barrel pork, hams and lard. Choice refined compound lard is now ½c. up, at 6c.; extra pure in pails, 8½c., and finest kettle, 9½c.; leaf lard, in 2 lb. bricks, being 10½c. Bacon is again finding its level, choicest easing off slightly, and cheaper lines stiffening. Some quote 7½c. to 7½c. for country-dressed hogs, but it must be confessed that it is very hard to find them at any price, save in small lots. Fresh-killed abattoir hogs are firm, at 8½c. to 8½c.

Grain—The wheat market has been quite weak for the most part, prices having broken once or twice, and then gradually strengthened again. However, prices are rather lower.

Oats—Are about steady, although there were rumors of an easiness even here. Stocks in store increased about 8,000 bushels during the week, at 89,500, and receipts are undoubtedly larger than hitherto. Sales of No. 2 oats were made at 45½c., store, although it is likely that 46c. was the more general price, and some would not accept less. No. 3 oats would, accordingly, be 35c.

Buffalo Markets.

Buffalo.—Cattle—Slow, barely steady; prime steers, \$5.25 to \$5.65; shipping, \$4.65; butchers', \$4.35 to \$4.90; heifers, \$3.25 to \$4.75; cows, \$2.75 to \$4.15; bulls, \$2.75 to \$4.25; stockers and feeders, \$3 to \$4.25.

Veals—Active; 25c. to 50c., higher, at \$4.50 to \$8.50.

Hogs—Active, steady to strong; heavy and mixed, \$4.45 to \$5.50; Yorkers, \$5.35 to \$5.45; pigs, \$5.30 to \$5.35; roughs, \$4.50 to \$4.80; stags, \$3 to \$3.50.

Sheep and Lambs—Active and higher; native lambs, \$6.50 to \$8.75; Western lambs, \$8.25 to \$8.65; yearlings, \$7 to \$7.35; wethers, \$6 to \$6.25; ewes, \$5.75 to \$6; sheep, mixed, \$2.50 to \$6.

Chicago Markets.

Chicago.—Cattle—Good to prime steers, \$5.15 to \$6.25; poor to medium, \$3.75 to \$4.80; stockers and feeders, \$2.50 to \$4.65.

Hogs—Mixed and butchers', \$1.85 to \$5.10; good to choice, heavy, \$5 to \$5.17½; rough, heavy, \$4.80 to \$4.95; light, \$4.70 to \$5.07½; bulk of sales, \$5 to \$5.10.

Sheep—Good to choice wethers, \$5.60 to \$6.10; fair to choice, mixed, \$4.75 to \$5.40; native lambs, \$5 to \$7.60.

U. S. Crop Report.

Washington.—The monthly crop report of the United States Department of Agriculture is much as expected. It shows the amount of wheat remaining in farmers' hands on March 1st to have been about 111,000,000 bushels, or 20.1 per cent. of last year's crop, as compared with 20.8 per cent. of the crop of 1903 on hand on March 1st, 1904.

The corn is farmers' hands is estimated at about 954,000,000 bushels, or 38.7 per cent. of last year's crop, against 37.4 per cent. of the crop of 1903, on hand on March 1st, 1904. Of oats, there are reported to be about 347,000,000 bushels, or 38.8 per cent. of last year's crop still in farmers' hands, as compared with 34.9 per cent. of the crop of 1903, on hand on March 1st, 1904.

This year's figures leave a smaller total, visible supply included, than in any of the preceding ten years, with the one exception of 1897, when the exceptionally low reserves everywhere stimulated the great Leiter deal.

The following shows the percentage and quantities of wheat on hand March 1st in the years named:

		In the hands of farmers.	In warehouses.
1904.....	20.8	132,000,000	35,060,000
1903.....	24.5	164,000,000	47,800,000
1902.....	23.2	173,000,000	54,600,000
1901.....	24.5	128,000,000	56,000,000
1900.....	29.0	158,700,000	53,560,000
1899.....	29.3	198,000,000	33,300,000
1898.....	22.9	121,000,000	34,006,000
1897.....	26.6	88,000,000	44,000,000
1896.....	26.3	123,000,000	64,000,000
1895.....	16.3	75,000,000	78,700,000

British Cattle Markets.

London.—Live cattle are quoted at 10½c. to 12½c. per lb.; refrigerator beef, 8c. to 8½c. per lb.; sheep, 12c. to 13c. per lb.

GOSSIP.

Note the full-page advertisement of Percheron, Belgian and German Coach stallions for sale by the great importing firm of Messrs. J. Crouch & Sons, Lafayette, Indiana, who have branch stables at London, Ontario, at which a grand string of stallions are in stock. Parties interested should write Mr. U. V. O'Daniel, London, Ont., the manager, or call at the stables here and see the horses. The record of this firm in prizewinning speaks well for the quality of the horses they handle.

Truman's Pioneer Stud Farm, Bushnell, Illinois, and London, Canada, have issued a new illustrated catalogue of their imported Shire, Percheron and Hackney stallions, which is a gem in its line. The engravings of notable horses in their stud are exceedingly fine, and the portraits of the members of the firm, the father and three sons, are lifelike. Parties interested, and thinking of purchasing a good horse of any of these breeds, should apply early to Mr. H. W. Truman, London, Ont., for a copy of the catalogue.

Messrs. J. Crouch & Son, of the Lafayette Stock Farm, of Lafayette, Ind., have sold from their branch stables at London, Ont., to the Bervie Percheron Horse Breeders' Association, Bervie, Bruce County, Ont., one of their fine Percheron stallions, Hercules 28595. He is three years old, dark steel gray, of good style and action, with quality and finish, and weighing 1,980 lbs. Messrs. Crouch & Son are confident that he will prove of very great advantage to the horse-breeding interests of the locality where he goes.

Mr. G. W. Keays, of Hyde Park, writes us in changing his advertisement, wishing to announce: "I have recently sold a handsome roan bull, Scotch bred, to Mr. Truman Orman, of Byron, Ont. Mr. Orman ought to be congratulated on purchasing such a fine bull. Also I recently sold another handsome red bull, Scottish Victor, Scotch bred, to Mr. Archie Hodgins, of London Township, breeder of Shorthorns. Scottish Victor will, no doubt, prove a successful sire in Mr. Hodgins' herd. Anyone wishing a choice young bull or heifer should write, or see my herd at once, as I am going to sell."

In answering the advertisement on this page, kindly mention the FARMER'S ADVOCATE.



HOME MAGAZINE

Life, Literature and Education.

"If Japan is defeated, there can be no future in the Orient for Christianity and civilization. If Russia wins, the light of religious freedom will fade out of that part of the world forever. It is for these reasons that the little nation of Japan, knowing well the giant might of the foe she has to face, is nerved, for the sake of freedom and civilization, with their heritage and promise of all that she holds most dear, to wage the present struggle to the last gasp of her endurance and her life."—Baron Kaneko.

"I firmly believe we must have in Japan religion as the basis of our national and personal welfare. No matter how large an army or navy we may have, unless we have righteousness as the foundation of our national existence we shall fall short of the highest success. I do not hesitate to say that we must have religion for our highest welfare. And when I look about me to see what religion we may best rely upon, I am convinced that the religion of Christ is the one most full of strength and promise for the nation."—Baron Mayjima.

Great Revivals.

Green's "History of the English People," which ranks among the foremost standard historical works of the times, traces very carefully the course of the great revivals in the religious life of the nation, and their results in social and political reconstruction. Their precursors would seem to be corruption, degeneracy and decay, from which the spirit of the nation is awakened. These great movements have made for the furtherance of democratic ideas and institutions, and for the cause of justice and equality. W. T. Stead, the English journalist, tabulates the record of revivals after this fashion, with the sequence of reforms, which, by a remarkable coincidence or result, followed:

- 12th century—The Cistercian Revival—Magna Charta.
- 13th century—The Friars Revival—Parliamentary Government.
- 14th century—Wycliffe Revival—The Peasant Revolt.
- 16th century—Puritanism Revival—Fall of Despotism and Founding of New England.
- 17th century—Quakerism Revival—Revolution of 1688, and Founding of Pennsylvania.
- 18th century—Methodist Revival—Era of Reform.
- 19th century—American Revival—Era of Democracy.
- 20th century—Welsh Revival—Who can say?

The remarkable Welsh revival has spread to England, and something similar seems to have made its ap-

pearance in the United States at Atlanta, Binghamton, Colorado Springs and Denver, where the whole city was moved, business suspended by order of the mayor for a portion of the day, and even the State Legislature adjourning to attend the vast meetings held under J. Wilbur Chapman, D. D. This movement is regarded by some as a swing away from the rank materialism, greed of wealth, passion for folly, social scandals, mob lawlessness, political and municipal corruption that have been deluging the country. Whether the American revival will take rank with others recorded in history remains to be seen. Some of the manifestations of these revivals may not be relished, but in the main they make for good, and the progress of the world. No political or social change is regarded of importance that does not tend to the improvement of the individual and his conditions. As Stead remarks, the aim of all reformers is the regeneration of the individual. To make a bad man good, a cruel man merciful, a lazy man industrious, a drunkard sober, and to substitute a selfless struggle to help others for a selfish scramble to seize everything for oneself—that is the end and aim of all those who seek for the improvement of society and the progress of the world. It makes no difference whether the reformer is called Blatchford, or Liddon, or Price Hughes, John Morley, or General Booth, Frederic Harrison, or the Archbishop of Canterbury, that is what all are seeking to achieve. The revival need not be credited with all the apparent results which it reveals, any more than a day's sunshine in spring with all the flowers that it brings to birth. Some of its results may be evanescent, but the historical record shows, as individual records attest, that the prints of revivals are among the most real and permanent things in history.

A Noted Historian.

In the serene, philosophic face that appears in our literary album today, one would scarcely recognize that of a man whose course in life has been an unusually checkered one, yet such has been that of William Kingsford, soldier, civil engineer, and historian. Mr. Kingsford was born in the parish of St. Lawrence, London, England, in 1819, and received his education there. On leaving school he went into the army, and shortly afterwards came to Canada with the First Dragoon Guards. But even the glamor of being a "dashing dragoon" could not compensate one of such varied talents for the routine of military life, so in 1841 he left the military, and for good.

The profession for which he had been especially educated, that of civil engineering, now stood him in good stead, and for many years—with the exception of a short time during which he edited the Montreal Times—he applied himself to it as his life work, his literary efforts being given second place. In various parts of Canada and the United States, away down in Panama, and again in Italy, he conducted important surveys, and it was not until late in life that he found himself at liberty to begin the extensive work which he had planned, the writing of a his-

tory of the Dominion from its earliest times, until the Union of Upper and Lower Canada in 1841. This he accomplished in great detail, the finished work occupying ten volumes. Mr. Kingsford wrote several other books, chiefly technical, e. g., "The Canadian Canals, Their History and Cost"; also, "The Early Bibliography of Ontario," and "Archæology of Canada," but it is his "History of Canada" which holds its place as one of the standard works on the Dominion that his name shall live.



Wm. Kingsford.

Determination and Success.

In every walk in life, strength comes from effort. It is the habit of self-denial which gives the advantage to men we call self-made. He is often very poorly put together. His education is incomplete; his manners may be uncouth. His prejudices are often strong. He may worship himself and his own oddities. But if he is successful in any way in life, he has learned to resist. He has learned the value of money, and he has learned how to refuse to spend it. He has learned the value of time, and how to convert it into money, and he has learned to resist all temptations to throw either time or money away. He has learned to say NO. To say NO at the right time, and then to stand by it, is the first element of success.—David Starr Jordan.

Success in life is a matter not so much of talent or opportunity as of concentration and perseverance.—Chas. W. Wendte.

- Attend carefully to the details of your business.
- Be prompt in all things.
- Consider well, then decide positively.
- Dare to do right; fear to do wrong.
- Endure trials patiently.
- Fight life's battles bravely, manfully.
- Go not into the society of the vicious.
- Hold integrity sacred.
- Injure not another's reputation or business.
- Join hands only with the virtuous.
- Keep your mind from evil thoughts.
- Lie not for any consideration.
- Make few acquaintances.
- Never try to appear what you are not.
- Observe good manners.
- Pay your debts promptly.
- Question not the veracity of a friend.
- Respect the counsel of your parents.
- Sacrifice money rather than principle.
- Touch not, taste not, handle not intoxicating drinks.
- Use your leisure time for improvement.
- Extend to every one a kindly salutation.
- Yield not to discouragement.
- Zealously labor for the right and success is certain.

—Baron Rothschild's Maxims.

How Does a Writer Work?

How does a writer work? The question is always one which arouses some curiosity, were it only to find out whether one's preconceived ideas on the subject were well placed. There may be those who imagine the realms of poetry and authorship a sort of ethereal zone, wherein walk or float men or women who are not precisely as other men and women. Byron, standing on the wind-swept cliff, with poet's eye "in a fine frenzy rolling," as the vision of Manfred filled his soul, is an imaginable figure. Burns, too, striding through the fields, and plowing execrable furrows, while the stanzas of the "Mountain Daisy," or, "To a Mouse," found rhythm and melody in his brain, is also a comprehensible combination. Writing, and the inspiration of it, is a thing to be accomplished on mossy banks, by shaded woods or rippling streams, never at an ordinary wooden desk after a dinner of cabbage and beef-steak.

To others, again, the Mrs. Jellaby type of writer is the one that looms upon the mental horizon. The writer sits down at the desk, hair dishevelled, tie awry, or hairpins loose, as the case may be, and drives and drives. There are sheets of paper everywhere, and though the world may come, and the world may go, the pen scratches on. Mrs. Jellaby with her voluminous correspondence on Borrioboola Gha, has a great deal to answer for in clearing the reputations of those who would fain dabble in the ink-pot.

Actual facts, however, are full of surprises. It is interesting, if not edifying, to find out that Jane Austen wrote the greater number of her books in the living-room of her father's house, with the rest of the family moving about at their usual duties, and to know that Mrs. Harriet Beecher Stowe scribbled down many a page on the kitchen table while waiting for pies to bake or potatoes to boil.

Dickens, very unlike his paper-child, Mrs. Jellaby, was very systematic about his work, writing in solitary state in his study for a certain length of time every day; while Victor Hugo, on the other hand, thought out his plots while lying on his back on a yacht at sea. After that he could write out the details anywhere. Sienkiewicz, author of the florid "Quo Vadis," is another who cannot bear interruption, and his work is all accomplished behind closed doors.

Thackeray never had his work separated from him, and always carried his MS. in his pocket, making corrections upon it whenever he had a spare minute. Lord Lytton, on the other hand, always made most elaborate preparations before sitting down to his writing, dressing in especial state, then retiring to his fine library, where he kept twelve candles burning, and two powdered footmen in attendance.

Jules Verne rises very early in the morning, usually before five o'clock, and works until eleven, writing and re-writing, with infinite pains. He always has the plots of several novels in his head at once, and when finished with one, is ready immediately to begin at another. Stevenson was another who believed in

early work, and in his beautiful Samoan home, where he fought out his long struggle with disease and was at last vanquished, so young, he was always at work in the first morning hours, lying, usually, on a mat on the floor, with a cigar at hand, and writing on a pad as ideas came to him. Kipling, too, seems to find inspiration in tobacco smoke. He invariably works with a pipe in his mouth, and his movements are so erratic that he splashes ink everywhere, the white cotton suit which he wears in his Indian home being usually much bespattered with it.

Whatever the method adopted, there is one lesson which may be learned from all the great writers, and which may be applied to all work, as well as to writing—the necessity for infinite painstaking. There has been no haphazard work with any of the truly successful writers. Study, observation, and thought, the faculty for struggling with imperfections, however small, have been servants, one and all pressed into the service of every author who has achieved, and which may be well employed by those who would likewise achieve in any walk of life.

For To-day.

Above all, that I may not be a coward; That I may have courage—courage to be unmoved by the uncertainties of life, and without dread of loss, whether of friends, of health or of fortune: That I may come with a firm and tranquil mind to the work of this day, fearing nothing—ready to meet bravely failure or deprivation:

That I may bring to the day's efforts, good humor and a cheerful regard for all with whom I may come into contact: That I may not judge others hastily or with bitterness:

That I may not be grasping, but content with a fair share of this world's goods, willing to let others have theirs: That I may be diligent in the performance of duties and cheerful in manner: That I may be earnest in pursuit of the light:

That I may stand with open mind ready to receive the Truth in small affairs and in large—whether in learning new and better methods, or in receiving that philosophy necessary to a brave, tranquil, well-poised, well-harmonized life. JOHN BRISBEN WALKER.

A Lawyer's Fee.

A story is told at the expense of a well-known solicitor. A man named Smith had failed in business and sold out, and having two or three tough little bills, had given these to the lawyer to collect. Smith went to the office to receive the proceeds, which amounted to only about fifty dollars.

"I am sorry you have been so unfortunate, Smith," said the lawyer, "for I had taken a great interest in you. I shan't charge you so much as I should if I did not take an interest in you."

Here he handed Smith fifteen dollars, and kept the balance.

"You see, Smith, I knew you when you were a boy, and I knew your father before you, and I take a good deal of interest in you. Good morning! Come and see me again!"

Smith, moving slowly out of the door, and ruefully contemplating the fifteen dollars, was heard to mutter—"Thank goodness—you didn't know my grandfather!"

An excited military-looking man entered the editorial sanctum of The Odessa, exclaiming: "That notice of my death is false, sir. I will horsewhip you within an inch of your life, sir, if you don't apologize in your next issue." The editor inserted the following the next day: "We regret extremely to announce that the paragraph which stated that Major Blazer was dead is without foundation."

Two little London girls who had been sent by the kindness of the pastor's wife to have "a happy day in the country," narrating their experiences on their return, said: "Oh, yes, mum; we did 'ave a 'appy day. We saw two pigs killed and a gentleman buried."



"A Nail in a Sure Place."

I will fasten him as a nail in a sure place. . . . and they shall hang upon him all the glory of his father's house, the offspring and the issue, all vessels of small quantity, from the vessels of cups even to all the vessels of flagons.—Isa. xlii: 23, 24.

This prophecy, which was spoken of Eliakim—a name meaning "God will raise up"—has been fulfilled in the Man, Christ Jesus, and in no other man. Eliakim is said to have the government committed into his hand, to have the key of David upon his shoulder, to open and shut as he may choose, words which in other places plainly refer to Christ. The parable itself is homely, but expressive: a nail driven (or built) into the wall of the common living-room on which all the cups and flagons may safely hang. And how much depends on the truth expressed by the words, "in a sure place." Think of all the millions of souls who, during the last two thousand years, have centered all their hopes on Christ, for this life as well as for the next. If He cannot bear their weight, then there is no hope for the world. And each man must test His power for himself. We, who have proved by long experience His unflinching strength, may declare with no shadow of doubt that it is safe to trust Him utterly, and yet no amount of outside evidence can establish a man's faith. Christ calls men by name, gathers them one by one, and a belief which is untested and untried, put ready-made into a man's hands, has no right to the name of faith at all. Children may accept Christ as their Master without question, but when they grow up they must face and conquer doubt, if they are determined to cling to Him who is all in all to them.

There are many talkers—I can't call them thinkers—who make a great flourish with that much-abused quotation from "In Memoriam":

"There lies more faith in honest doubt, Believe me, than in half the creeds."

But they never seem to be "honest" enough themselves to continue the quotation—much less to act on it:

"He fought his doubts and gathered strength,

He would not make his judgment blind, He faced the spectres of the mind And laid them: thus he came at length To find a stronger faith his own: And Power was with him in the night."

If "cant" is abominable in religion, it is certainly contemptible in scepticism. There is no trace of "honest doubt" in the "cant" catch-questions—such as, "Who was Cain's wife? Could a whale swallow Jonah?" etc.—with which these shallow objectors think they can overthrow a faith strong enough to endure ages of fierce persecution and strife, a faith that has proved itself mighty to destroy such giant evils as slavery, polygamy, child-murder, etc., wherever it has taken root. If they could shake Christianity, would the world gain anything in the place of its terrible loss?

Have these easy, indolent objectors a monopoly of doubts? Is it likely that any sane man would throw his whole weight on Christ without an attempt to test His tremendous claims? There may possibly be exceptions, but it seems to me that any grown-up person, with a

reasonable amount of intelligence, who accepts Christianity without examination, is not really throwing his weight on Christ at all, but is living for this world and only puts on an outside appearance of religious observance. This may deaden his own conscience, but can hardly be called obedience to Him who claims not only our first love, but a love so strong that, in comparison with it, all other love is called "hate."

"If any man come to Me, and hate not his father, and mother, and wife, and children, and brethren, and sisters, yea, and his own life also, he cannot be My disciple."

"So likewise, whosoever he be of you that forsaketh not all that he hath, he cannot be My disciple."

Is it likely that any man in his senses should be prepared to submit to such stupendous demands without examining into the authority of One who so calmly asserts a right, not only to entire obedience, and a readiness to sacrifice everything if called upon, but even to the deepest love of the heart?

I do not say for a moment that all who have thrown their whole weight on Christ, and have centered on Him all their love and trust, have studied what are usually called "the evidences of Christianity." God has many ways of manifesting Himself to men. It is possible to study diligently the proofs of Christianity—as many clever agnostics do—and yet to be very far from a living, quickening, personal knowledge of Christ, very far from resting the whole weight on Him. But proofs are of various kinds. The "woman who was a sinner," and many other heart-sick men and women, are drawn irresistibly to Him who only can supply their utter need. The pure-hearted Nathaniel needed no other proof than Christ's power of reading his inmost soul, while Nicodemus only found the peace of certainty after years of restless doubt. Polycarp, of Smyrna, could say: "Eighty and six years have I served Christ, and He has never done me wrong," while, on the other hand, the great Augustine of Hippo found out from sad experience the truth of his famous saying, a saying which has become proverbial because it fits all men in all ages, that God has made man for Himself, and his soul is restless until it rests on Him.

God deals directly with each soul, and He has as many ways of reaching them as there are souls to be reached. He has witnesses innumerable, in city and village, town and country, who can testify that He speaks to them, not vaguely and indistinctly, but so plainly that they cannot doubt His orders. But He does not force proofs on those who do not want to hear and obey, any more than He forced the fact of the Resurrection on Caiaphas, Pilate or Herod. As it was then, so it is still, sooner or later He reveals His living presence to all who are willing to do the will of God.

A few years ago a young man, who had been called to go out as a missionary, said with strong, calm certainty: "Calls to-day are a reality. The voice of God is clear and strong, though still and quiet. The call comes to us to be, to do, to dare, to die, to work and to suffer, and the men who are always listening to God's voice—and, of course, always hearing it—are the men who accomplish things in the world."

There is no sign of doubt or hesitation in those quiet but inspiring words. The speaker was plainly not testing for the first time Christ's power to support his weight.

But some earnest seekers after God, who have not yet heard His voice, may wonder why He hides Himself from them so long. Who can tell all His reasons? On one occasion, when our Lord had departed into a solitary place to pray, the disciples followed to tell Him that all men were seeking Him. Did He at once go to meet those earnest seekers? Quite the contrary. He withdrew Himself still farther from them, saying: "I will go into the next town."

"God's fashion is another; day by day And year by year He tarrieth; little need The Lord should hasten; whom He loves the most He seeks not the oftenest, nor woos him long, But by denial quickens his desire, And in forgetting best remembers him; Till that man's heart grows humble, and reaches out To the least glimmer of the feet of God, Grass on the mountain tops, or the early note Of wild birds in the hush before the day."

But the promise, "Seek and ye shall find," always has been and always will be fulfilled. Those who persistently try to live up to the light they have, and persistently reach out for more light, will certainly find the truth. Christianity can only be really understood from the inside. Our Lord always refused to give a "sign" to unbelievers, but to His own disciples He still shows Himself to be alive "by many infallible proofs." Countless witnesses can testify that the promise is sure: "If any man willeth to do His will, he shall know of the teaching, whether it be of God." Christ, in His own time and way, will manifest Himself clearly and distinctly to those who make the keeping of His commandments their business in life. He has endured many years of fiercest scrutiny, and still stands "in a sure place," so we need not fear the strong search-light of the "higher critics," the remorseless investigation of scientists, or the honest doubts of men who, like S. Thomas, are in terrible earnest and feel His claims to be a matter of life and death. As for the dishonest doubters, who care nothing at all about the matter, but fancy themselves to be very clever because they parade a few "cant" objections, which they don't want answered; such shallow sceptics may expect to receive only the stern silence our Lord dealt out to the careless curiosity of Herod.

I do not say that any amount of mental research may find out God, for "the natural man receiveth not the things of the Spirit of God: for they are foolishness unto Him; neither can he know them, because they are spiritually discerned." (If you don't see any difference between mind and spirit, I can't explain it to you, any more than I could explain to a man who was color blind the difference between green and red.) It is not with our bodily eyes, nor yet with our mental vision, that we can see God, although He is not "so far off as even to be near."

"Speak to Him, thou, for He hears, and spirit with spirit can meet; Closer is He than breathing, and nearer than hands and feet."

Of what value then are the numerous books which have been written to establish the claims of Christianity? Surely they are of inestimable value, for, if we are to hang with all our weight on Christ, we must believe with the "understanding" as well as with the spirit, the reason must own Him to be Master, as well as the heart. God does not ask us for a childish credulity, and reason must be able to follow in the track of faith, if we are to offer ourselves fully and entirely—body, will, heart, mind and spirit. How many parts do we consist of, anyway? Do you know? I am sure I don't.

We all know that the sun is out of reach, and that it would be folly to attempt to shake it from its place, and it is just as impossible to shake the Sun of Righteousness from His "sure place." To try and stop the onward march of Christianity would be as futile as an attempt to hold back for a moment the daily miracle of the dawn. The spirit of man is near of kin to the Spirit of God, and will not be held back from the search after Him, and well we know when we have found Him.

"The truth in God's breast Lies trace for trace upon ours impressed; Though He is so bright and we so dim, We are made in His image to witness Him."

HOPE.

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Dear Grandma.

Oh, I love to slip into grandma's room— The Blindman's hour" is the best— And get her to talk of the dear old home, Which she left to come out West. And then, as the twilight grows more dim, She slips her dear arm around me And tells of a brighter home above, Where she soon expects to be. Dear grandpa went up there long ago, But she knows that he loves her still. When she speaks of him her voice grows soft, And I feel the strangest thrill Go right to my heart, for she says that death Can only make friends more dear, If they love each other, and love the KING, He is sure to keep them near. And her trembling voice grows sweeter still As she says that her KING—and mine— Is close at our side in the darkened room, And I almost see the shine Of His glistening robes. Oh, I love Him too, And I know that He loves me. When grandma goes I must slip through the gates And the KING in His beauty see. COUSIN DOROTHY.

A visit to the Sick Children's Hospital. Why is "The Farmer's Advocate" the best farmers' paper?

Write on one of these subjects only, and don't make your essay too long for insertion in our Corner. Write on one side of the paper only (with ink), add your name, age and address, and post in good time so that it may reach me before the end of April. Address as usual to COUSIN DOROTHY, Box 92, Newcastle, Ont.

Bud, the Clever Collie.

One of the most clever things of which I ever heard was about a collie dog named Bud, which my uncle owned. My uncle lived across the road from us. The stage ran past our place every night about half past five. Bud always used to meet the stage every night, and bring in our paper. When he got to the door, if we did not open it right away, he would bang his tail against it till someone came. Mother had always to give him a piece of bread or cake before he would drop the paper. But the most clever trick is coming.

One Saturday night we all went away to spend Sunday. While we were away there was a very heavy snowstorm, which blocked up all the paths around.



Dear Grandma.

"Subjects for Letters" Competition.

Two prizes have been awarded in class I., the winners being Jessie C. McDonald, Aberdeen, Ont., and Birdie Robb, Kazubazua, Que. (aged 15); class II., Blanche Thornton, Elliott, Ont. (aged 13); class III., Hugh A. Bowman, Sonya, Ont. (aged 11).

The list of competitors deserving honorable mention is as follows: Bertha Ross, Hildred, Agnes Buchanan, Ruth Cutler, Ha McColl, Lizzie Humphrey, Constance Hutchison, Leyda McColl.

A great many subjects for letters have been suggested by the competitors, but I will only pick out a few from the different lists for you to choose from. Prizes will be given for the best original essays on any of the following subjects.

- How I spent my Christmas holidays. The best book I ever read, and why I liked it. An adventure with some wild animal. What I should like to be when I grow up. A narrow escape (real or imaginary story).

piece of cake, and praised him for being so clever. My uncle has moved farther away now, but he still has the same dog. Now, the dog will carry in wood in his mouth. When he gets hungry, he will run to the wood-pile to get a stick, so he will get something to eat. Bud's teeth are now worn off with carrying in wood. But, the most comical thing! When he is extra hungry he will get the biggest stick he can carry, and expects to get a larger piece of bread. ALMA LYONS, (Age, 13 years). Ancaster P. O., Ont.

A TALE OF A CAT.

My cat doth daily chase her tail, But ne'er that tail hath caught. What though her quest may seem to fail, Call not her zeal miswrought: She always has an end in view. And that's enough for humans too. —Lippincott's.

Welcome to Robin.

Red-breasted Robin is with us again. He swings on a branch of the old apple tree.

Singing a love-song gladsome and free, Happy alike, whether sunshine or rain. Sing on, happy fellow, good tidings you bring; We welcome you gladly, our herald of spring.

The snows in the valley lie white and cold.

A wintry air lingers with us still, But the sun is warm, though the winds are chill;

Soon the Frost King must loosen his icy hold, For we know of a surety that spring-time is near.

Since Robin, gay red-breasted Robin, is here.

Oh! the Robin's clear notes have an undertone.

On their cadence seems wafted a perfume of flowers,

A sparkle of sunshine, a patter of showers,

A glint of green meadows with dandelions strewn.

Oh, Robin, gay Robin, good tidings you bring;

We welcome you gladly, our herald of spring.

M. CARRIE HAYWARD. Corinth, Ont.

Sewing Carpet Rags.

By Harriet Whitney Durbin, in the Ladies' World.

The day was dull and misty; the sky was cold and pale;

Each minute, o'er the cottage roof, a dismal gust would wail.

I raised my voice and grumbled at Nature's ruthless law

That all the world should undergo a February thaw.

The very fire pouted; the kettle would not hum;

The household spirits slowly sank, and visages were glum.

When Cousin Kate, a cheery soul whose courage never flags,

Said: "What a splendid day it is for sewing carpet rags."

A sudden change came o'er us; we climbed the attic stair,

And gathered up with active hands the ancient garments there.

A queer old dusty scent of sage and boneset hung around,

And old, forgotten odds and ends in nook and trunk we found.

With arms and aprons laden we sought the sitting-room,

And lo! the February day had lost its darkest gloom.

With bits of song and joke we gathered in the hearthstone's glow

To plan a gay new carpet from the wrecks of long ago.

Our busy fingers cut and tore the varicolored stuff

And heaped the baskets full of strips of red and brown and buff,

And then with flying needles (while tongues ran on as fast),

We sewed away and ere we knew, the afternoon was past.

The supper board was ready; the coffee and the cream,

The sally-lunn and honey were perfect as a dream.

And Memory still brings me, with joy that never flags,

The misty afternoon we spent in sewing carpet rags.

Two dusky small boys were quarreling; one was pouring forth a volume of vituperous epithets, while the other leaned against a fence and calmly contemplated him.

When the flow of language was exhausted he said:

"Are you troo?"

"Yes."

"You ain't got nuff' more to say?"

"No."

"Well, all dem tings what you called me you is."

To express the life, to unfold what has been wrapped up in us, that is success.—

Success.

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All "bucket bowl" separators have incorrect bearings. The bowl is set upon the spindle and held upright by rigid bearings. Such bowls are top heavy, inclined to wobble, sure to bind.

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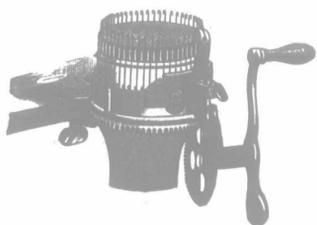
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Plain \$8; Plain and Ribbed, \$12.

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Here and There.

"Hang sorrow! Care will kill a cat,
And therefore let's be merry!"

says an old song. Probably, however, the poet just meant worry, not sorrow, when he spoke of so ignominiously disposing of it. Sorrow, real sorrow, has too much of dignity and sanctity in it, to be touched upon with so much flippancy; but worry is, as a rule, quite another thing. Something bothers us—a very tiny thorn in the flesh, perhaps, annoying, of course, yet as easily got rid of in the first place as a thistle from one's finger. A little walk, perhaps, might do the good work, or a visit, or the firm resolution to stop thinking about it by occupying one's mind by reading, or talking, or plunging into some absorbing work. Instead of taking this heroic treatment, however, we sit down and proceed to dwell upon the annoyance, and the more we think of it the bigger it looks, until presently it appears as a great big bugaboo, haunting us by night and day. And so we keep on looking at it, and putting wrinkles on our faces, and ugly down curves to our lips, and peevish tones into our voices, until life scarcely seems worth living, to ourselves or anyone about us.

Then, one day, some little thing happens. A dear friend comes to visit us; we have an unexpected trip, or some such variation. We forget all about Mr. Bugaboo, and before we know it the lip-corners are going up again, and the cheery tone is coming back to the voice and the rose color to the sky. After a while, perhaps, we think of our pet phantom, and look up to see him, but presto! he has gone!—vanished into thin air, and we discover that, like the giant of the Jungfrau, he has been pretty much just a reflection of ourselves. Then we laugh and say, "What a goose I was to worry about that!"

After all, what a great deal we in Canada have to be thankful for!—we who walk in the humbler paths of life, perhaps, most of all. Of course there must always be some heroes and heroines who must forge to the top, or be driven to the top, but if we be not of those, let us not forget that there is the great happiness of the quiet life still for us. George Eliot has said that "the happiest woman, like the happiest nation, is the one without a history." Be one woman or man, there are, in truth, many compensations in having no history.

I was reading a little while ago an account of how poor Archduchess Marie, wife of Grand Duke Vladimir, is spending these beautiful spring days. Some weeks ago, you remember, before the assassination of Grand Duke Sergius, letters were received by several of the nobility of Russia, telling them that their days were numbered. Prince Vladimir was one of these nobles. Then came the fatal day upon which the bomb fell, and the remains of Sergius were gathered up from the blood-stained snow. What an awful scene was that—the snow spattered with crimson for yards about, the mangled flesh gathered up in shreds, and Elizabeth, wife of the murdered man, throwing herself down, hatless and coatless, in the bitter winter air, upon that place of blood, to pray! After this assassination, Prince Vladimir received other letters, telling him that he would be the next, and for days he stayed in, not daring to appear. Then the soldier's spirit asserted itself. He declared that he would be no coward, and that he was guiltless of the charge of being responsible for atrocity committed in St. Petersburg on the day of Father Gapon's pilgrimage. From the day of Sergius' funeral, he insisted on going out in an open carriage, and even in walking on the boulevards

before the Palace, but under the dreadful strain he had become an old man, and his hair was growing white. Meantime, what of the Archduchess Marie? Fearful of the life of her husband, feeling that her presence might be safety to him, she has never left his side, riding with him in his carriage, walking with him arm in arm, not knowing at what instant the bomb might fall which would leave them both but little shreds of tattered flesh on the snow.

Think of living like this; think of troubles such as these, and be thankful for Canada. There are those who say that the autocracy of Russia deserve all that they get. That question we shall not presume to investigate. The peasants of Russia have of a surety had their grievances. But, however that may be, there still remains the Archduchess Elizabeth, with her buried heart, and the Archduchess Marie, in her living death. Again, let us be thankful for Canada, for her free life for low and high, her justice to all the world. Let us think what sorrow may mean, and never worry. Care may not kill a cat, but it can do enough damage in the world without being harbored, so let us give it a wide berth, and be merry while we may.

DAME DURDEN.
"Farmer's Advocate" office, London, Ont.

The following letter—the first which has been received on the "Illinois Farmer's Wife" question—will be read with much interest. Next!

Too Much Work.

Dear Dame Durden,—I have been much interested in some of the Ingle Nook letters, and after reading the article on "The Farmer's Wife," thought I would write a few lines on that subject. I believe the farmer's wife to be (as a rule) the hardest worked woman in town or country, and especially so where dairying is carried on as extensively as in this part of the country, for milking is then added to the round of chores. She will milk as many cows as the men in the morning, and then they will walk in about the time she has her hands washed and enquire if breakfast is ready. I am a farmer's daughter, and know that just such impossibilities are expected of her; and yet, little is thought of "Woman's Work."

However, I think life in the country preferable to town life, if a woman is so fortunate as to get a "man" for a husband, and not a slave-driver, and, unless she can do that, she had better not get married—certainly not to a farmer. I think matters might be remedied by teaching the boys to have consideration for their mother and sisters, and then they will respect their wives. There are so many improvements in and about the house nowadays that labor can be lightened in many ways, and life on the farm made very pleasant indeed, if the husband and wife desire it so; but better to marry the "hired man" than a farmer like the one described by the Illinois woman, for I know of no country woman who has an easier time than the hired man's wife. One could write pages on this subject, but space will not permit. I shall look for many letters on this subject.

MARIE.

Good Housekeeping.

I would not know how to keep house without the "Farmer's Advocate," as I have taken it since 1874, without missing a year.

R. K. MILROY,
Cornwall Centre, Feb. 14th, 1905.

Traveller (to valet).—"That's a rather large statue, Pat."

Pat.—"Yes, son. They tell me the hand is eleven inches wide."

Traveller.—"Wonder why they couldn't make it twelve inches?"

Pat.—"Beauz they didn't want ter make a fool."

With the Flowers

Cannas from Seed.

Old Subscriber writes asking information regarding culture of cannas from seed.

Ans.—Get the seed in February or March, and file or sandpaper each seed on the side opposite the germ until the white can be plainly seen. Next soak the seed in rather hot water for an hour or two, then plant in a hotbed or in shallow boxes in the house, and see to it that the soil is kept moist and warm. When the seedlings are large enough to handle, transplant them into thumb-pots, doing this with great care, as the tiny plantlets are very delicate. Keep in a sunny window, and give plenty of water, shifting from the tiny pots to larger ones when necessary. Finally, when all danger of frost is past, set out in the open ground. The Canna bed should be deeply dug, and should, if possible, be made of swamp muck mixed with old, well-rotted manure. Very few plants will grow in swamp muck, but Cannas, Caladiums and Salvias find it very much to their liking, hence these plants may be mixed in the bed if preferred. After planting give plenty of water, washday suds are very good, for the Canna is a gross feeder, and can scarcely have too much nourishment, and if frosts should threaten at any time in June, do not forget to cover the plants during the night.

By planting the seed in March, the tubers should be well developed by fall, so that there will be a goodly number to store away over winter.

Sweet Peas.

"What are you going to have in your garden this summer?"

"Oh, sweet peas, and asters and nasturtiums, and—oh, I don't know just what else."

Now, isn't this the answer often given to that question? No matter what else one has, it does seem as though sweet peas, nasturtiums and asters are a necessary part of every garden. To this list a great many would add pansies and mignonette.

As sweet peas, then, are the first of this quintette to be planted, our talk to-day will be of them, and we will hope to bring out a few points that may bring success to many who have hitherto failed with this beautiful flower. Sweet-pea culture is not difficult, but one must go about it rightly, else the result is sure to be disastrous.

In the first place, then, it is necessary to plant the peas the very first day in spring on which the ground is workable, no matter whether that day come in March or April. Subsequent storms and cold snaps will do no harm, for the sweet pea is very hardy, and is much more particular about getting an early start in life than about being coddled after it has got on the way. There is, however, a right and wrong way of giving it its start, and if you make a mistake disaster will come early. There is no use in scratching a few holes in a shady, gravelly spot overrun with the roots of trees, and expecting a clump of luxurious pea foliage, nodding with pea blossoms in July. . . . No; you must select your site with care, in the sunniest place you have, quite out of the reach of trees, and not too close to a brick or stone wall, which might scorch the vines in the hot summer weather. The soil, to be ideal, should be a deep, rich clay, which will not need the addition of any fertilizer. If poor or sandy, it must be improved by the addition of some very old compost, the black earth from the very outskirts of the barnyard, for instance, or the mucky compound from an old compost heap. Manure in anything like a raw state should never be used for sweet peas,

In answering any advertisement on this page, kindly mention the FARMER'S ADVOCATE.

nor for any other flower, for that matter.

Having chosen the site, mark out your border so that it will run north and south, as in this way the peas will receive the most sunlight; then proceed to dig the trench, making it about a foot deep, and a foot and a half or two feet wide. Leave the soil piled up at the side, to be used for filling in later. Now, along the bottom of the trench make two marks over an inch in depth to sow the seed in, scatter the peas along, and press the soil over them very firmly to a depth of one or two inches. After that, until six weeks after the peas are up, you may safely leave the border to itself, with no care whatever, except to see that the weeds are kept down. In case of a time of extreme drought, of course, water thoroughly, so that the water will reach the roots, but do not make a practice of putting water on so that the ground will be kept soaked during this time.

At the end of six weeks begin to fill in the earth, drawing it in from time to time, and making it firm. When the buds appear, give plenty of water—washday suds whenever possible, and see to it that, each time, the water goes all the way down to the roots. Less than this will be of little use. Liquid manure should also be supplied from this time on, and an occasional dressing of wood ashes hoed in lightly about the surface will be found beneficial. It must be remembered, however, that sweet peas, unlike the majority of plants, resent much cultivation, and such as is given must be very shallow, to act as a mulch rather than as a cultivation. A mulch of lawn clippings put on the surface of the soil frequently will do much towards conserving dampness and keeping the roots cool, and will be found a great benefit. One may, however, object to its appearance.

All sweet-pea vines, of course, require support. Perhaps one of the most satisfactory devices has been found to consist of a trellis of poultry-netting fastened to posts at each end, the posts being provided with cross-pieces, to which wires may be stretched for further support when necessary. Another which has been found to work well is made of two parallel fences of poultry-netting placed each side of the row. It is not, however, absolutely necessary to plant sweet peas in rows. Just as satisfactory results may be obtained by putting them in round beds, thinning them out properly, and letting them run on twiggy branches fixed in the ground for the purpose.

In sandy soil sweet peas are often attacked by a sort of blight, which makes them turn yellow and dwindle shortly after they come up. Stiffening the soil with clay will help to prevent this. If clay cannot conveniently be obtained, all that one can do is to take particular pains in tramping the soil down firmly below and above the peas, this having been found to be to some degree a preventive of the disease.

Sweet peas are not likely to be troubled much by insect pests, a tiny green louse and the cutworm being the only enemies that one need watch for. Frequent spraying of dilute tobacco water will do away with the former, while a mixture of bran and Paris green water sprinkled along the surface of the ground about the stems will be efficacious against the latter.

Just one word more—do not let your sweet peas run to seed. It will pay you a hundred times over, in the beauty of your border, to buy fresh seed every spring. Pluck all the flowers you wish, the more you take off the more you will have, and the longer will be the season of bloom.

Frequently leather chair covers or trimmings which have become dull and stained may be brightened and restored if treated with sweep oil to which a little vinegar has been added. Apply a little of the mixture at a time, and put it on with a soft cloth, afterward rubbing the leather with a flannel.

The LEAVENWORTH CASE

By A. K. Green.

CHAPTER XXII.—Continued.

"That is all."
"Another question; did you hear in what manner and at what time he procured a newspaper that evening?"

"No; I only learned that he was observed by more than one to hasten out of the dining-room with the Post in his hand and go immediately to his room without touching his dinner."

"Humph! that does not look—"
"If Mr. Clavering had had a guilty knowledge of the crime, he would either never have ordered dinner before opening the paper, or having ordered it, he would have eaten it."

"Then you do not believe from what you have learned that Mr. Clavering is the guilty party?"

Mr. Gryce shifted uneasily, glanced at the papers protruding from my coat-pocket, and exclaimed: "I am ready to be convinced from what you have learned that he is."

That sentence recalled me to the business in hand. Without appearing to notice the look he had given me, I returned to my questions.

"How came you to know that Mr. Clavering was in this city last summer? Did you learn that, too, at the Hoffman House?"

"No; I ascertained that in quite another way. In short, I have had a communication from London in regard to the matter."

"From London?"

"Yes; I've a friend there in my own line of business, who sometimes assists me with a bit of information, when requested."

"But how? You have not had time to write to London and receive an answer since the murder."

"It is not necessary to write. It is enough for me to telegraph him the name of a person for him to understand that I want to know everything he can gather in a reasonable length of time about that person."

"And you sent the name of Mr. Clavering to him?"

"Yes, in cipher."

"And have received a reply?"

"This morning."

I looked toward his desk.

"It is not there," he said, "if you will be kind enough to feel in my breast-pocket you will find a letter—"

It was in my hand before he had finished his sentence. "Excuse my eagerness," I said. "This kind of business is new to me, you know."

He smiled indulgently. "Let us hear what my friend Brown has to tell us of Mr. Henry Ritchie Clavering, of Portland Place, London."

I took the paper to the light and read it as follows:

"Henry Ritchie Clavering, Gentleman, aged 43. Born in —, Hertfordshire, England. His father was Chas. Clavering, for a short time in the army. Mother was Helen Ritchie, of Dumfriesshire, Scotland; she is still living. Home with H. R. C., in Portland Place, London. H. R. C. is a bachelor, six feet high, squarely built, weighing about twelve stone. Dark complexion, regular features. Eyes dark brown; nose straight. Called a handsome man; walks erect and rapidly. In society is considered a good fellow; rather a favorite, especially with ladies. Is liberal, not extravagant; reported to be worth about £5,000 per year, and appearances give color to this statement. Property consists of a small estate in Hertfordshire, and some funds, amount not known. Since writing this much a correspondent sends the following in regard to his history: In '46 went from uncle's home to Eton. From Eton went to Oxford, graduating in '56. Scholarship good. In 1855 his uncle died and his father succeeded to the estate. Father died in '57 by a fall from his horse or a similar accident. Within a very short time H. R. C. took his mother to London, to the residence named, where they have lived to the present time.

"Travelled considerably in 1860; part of the time was with —, of Munich; also in party of Vandervorts from New York; went as far east as Cairo. Went to America in 1875 alone, but at end of three months returned on account of

mother's illness. Nothing is known of his movements while in America.

"From servants learned that he was always a favorite from a boy. More recently has become somewhat taciturn. Toward last of his stay, watched the post carefully, especially foreign ones. Posted scarcely anything but newspapers. Has written to Munich. Have seen from waste-paper basket torn envelope directed to Amy Belden, no address. American correspondents mostly in Boston; two in New York. Names not known, but supposed to be bankers. Brought home considerable luggage and fitted up part of house as for a lady. This was closed soon afterward. Left for America two months since. Has been, I understand, travelling in the south. Has telegraphed twice to Portland Place. His friends hear from him but rarely. Letters rec'd recently, posted in New York. One by last steamer posted in F—, N. Y.

"Business here conducted by —. In the country, — of — has charge of the property."
"BROWN."
The document fell from my hands.

F—, N. Y., was a small town near R—.

"Your friend is a trump," I declared. "He tells me just what I wanted most to know." And taking out my book I made a memorandum of the facts which had most forcibly struck me during my perusal of the communication before me.

"With the aid of what he tells me," I cried, "I shall ferret out the mystery of Henry Clavering in a week; see if I do not."

"And how soon," inquired Mr. Gryce, "may I expect to be allowed to take a hand in the game?"

"As soon as I am reasonably assured that I am upon the right tack."

"And what will it take to assure you of that?"

"Not much; a certain point settled and—"

"Hold on; who knows but what I can do that for you?" And looking toward the desk which stood in the corner, Mr. Gryce asked me if I would open the top drawer and bring him the bits of partly-burned paper which I would find there.

Hastily complying, I brought three or four strips of ragged paper and laid them on the table at his side.

"Another result of Fobbs' researches under the coal on the first day of the inquest," shortly exclaimed Mr. Gryce. "You thought the key was all he found. Well, it wasn't. A second turning over of the coal brought these to light, and very interesting are they too."

I immediately bent over the torn and discolored scraps with great anxiety. They were four in number, and appeared at first glance to be the mere remnants of a sheet of common writing-paper, torn lengthwise into strips and twisted up into lighters; but upon closer inspection, they showed traces of writing upon one side, and what was more important still, the presence of one or more drops of spattered blood. This latter discovery was horrible to me, and so overcame me for the moment that I put the scraps down, and turning toward Mr. Gryce, inquired:

"What do you make of them?"

"That is just what I was about to inquire of you."

Swallowing my disgust, I took them up again. "They appear to be the remnants of some old letter," said I.

"They have that appearance," Mr. Gryce returned a little grimly.

"A letter which, from the drop of blood observable on the written side, must have been lying face up on Mr. Leavenworth's table at the time of the murder—"

"Just so."

"And from the uniformity in width of each of these pieces, as well as their tendency to curl up when left alone, been first torn into even strips, and then severally rolled up, before being tossed into the grate, where they were afterwards found."

"That is all good," said Mr. Gryce, "go on."

(To be continued.)

"Molly," said some one to the little daughter of a clergyman, "does your father preach the same sermon twice?"

"I think, perhaps, he does," returned Molly, cautiously; "but I think he talks loud and soft in different places the second time, so it doesn't sound the same at all."

TRADE TOPICS.

DR. CHASE'S CALENDAR ALMANAC.
—A copy of Dr. Chase's Calendar Almanac, whose monthly weather forecasts are very popular, can be obtained gratis by dropping a post card, mentioning the "Farmer's Advocate," to Edmanson, Bates & Co., Toronto, Ont.

AMERICAN MILLS.—Machinery is one of the many lines in which it invariably pays to get the best. It is safest, cheapest and best. If you have sawing or woodworking to do, write American Sawmill Machinery Co., Engineering Building, New York, U. S. A., for free catalogue and list of Canadian agents of their improved American mills. You will get ideas from the catalogue and good machinery from the agents.

A WORD TO FARMERS.—Farmers cannot be too particular in the quality of seeds sown. Some one has said that "a dollar saved is a dollar made," and while this may be true in many cases, yet a small saving in the price of seeds may mean hundreds of dollars lost in the crop, and very often the sowing of cheap seeds means no crop at all. The Rennies, of Toronto, have a reputation for good seeds. Every gardener and farmer should have their seed book.

LAMB FENCE MADE OF HIGH-CARBON WIRE.—In building a fence, it is important to use the strongest wire. Whereas no other fence can compare with a neat, well-constructed wire, none is more unsightly or annoying than a sagging, kinked or torn wire. Good wire has a high-carbon content. "Lamb fence," manufactured by the H. R. Lamb Fence Co., Ltd., 687 Bathurst St., London, Ont., is made of high-carbon wire. Write them for free sample, and compare it with other wire. The sample is their agent.

SOME FINE REAL ESTATE FOR SALE.—In this issue there is an advertisement announcing the sale of a number of fine farms in Western Canada. These lands are owned by G. B. Housser & Co., the well-known and enterprising lumber dealers at Portage la Prairie, Man. At the prices quoted, the farms are splendid value, and we would strongly advise farmers who think of going West, to write this company for full particulars. Farms all over Manitoba and the Territories are increasing very rapidly in value, consequently opportunities such as are offered in their advertisement should be quickly snapped up, as their like do not appear every day. With an increased acreage prepared for crop last fall, a clear, even winter, and an early spring, prospects never looked better for Western Canada.

The annual meeting of the management, heads of departments, and travelling salesmen of the Ontario Wind Engine & Pump Co., Ltd., took place on the 20th and 21st of February at their office, at Toronto, when representatives of the company from all parts of the Dominion were present, and matters of general interest and importance were discussed, and most gratifying reports presented by all concerning the business done during the past year and prospects for the present one. The report of the Winnipeg branch was especially encouraging, considering the fact that this branch had only been in existence for some eight months, and the company were more than ever convinced that they had made no mistake in building a warehouse and making full provision for taking care of their trade in the West.

On the afternoon of the 21st, a session was held at the King Edward Hotel with a banquet following, at the conclusion of which the retiring sales manager, Mr. F. W. Monteith, was presented with a gold chain and locket by the company, also roll-top desk and chair, and by his fellow employees with a gold watch suitably engraved. The presentation was made by Mr. S. H. Chapman on behalf of the company, and by Mr. H. Almas on behalf of the employees, coupled with expressions of regret at his retiring from the company's service, with best wishes for his future success on his embarking in business for himself, to all of which Mr. Monteith made a very appropriate reply. The meeting will be long remembered by all who were present as one of the most profitable and encouraging ever held.

GOSSIP.

MR. BEITH'S GREAT HACKNEY SALE.

March 29th is marked as the date of the dispersion sale of the great stud of Hackney stallions, mares, fillies and harness horses belonging to Mr. Robt. Beith, of Bowmanville, Ont., at his Waverly Farm there. Parties desirous of securing the best class of breeding stock in this line should note the date, and plan to be present. The Hackney holds first place as a high-class harness and saddle horse, and stock of this class is always in demand at good prices. The Hackney combines style, action, handsome conformation and good temper in the highest degree. Sound, intelligent, level-headed, cool and collected, the Hackney does his work quietly, without fretting or fuming, and improves on all classes on which he is crossed.

Among the mares included in the sale, are a large number of choice ones of all ages, at the head of which stands Priscilla, whom many will remember having seen wearing the championship ribbons at the leading fairs of 1904. She is the get of the New York champion, Robin Adair 2nd, the sire of Saxon, and like her brother has gone the rounds, winning championships wherever shown, at Toronto, Chicago and St. Louis. She is a dappled chestnut, a mare of great substance, action, style and quality. Lady Brookfield—105—is a fine brood mare, which has proved her value already, being the dam of some splendid colts, among them Toscar, winner of first at Ottawa; Mister Dooley, winner of second at Toronto, and Sir Wilfrid, also winner of second at Toronto. She is a brown, with fine action and style. Portia—41—is a nice chestnut, sired by the champion, Ottawa (imp.), dam Florence, by Randolph (1123), a mare well known to horse fanciers, having won many prizes in harness, among them the gold medal at Ottawa, and first at the Chicago International. Cherry Ripe, a nice brown, is as sweet as her name implies, a get of Imp. Jubilee Chief, sire of many gems of rarest character, dam Mona's Queen (imp.)—4—, a winning card wherever shown. Wild Mint—106—is a fine bay mare, sired by Confidence (158), dam Wild Rose, by Denmark (177). She is as pretty as they are made, a handsome and fast mover. Lady Aberdeen—5—is a brown, by Lord Derwent 2nd, grandam Florence—3—(imp.). She has won, among other prizes, first as a two-year-old at Toronto, second at Chicago, 1903, first at Toronto, same year, and first in tandem with mate. She will be sold with brown colt at foot, by Smylett's Performer. Mona's Queen is an aged mare, the dam of many good ones at Waverly, sire Lord Derwent, dam Imp. Mayflower. Imp. Florence is a bay with dark points, by Randolph (1123), dam Maud (749). She has proved a successful breeder, and will interest breeders of light harness horses. Minona, a splendid young mare, as dainty as they make them, is a very choice one, and would be an ornament in any show-ring. She is by Robin Adair 2nd, dam Frisk, by False Heir. She won second in Chicago, and was in the string of ten shown in Toronto. Thelma is another splendid four-year-old, of good size, sired by Squire Rickell, dam Princess. A very choice one will also be offered in the recently imported mare, Gaudy Kitty (115102), one of the flashy kind, bred in the purple, and whose dam, Lady Nan, was one of England's noted winners, winning five firsts in 1895, four in 1896, six firsts and four specials, and H. S. medals with reserve championship, 1897. She won eight firsts, one second, two specials and H. H. S. medal in 1898, and H. H. S. medal, two specials and eleven other prizes in 1899; three firsts, H. H. S. medal, 1900; five firsts, one second in 1902. Her dam, Nancy, won over 150 cups, specials, medals and first prizes during her lifetime, and her progeny all proved show animals. Gaudy Kitty is sired by Revival (7736), and is rich in the blood of England's prizewinners. Floradora—243—is a fine filly, by Squire Rickell, dam Florence. Lady Minto 2nd—246—is a beautiful chestnut, sired by Squire Rickell, and from the grand breeding mare, Lady Brookfield. Olga 2nd—228—is a good chestnut filly, by Squire Rickell, dam the good mare, Mona's Queen. Wild Cherry—240—is an exceedingly handsome brown two-year-old filly, a get of Squire Rickell, dam Wild

Mint, a strain that is well known as successful winners in the show-rings. Terrington Bonibel—260—is an imported filly, by Bonfire (238), dam Miss Caxton, by Caxton (2398). She is grandly bred, having such names as Cadet, Confidence, Norfolk Trotter and Nonpareil in her pedigree. At last year's shows she won first and junior champion, with reserve for senior champion at St. Louis, first at Toronto and first with reserve at Chicago. Melody—238—, by Alarm—124—, dam Lady Aberdeen, the well-known prizewinner, is a very handsome brown, with white feet, which she can handle to a queen's taste. Rosalie—244—is a fine bay filly, by Alarm, dam Florence. Wild Violet—245—is a bay filly, by Alarm, dam the beautiful mare, Wild Mint. She is now one year past, and promises to be a good one. Canadian Queen, bay, is by Squire Rickell, dam Cherry Ripe. She was first and champion at Toronto as a three-year-old, and is now in foal to Cliffe Rosador, having to her credit a fine filly rising one, by Smylett's Performer. Another young one, from Wild Mint, is Wild Clover, sire Smylett's Performer. Waverly Princess is a very promising filly, sired by Smylett's Performer, dam Cherry Ripe. There will also be sold at this sale, Mr. Beith's fine Clydesdale stallion Peveril (3613) (imp.), a fine, large and drafty horse, bay in color, with white markings, a horse of grand proportions and quality, now six years of age, sire The Prior (10470), dam Madam of Blackspark (14277), by Ghillie Callum (3629).

SPRING FOR STUDY.—Splendid opportunity is afforded for study during the spring months by the Central Business College, Toronto, whose card appears in our advertising columns this month. Read it.

FARM MANAGERS

On April 15th the Ontario Agricultural College at Guelph will turn out a number of young men specially qualified to act as foremen or managers of large farms. These men have all had practical farm experience to start with, and in addition they have had two or more years at the Agricultural College, learning the most modern methods of farm practice. They are all good workers and capable of handling men and teams. They will take engagements for the spring and summer months, or from one to five years. Salary expected, \$40 a month and upwards, according to work and responsibility.

G. C. CREELMAN, President.

When travelling in the eastern part of Ontario, our representative called to see the Ayrshire herd of Robt. Hunter & Sons, of Maxville, in Glengarry Co., and reports them as being in fine shape. Among the females that are on hand are some 16 head, imported, bred by such noted Scotch breeders as the Montgomerie, of Lessnessock; Andrew M. Baird, Garclaugh; G. B. Mirkle, Kirkland; T. W. & R. Lindsay, Wigtown, and others. Messrs. Hunter have been giving close attention to milk production, both in buying and breeding, consequently are keeping nothing but what is profitable from a dairy standpoint, many of their cows giving from 40 to 55 lbs. of rich milk per day. Among the best is Beauty of Springhill, a home-bred cow that gave 8,000 lbs. of 4.6 per cent milk in six and a half months. As soon as the Advanced Registry is fully arranged for this breed, this firm intends to have some official testing done. The Imp. bull, Lessnessock King of Beauty, a very smooth, nice-quality bull, sire of the present crop of calves, has demonstrated that he is an excellent stock-getter, his calves showing clean-cut dairy quality in a marked degree, and being from grand-quality females, many of which are imported, they should soon find ready buyers at good prices. Among the young bulls, a few of which are old enough for service (that are to be sold at auction in the Ogilvie sale at Montreal on March 22nd), is Imp. Royal Edward, rising two years old, a good, smooth bull, with plenty of substance, a winner at Winnipeg, Toronto, London and Ottawa also White Prince, a thirteen-months-old, by Lord Dundonald, dam White Rose, a very persistent milker, grandsire Glencairn 3rd (imp.), and White Lad of Springhill, about thirteen months old, by same sire, dam Dewdrop of Springhill, a persistent milker with a record of 45 lbs. of milk per day. Still another is Prince Robert, a seventeen-months-old white and red, by same sire, and from an imported dam. This bunch of young bulls certainly rank among the best in dairy type and conformation, and should bring good prices. The females that are going into the sale are also of good quality, and should command good prices, as milk, cream and butter are staple articles, and bound to be in good demand at paying prices. This herd has made a most creditable record in the leading shows of Canada the past two years, winning many of the best premiums offered, including firsts and sweepstakes at Toronto, London and Ottawa, against the best in America.

An imported Belgian stallion is advertised for sale in this issue by John McKenzie, Hartley P. O., Ont.

The dispersion sale on March 8th of the large herd of Shorthorns belonging to Mr. John E. Smith, of Brandon, Manitoba, was a decided success, notwithstanding that the day was stormy, and that the stock bull, Imp. Golden Measure, was not included, he having been previously sold to the purchaser of the farm. Fifty females, old and young, made an average of \$125, while the whole herd of 64 averaged \$115, and they were only in moderate condition.

The full complement of entries is in for the second annual pure-bred stock sale to be held at Guelph under the auspices of the Fat-stock Club, on Wednesday, March 22nd. The animals to be offered have been carefully selected, and will be found to be of good quality. The 75 animals are from such breeders as E. Jeffs, Bond Head; Geo. Amos, Moffat; J. T. Howard, and T. Scott, Sutton West; H. K. Fairbairn, Thedford, and others. There are also three Herefords offered from the herd of J. A. Gowanlock, Forest.

On March 24th, as advertised in this issue, the executors of the estate of the late Mr. Chambers, of Currie, Oxford County, near Woodstock, Ont., will sell at auction the herd of 22 head of Shorthorns, including the imported roan two-year-old bull, Shaw Wood Alpha (84752), of the Village Maid family, and sired by Cornelius (66864), by the great Star of Morning. A number of Cotswold sheep and horses and farm implements will also be sold. Currie is a station on Stratford to Port Dover branch of the G. T. R., five miles from Woodstock, and teams will meet trains at Currie on day of sale.

THE OGILVIE-HUNTER AYRSHIRE SALE.

This is the last call for the great auction sale on Wednesday, March 22nd, of 64 head of high-class Ayrshire bulls, cows and heifers from the noted prize-winning herds of W. W. Ogilvie and Robert Hunter & Sons, to take place on the farm of Mr. Ogilvie, at Lachine Rapids, near Montreal. The catalogue recites the prizewinning record of many of the animals included in the sale, and of their sires and dams in Scotland and America, making a record that it is safe to say stands unequalled. So favorable an opportunity to secure first-class young bulls and cows of the best breeding and individuality has never been offered in this country. The sale includes all the two-year-old and yearling heifers in the Ogilvie herd (26 head), most of the former bred to the grand imported bulls in service in the herd, as also are the 11 grand young cows, including the imported cow that won first at the Dominion Exhibition last year. There are also in the Ogilvie offering 17 young bulls, 10 of which are old enough for service, and all by prizewinning imported bulls and from imported cows. The offering of Messrs. Hunter & Sons includes two young imported bulls, Garclaugh Royal Edward, just two years old, a prizewinner at Winnipeg and Toronto last year, and Lessnessock Bleucher, a year old last October, whose sire was at the head of one of the best herds in Scotland, and his dam was a winner at Scottish shows, and at Toronto and Ottawa. Nine other young bulls of choicest breeding are offered from this herd, as well as a half dozen grand young females.

Breeders of Ayrshires and dairymen desirous of improving the milk-producing capabilities of their herds should not miss this opportunity to secure blood that has been bred along dairy lines for generations, and that will surely tell for good wherever it is used. Scottish breeders have scored a grand success in the breeding of dairy cattle, as well as in beef cattle, and have set the standard for model dairy conformation and milk vessels, so that the nearer other breeds come to this standard, the higher their selling value and the greater their show-yard success. No farmer should be deterred from attending this sale by the impression that prices will be too high for him. Fancy prices are not expected, and there is no doubt that it will be a bargain day for those who attend.

Selected Farm Lands for Sale In Manitoba

ALL SUITABLE FOR MIXED FARMING. UNIMPROVED.

- | | | | |
|--------|---|------------|---------|
| No. 1. | 320 acres, near Swan River, C. N. R. | Price..... | \$3,200 |
| No. 2. | 240 acres, near Poplar Point, C. P. R. | Price..... | 1,700 |
| No. 3. | 160 acres, near Oakville, C. N. R. | Price..... | 2,400 |
| No. 4. | 240 acres, near Willow Range, C. N. R. | Price..... | 3,000 |
| No. 5. | 240 acres " " " " | Price..... | 3,000 |
| No. 6. | 160 acres " " " " | Price..... | 2,500 |
| No. 7. | 320 acres, near Portage la Prairie. This farm has house, stable, and other buildings, with over 100 acres cultivated. | Price..... | 5,000 |
| No. 8. | 160 acres, near Patrick station, C. P. R., Pheasant Hill Branch, Sask. | | |

These farms will be sold on reasonable terms. For further particulars, address

THE G. B. HOUSSER LUMBER CO., LTD.
PORTAGE LA PRAIRIE, MAN.

ONTARIO Provincial Auction Sale

PURE-BRED CATTLE (REGISTERED)

MALES AND FEMALES OF BEEF BREEDS

Will be held by Local Management, under the auspices of the Live Stock Associations of Ontario, at

GUELPH, MARCH 22

All stock inspected before being accepted. Only good representatives of the various breeds will be offered. For Catalogues and full particulars, apply to

A. P. WESTERVELT

Secretary Live Stock Associations - Parliament Buildings, Toronto

In answering any advertisement on this page, kindly mention the FARMER'S ADVOCATE.



To Bring Up The Chicks

Strong and healthy there is nothing like Dr. Hess Poultry Pan-a-ce-a. Chicks very frequently become exhausted from a rapid growth of feathers, which is characterized by debility, general ill condition and leg weakness. The digestive organs of Dr. Hess Poultry Pan-a-ce-a work wonders in these cases. It strengthens every organ, makes pullets lay earlier. We guarantee that if Pan-a-ce-a is fed once a day, beginning when the chicks are less than a week old and continued until they are well feathered, there will be no loss from gapes or other diseases.

DR. HESS POULTRY PAN-A-CE-A

Is formulated by Dr. Hess (M.D., D.V.S.) Costs but a penny a day for 30 to 60 fowls.

1 1-2 lb. package 35c; 5 lbs. 85c; 12 lbs. \$1.75; 25-lb. pail \$3.50. Sold on a written guarantee.

Send 2 cents for Dr. Hess 48 page Poultry Book, free.

DR. HESS & CLARK, Ashland, Ohio, U. S. A.

When setting the hen sprinkle both hen and nest with Instant Louse Killer.



POULTRY AND EGGS

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

MAMMOTH Bronze turkeys. A choice lot of heavy birds, bred from my imported toms. Stock from the 1st-prize Pan-American winners. Pairs and trios mated not akin. R. G. Rose, Glanworth, Ont.

BARRED ROCKS—Cockerels for sale. Eggs from prize stock, \$1 setting. Emily Spilbury, Colborne, Ont.

FOR your Orpington winners and breeders go to Willow Brook Farm, who has always beaten the breeders calling themselves the originators. Over sixty (60) prizes and sixteen (16) specials at Madison Square Garden, New York, in the past three years. The largest and best stock in this country to select from. Send two-cent stamp for 40-page illustrated catalogue, testimonial book, and mailing list describing thirty-two breeding yards and prices of eggs. Willow Brook Farm, Box 74, Berlin, Conn.

WHITE WYANDOTTES, great winter layers. Strongly-fertilized eggs, \$1.50 per 15. Incubator lots special. Chas. A. Goulding, Vinemount, Ont.

WHITE WYANDOTTE eggs. Pen headed by grand Duston cockerel. W. D. Monkman, Bondhead, Ont.

WHITE WYANDOTTES—Second Ontario cockerel heading first pen. Write for eggs. Aaron Witzner, Berlin, Ont.

EGGS from imported and prize-winning. Barred and White Rocks, White and Brown Leghorns, White Wyandottes, Buff Orpingtons, Black Minorcas. Write for prices. William Manley, Bridgen, Ont.

LARGE Snow-White Wyandottes. Eggs \$2.00 per fifteen, from my prizewinners. (See Mr. Langelier's article in Farmer's Advocate, Feb. 23, page 264. R. W. Kemp, Tambling Corners, London, Ont.)

FOR SALE—Buff Orpingtons, Golden Wyandottes, White Leghorns. Also eggs, \$1 per setting. William Daniel, Platteville, Ont.

BARRED ROCKS. Fifteen cockerels for sale. Eggs from prize stock. O. S. Hunter, Durham, Ont.

BUFF ORPINGTONS. At Central Canada Exhibition my Orpingtons won ten prizes; and again at Eastern Ontario Exhibition they won 9 prizes. Eggs, \$3.00 per 15. A. W. E. Hellyer, Ottawa, Ont.

FARM RAISED, prizewinning Buff Orpingtons, W. Rocks, Rose-comb White Leghorns, Bronze turkeys. Eggs, \$2 per setting. Wm. A. Rife, Hespeler, Ont.

QUESTIONS AND ANSWERS. Miscellaneous.

POULTRY SUPPLIES, ETC.

1. Where can I get eggs for hatching and poultry supplies, Spratt's Food, etc? 2. Can you give me Mr. J. E. Meyer's address? J. W. Y. York County.

Ans.—1. Consult the advertising pages of the "Farmer's Advocate" for several issue past. 2. Gourlock, Ont.

FRENCH COACH HORSE. MARK D'OR.

Can you furnish, through your paper, any information regarding a French Coach horse, named Mark D'Or, that was travelled in Huron County? Was he imported, and what was his pedigree? Was any of his stock prizewinners at Toronto exhibitions? READER.

Ans.—Can any of our readers furnish this information; if so, kindly write us?

A BELATED CALF.

Bought a registered Durham cow at a sale last year. All cows at sale were given out in catalogue to be in calf to stock bull. Each cow's time when served was given out in catalogue below her pedigree. I bought a cow at sale on those conditions, but cow did not calve to that time of service; went forty days past. I notified party when cow calved, but he paid no attention to me. Can I claim damages for cow not calving near catalogue time, as she will come in later this year, and that makes the calves late and of less value? SUBSCRIBER.

Ans.—Not unless you are able to prove that the date of service was later than that stated in the catalogue.

BREEDING MARE.

I have a mare, four years old, weight 1,100 lbs., stands 15.2; her dam weighed 1,400 lbs., sire a Thoroughbred, weighing 1,250 lbs. Would it be advisable to breed her to a Clydesdale horse, the choice being between that and a small Standard-bred horse? Would like to have your opinion on the subject, as there are several mares of similar type in this locality. W. H. T.

Ans.—We would advise breeding to a good Clydesdale horse, as then you are likely to get a good work horse and a fair seller, while from a small Standard-bred horse you would probably get a weed.

BOOKS ON FARMING, POULTRY AND NATURAL HISTORY.

1. What is the best book on general farm work; (2) a good poultry book; (3) a book on the natural history of Canada? L. V. P.

Ans.—1. "Successful Farming," \$1.50, by Rennie, would probably fill the bill. 2. "Poultry Craft," by Robinson, \$1.75; or "Farm Poultry," by Watson, \$1.25.

3. "American Natural History," by W. T. Hornaday, \$3.75, covers Canada, and is a good authority. We are not aware of a similar volume relating to Canada. The Ontario Department of Agriculture, Toronto, a few years ago issued a volume on the game animals and birds and fishes of Ontario.

Volumes (1) and (2), above mentioned, may be obtained through this office, and (3) from Chas. Scribner, publishers, New York City.

RETENTION OF PLACENTA.

Will you, through your paper, give me a little advice on what is the cause of a cow not getting rid of her afterbirth? I have a cow that did not do well after she calved, and 24 hours afterwards I tried to take the afterbirth away, and I only got about half of it. What should I feed my cow to keep her in good health? G. B.

Ans.—It is impossible to say what was the cause. Generally when a cow is in good health and condition, the placenta comes away within a few hours. When it does not within twelve hours, it should be removed by introducing the oiled hand into the womb and carefully stripping the membranes from the button-like protuberances that hold it. It requires time and patience to do it, but it should be attended to for the sake of the health of the cow. For prevention, see article in Stock department, this issue.

PLANK BARN FRAME.

We enjoy reading your paper very much. I notice some of your correspondents recommend the plank frame for a barn. Would it be convenient to give us a plan of a barn frame constructed of plank, with the plans of a section worked out in detail? W. W. W.

Ans.—We are endeavoring to secure this information, and hope to publish it soon.

U. S. PRESIDENTIAL VOTE, 1904.

What was the total popular vote for President of the U. S. in last November elections? J. H. B.

Ans.—Parker (Dem.), 5,082,754; Roosevelt (Repub.), 7,624,489; Debs (Socialist), 402,286; Swallow (Prohibition), 258,787; Corrigan (Socialist Labor), 32,088; Watson (Populist), 117,935.

GOSSIP.

THE HOWDEN AND JOHNSTON SALES.

March 22nd and 23rd are the dates set for the twin dispersion sales of the Shorthorn herds of Messrs. W. G. Howden, of Columbus, and Geo. H. Johnston, of Balsam, Ont., in the order named, Mr. Howden's sale on the 22nd and Mr. Johnston's on the 23rd. These sales are practically in the same neighborhood, Mr. Howden's farm being near Myrtle Stations, C. P. R. and G. T. R., and Mr. Johnston's near Claremont, C. P. R. The Messrs. Goodfellow Bros., of Macville, 25 miles northwest of Toronto, near Bolton, C. P. R., will sell their herd on the 21st, and as a special general meeting of the Dominion Shorthorn Association is called for the 24th in Toronto to consider the question of National records, these four important events may be taken in at practically the expense of one trip. It is rarely, indeed, that so many good Shorthorns have been offered at one time, or so nearly together, as in this case, and their dispersion in two instances is due to the fact of the owners giving up farming, and in the other to a dissolution of partnership, and the giving up of breeding pure-bred stock for the present. We can add little to what has been said in late issues of the "Farmer's Advocate" as to the character of the cattle comprised in these offerings. Many good young bulls, cows and heifers are included in each of the herds. First-class Scotch-bred bulls have been used in the herds of Mr. Howden and Mr. Johnston for many years, and imported bulls now head each of the herds, and are included in the sales. The catalogues, which, no doubt, are now in the hands of many who purpose attending, speak for the breeding of the animals, which is above reproach, and we are confident that the quality of the cattle will not be disappointing, as the owners are generous feeders, while not given to pampering their stock. Shorthorn breeders should rally to these sales, and farmers desiring to improve their cattle will find here what they need: good-feeding, early-maturing stock, and some cows of good-milking strains, the right sort to produce the dual-purpose class.

HE MEANT EVERY WORD HE SAID

Ex-Reeve's Rheumatism Cured by Dodd's Kidney Pills.

Was so Crippled that He Could Hardly Get Around, and Could Get no Relief from Doctors of Medicines.

Dresden, Ont., March 18th.—(Special).—"Dodd's Kidney Pills cured me of Rheumatism slick and clean." Mr. W. G. Cragg, the well-known merchant and ex-reeve of this place, was the speaker, and he evidently meant every word he said.

"It was the inflammatory kind of Rheumatism I had and it crippled me up so that I could hardly get around to do my work in my store. I had the best doctors and everything in the line of medicines I could hear of, but nothing even gave me relief.

"Then I tried Dodd's Kidney Pills and six boxes cured me completely."

Dodd's Kidney Pills cure Rheumatism by curing the Kidneys. Rheumatism is caused by Uric Acid in the blood. If the Kidneys are right they strain all the Uric Acid out of the blood and the Rheumatism will go with it.

The Daniels INCUBATORS



Are the latest and most modern invention for artificial hatching of turkeys, chickens and ducks. Do not forget we guarantee the Daniels incubators to be satisfactory to the purchaser. We manufacture Chas. A. Cyphers Model Incubators and Brooders. We carry a full line of poultry supplies. Our new catalogue is out, and is free for the asking.

C. J. DANIELS, 196 to 200 River St., TORONTO

\$12.80 For 200 Egg INCUBATOR

Perfect in construction and action. Hatches every fertile egg. Write for catalog to-day. GEO. H. STAHL, Quincy, Ill.

\$9,000 Poultry Catalog. 60 kinds Turkeys, Geese, Ducks, Chickens, fowls and eggs cheap. 100 good pictures, 50 lines plain. We make less lay, one dozen, etc. Send 10 cts. for mailing catalog. 100 page Poultry Catalog, free. J. R. Brubaker Jr. & Co., Box 113 Delaware, Wis.

NATURAL HEN INCUBATOR. The only one that's different. Use the hen all through the hatch. Nature's own way. Avoid high prices. 200 Egg Incubator costs but 69c. Agents wanted. Catalog free. Write to: Natural Hen Incub. Co., P. O. Box 14 Columbus, Neb.

Barred Rocks—We offer eggs for hatching from pens good in size, shape, color and laying qualities at \$1 per 13, \$2.50 per 39, \$5 per 100. 1905 egg circular free. H. GEM & SONS, Rainham Centre, Ont.

ADMINISTRATOR'S SALE

The property of the late WM. OHAM-BEES, Currie, Oxford Co., Ont. to be held on

MARCH 24, '05 Commencing at 10 o'clock, 22 Head of Pure-bred

SHORTHORN CATTLE

The celebrated imported bull Shaw-Wood Alpha (84752) at head of herd. Also B-E-S, IMPLEMENTS, and a number of well-bred COTSWOLD SHEEP. Rigs will meet trains at Currie, G. T. R., on day of sale.

A. LEE.

ABSORBINE

REMOVES RUSAL ENLARGEMENTS, THICKENED TISSUES, INFILTRATED PARTS, AND ANY PUFF OR SWELLING, CURES LAMENESS, ALLAYS PAIN without laying the horse up. Does not blister, stain or remove the hair. \$2.00 a bottle, delivered. Pamphlet 1-B free. ABSORBINE, JR., for mankind, \$1.00 bottle. Cures Syphilis, Weeping Sore, Strains, Gouty or Rheumatic Deposits. Always Pain. Book free. Manufactured only by W. F. Young, P.D.F., 68 Monmouth St., Springfield, Mass. Canadian Agents, Lyman, Sons & Co., Montreal.



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

TERMS—Three cents per word each insertion. Each initial counts for one word and figures for two words. Names and addresses are counted. Cash must always accompany the order. No advertisement inserted for less than 30 cents.

SWAN RIVER FARM.—My husband being deceased, and finding renting unsatisfactory, I offer, cheap, 320 acres first-class improved land. For further information write Mrs. N. Gable, Swan River, Man.

FARM HAND WANTED—Married or single, by the year; state wages; none but good men need apply. Address, Farmer's Advocate, London, Ont.

IRRIGATED Farm for sale in Southern Alberta. Good buildings; ditches all in; near school, six miles from town. Excellent reason for sale. Apply for particulars to A. M. Marshall, Minot, N. D. com

WANTED—Reliable man to work farm. Must have his own stock. Liberal terms. Apply T. S. Scott, Tyndall, Man.

FARM manager open for engagement; first-class stockman; married; has four single men open for engagement; all Scotchmen. Apply to Wm. Ritchie, Gordon, Ont.

TO SECURE RESULTS Advertise in the Advocate

In answering any advertisement on this page, kindly mention the FARMER'S ADVOCATE.

QUESTIONS AND ANSWERS.
Miscellaneous.

INSPECTION OF SCHOOL ACCOUNTS.

Has any ratepayer a right to look at school books at any time, or should they be kept private with the trustees and auditors? **SUBSCRIBER.**

Ans.—We consider that a ratepayer has not such right, and that the trustees have done their statutory duty in the matter, when they have duly submitted their accounts, agreements, vouchers and books to the school auditors of the section.

A HORSE TRADE.

A and B trade horses. A says: "You give me \$15 to boot; I will trade you this mare in foal. She is ten years old, and sound." The mare is sixteen years old, and proves to have heaves, after the drugs got worked off her. B did not give A his boot money at the time.

1. Can A collect it?
2. Can B collect damages of A?

F. J. C.

Ans.—1. We think not, provided the mare be tendered back to A promptly, and B is in a position to satisfy a court that A made the representations stated, and that the mare is of the age and condition alleged.

2. He would be entitled to do so after tender back of the mare and demand upon A for the return of the other animal, and refusal by A to comply with such demand.

CLYDESDALE REGISTRATION.

1. How many crosses does it take to register in the American Clydesdale Book?

2. Is there a Shire Book in America?

3. Does a horse that is registered in Toronto go to the States free of duty?

4. I understand the Toronto book calls for five top crosses. If you can trace back five crosses, would the men that owned mares have to sign form as breeders of 1st, 2nd, 3rd, 4th and 5th crosses, or could breeder of foal eligible for registration sign the form as breeder only? **E. B.**

Ans.—1. The standard for the American Clydesdale Studbook reads: "Stallions having five top-crosses and mares having four top-crosses by sires recorded in the American Clydesdale Studbook." A certificate signed by the recorded owner of the sire must accompany the application for entry, where the sire is not recorded in the name of the owner of the dam at time of service, and the eligible dams of American-bred stallions and mares must first be recorded. R. B. Ogilvie, Union Stock-yards, Chicago, is the Secretary.

2. Chas. Burgess, Wenona, Illinois, is Secretary and editor of the American Shire Horse Studbook, and Henry Wade, Toronto, of the Canadian book.

3. We think only the latter, but we presume satisfactory evidence of the facts in each case is required.

VENTILATION SYSTEM.

Would you kindly, through the columns of the "Farmer's Advocate," state the most approved methods of ventilation for a barn basement 58 x 40? **J. B.**

Ans.—It is by no means a settled question what is the best system of ventilation. Perhaps, considering economy, the system used in the barn of Mr. W. D. Cargill, Cargill, Ont., is as good as any. It consists of several four-inch tile built in the wall, about half a dozen along each of the four-hundred-foot walls, the tile being placed horizontally near the top of the wall, and establishing direct communication with the outside. A breeze from any point of the compass forces the air in at one or two sides, displacing the stable air, which is driven out through the corresponding tiles on the opposite sides. Provision is made for partially closing these in case of storm. Another plan is the Usher system, employed by Isaac Usher & Son, cement manufacturers, Queenston, Ont. It consists of an intake pipe, or pipes, leading from outside the wall, being imbedded in the cement walks in the feed alley, between the rows of cattle facing it. The air is distributed from the mains through small iron pipe running out on each side between each pair of cattle, the end being protected by a screen. The foul air is drawn off by a wooden box ventilator leading from near the ceiling up through the roof. These and other methods you will find fully described in previous issues.

The Woman who Would And The Grocer who wouldn't.

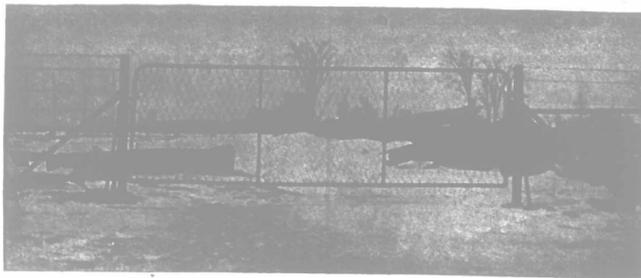
Every day from five to fifteen letters are received by The Ogilvie Flour Mills Co. from women living in the smaller towns throughout Canada, saying they have asked their grocer for Royal Household Flour but can't get it. One writes—"I told my grocer, Mr.----, that I would buy 'Royal Household' regularly if he would always keep it on hand, but he said he wouldn't take on another brand of flour until he was obliged to." Another says—"My grocer is an 'old fogie' and never gets the newest or the best things until the year after." A third says—"We haven't an enterprising grocer in our town and are obliged to send to-----for 'Royal Household' or take a poorer flour."

Write direct to Ogilvie's.

If you can't get "Royal Household" from your grocer, write to us direct—we will immediately give you the name of the nearest grocer who keeps "Royal Household" and send you also the "Royal Household" recipes. There is no good reason why your grocer should compel you to use inferior flour—no first class grocer will hesitate to order "Royal Household" for you, and even the smallest dealer will get it if you insist upon it.

THE OGILVIE FLOUR MILLS CO., LIMITED, MONTREAL.

THIS YEAR YOU WILL NEED THEM MORE THAN EVER.



For your Spring Fencing specify

OUR STEEL TRUSS POSTS and PORTABLE FENCE

Send for Catalogue and Price List.

The CANADIAN PORTABLE FENCE COMPANY, Limited, Toronto, Can

SPRINGHILL AYRSHIRES

We will sell by auction on the 22nd March, 1905, 11 young bulls, five of which are fit for service. Also five young cows and heifers. Sale to be held at Lachine Rapids Farm, and will take place right after the Ogilvie sale. For further information and catalogues, apply to

ROBT. HUNTER & SONS, Maxville, Ont.

In answering any advertisement on this page, kindly mention the FARMER'S ADVOCATE.

PRICE OF FERTILIZERS.

Will you please mention in your valuable paper the price of the various kinds of artificial and commercial fertilizers, where they can be obtained, and which is the most satisfactory? **S. K.**

Ans.—To comply with this request in full would necessitate the publication of a list of names and prices occupying half the paper. The staple commercial fertilizers are valuable, mainly, according to the amounts contained of the three elements of fertility: nitrogen, phosphoric acid and potash. These are valued respectively at about the following range of prices, varying somewhat, however, according to the availability of the form in which they are held: nitrogen, 14c. per pound; phosphoric acid (soluble) and potash, each about 6c. per pound. For prices of specific brands correspond with our advertisers: German Kali Works, 98 Nassau St., New York, U. S. A., and W. A. Freeman, Hamilton, Ont.

BUFF COCHIN BANTAMS—DUTY.

1. Where can I get Buff Cochins Bantams or eggs?

2. Is there any duty on pure-bred poultry coming from United States into Canada? **F. S.**

Ans.—1. Breeders of poultry of all classes should make the fact known through our advertising columns. There are plenty of buyers, if breeders will only make themselves known.

2. No; but the customs authorities require papers to certify that the birds are pure-bred and for the improvement of the stock of the country. A good many importers prefer to pay the twenty-per-cent. duty on ordinary poultry, rather than bother with so much red tape.

Frost Fence Features

**Found in no other
Wire Fence.**

Not a weak spot in a mile of fencing.

Made of high carbon coiled steel wire, of 2,000 pounds tensile strength.

Upright wires are large and strong, and each one supports its own share of the strain.

No bending, crimping or kinking.

Uprights are immovably locked to the running wires.

All locks are enamelled or galvanized to prevent rust.

Then, there's the

**Frost
Lock**



—that gives strength where soft tie wires, bending and crimping, make weakness.

It holds both stays and running wires so they can't slip or bend—prevents the fence from sagging or bending.

Put live stock inside a FROST WIRE FENCE, and they'll stay there until you let them out. They can't break it down. FROST FENCES last a lifetime.

Write for our catalogue about the Frost Fence. It's free.

FROST WIRE FENCE CO.
HAMILTON, Ont. Limited
WINNIPEG, Man. CLEVELAND, Ohio.

VALLEY HOME STOCK FARM

S. J. PEARSON, SON & CO.

Breeders of Shorthorn Cattle, Berkshire Swine & Shropshire Sheep.

For sale, seven young bulls fit for service, four from imported sires and dams. All pure Scotch breeding, of choice quality. Prices away down for quick sale. No reasonable offer refused. Also a choice lot of young Berkshires. Visitors welcomed.

Meadowvale P. O., Tel. & Station on C. P. R. Six miles from Brampton on G. T. R.

**IF
YOU
SAW**



lumber or saw wood, make lath or shingles or work lumber in any form you should know all about our improved

AMERICAN MILLS.

All sizes saw mills, planers, edgers, trimmers, engines, etc. Best and largest line wood working machinery. Write for free catalogue and name of Canadian agents.

American Saw Mill Mch'y. Co.,
624 Engineering Bldg., New York City.



PAMPHLET FREE
MOORE BROS., V.S., ALBANY, N.Y.

GOSSIP.

Was it a Henglishman who said: "It's the ammer, ammer, ammer on the ard igh rood that urts a orse's oofs for unting, don't you know."

At the provincial auction sale, at Ottawa, on March 10th, there was a large attendance of farmers, and 33 head of Shorthorn cattle sold for an average of about \$80 each; the highest price for a bull being \$125 for Rover, a roan two-year-old, bred by W. C. Edwards & Co., Rockland, contributed by R. R. Sangster, Lancaster, and purchased by Wm. Major, Woodlawn, Carleton Co., Ont. The highest price for a female was \$132 for the roan three-year-old cow, Mayflower 21st, bred and contributed by R. R. Sangster, and purchased by David Barr, Jr., Renfrew.

S. D. Crandall & Sons, Cherry Valley, Ont., in ordering a change of advertisement, write: "Our Berkshire and Yorkshire stock have been selected from the leading herds in Canada at high prices. The breeding sows are all of most approved type, combining great size and constitution, with good growing qualities. We believe we have as good an average herd of breeding sows as can be found in Canada. Our Berkshire boar, now at the head of the herd, was bred by W. H. Durham, dam Lady Premier, the first-prize sow at Toronto last fall, and sired by Big Ben, a first-prize winner at Toronto, who weighed 298 lbs. at five months old. Our Yorkshire boar at head of herd is a very smooth hog of the true bacon type, has great length and depth of sides, and would weigh, if fat, 1,000 lbs. He was bred by D. C. Flatt & Son, and is a brother of the \$700 boar, Summer Hill Victor, the Pan-American champion over all ages, sire Look-Me-Over, dam Dalmeny Empress, bred by the Earl of Roseberry. We have for sale at this writing a very fine litter of Yorkshires, now two weeks old, from an imported-in-dam sow, sired by Dalmeny Turk, one of England's most famous champions. Some of these will make winners in any show-ring. We have also some excellent Berkshire pigs, now three weeks old. The remainder of our sows are due to farrow in March. All purchasers are assured of satisfaction by our terms of sale. See advertisement."

LAST CALL FOR THE GOODFELLOW SALE.

Once more we remind our readers of the auction sale on Tuesday, March 21st, of the entire herd of imported and home-bred Scotch and Scotch-topped Shorthorn cattle belonging to Messrs. Goodfellow Bros., of Macville, Ont., at their farm, near Holton Station, on the Owen Sound division of the C. P. R., and 25 miles north of Toronto. Trains will stop on the farm on day of sale. It is rarely, indeed, that so excellent a herd as this is offered at public sale. It is unquestionably one of the best herds in Ontario, both in breeding and individual merit, having won many important prizes at the leading exhibitions, and being always in the thickest of the fight for premium places. They are of the proper type, the good-feeding sort, low-set, thick-fleshed and early-maturing. The imported bull, Famous Pride, second at Toronto to a junior champion, has developed into a great bull, straight, smooth and thick, and good enough to win in high-class company. The imported cow, Water Cress, stood third at the Dominion Exhibition at Toronto, in 1903, in a great class, and was considered by many good judges entitled to a higher place. The imported cow, Water Lilly, won first prize and junior championship at Toronto as a yearling, and is a model of the modern Scotch Shorthorn that wins. There will never be a better time to buy good cattle and start a herd or strengthen one than just now, as no fancy prices are going or expected, and the outlook for good cattle is hopeful. The best will sell for good prices at any time, and one good crop of corn in the States and a good crop of wheat in the Canadian West will bring buyers to Ontario for more good cattle. English and Argentine breeders are paying such big prices for Scotch Shorthorns that there will be few, if any, imported to Canada for some time. All of which will advance prices for good cattle here.

POSTPONED SALE

Our sale of PURE SCOTCH SHORTHORNS advertised to take place on February 16th was postponed owing to the railway blockade, and will take place on

TUESDAY, MARCH 21, 1905.

All trains on the Owen Sound Division of the C. P. R. will stop on the farm on day of sale.

GOODFELLOW BROS., Oak Lane Farm, MAOVILLE, ONT.

Better Butter

and more of it will be the result if you use a



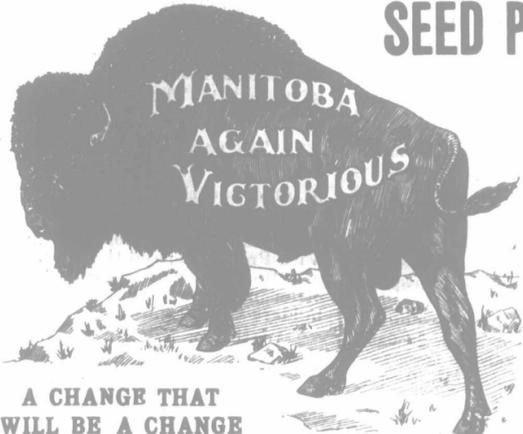
**NATIONAL
Cream
Separator**

in your dairy this spring.

SEND FOR CATALOGUE TO

The Raymond Mfg. Co., Limited
GUELPH, ONTARIO

SEED POTATOES



**PURE - BRED
MANITOBANS**

Absolutely new varieties.

The selection from over 500 sorts from the seeds ball.

Covering 10 years' faithful work.

**A CHANGE THAT
WILL BE A CHANGE**

GET RID OF BLIGHT and ROT.

Ontario and the Eastern Provinces have in these New Seedling Potatoes the best opportunity to rebuild their Seed stock, as they possess exceptional merit in themselves; besides being grown in the finest potato soil in the world, with immunity from bug and summer blight and rot unknown, their vitality is the strongest.

PRICES: Either variety, 1 lb. 35c.; 4 lbs., \$1.10, post-paid; peck, \$1.75; 1/2 bush., \$2.50; bush., \$4.50, by express.

Our special express rates from Brandon to all parts of Ontario and the East averages from 4c. to 5c. per lb.

A. E. McKenzie & Co., SEEDSMEN,
BRANDON, MANITOBA.

"MANITOBA WONDER,"
The phenomenal yielder, producing 30 to 50 per cent. more than any other variety we know of. Splendid keeper, of finest quality, pink-russeted skin.

"NORTHERN LIGHT,"
Remarkable keeper, of finest quality—better than newly-dug potatoes in July following—2 to 3 eyes to the tuber—heavy yielder—a most beautiful potato, with pink, slightly russeted, skin.

ADVERTISE IN THE ADVOCATE

In answering any advertisement on this page, kindly mention the FARMER'S ADVOCATE.

QUESTIONS AND ANSWERS.
Miscellaneous.

TENANT MAKING IMPROVEMENTS.

A has agreed to let B have the use of a farm for a small rent. B wants to make numerous improvements without the consent of A. Would A be under any obligations to B in regard to the cost of improvements? E. F. T.

Ans.—No.

KEROSENE FOR BARK LICE.

I noticed an article in the "Farmer's Advocate," January 12th, touching on the use of crude oil for bark louse, by R. L. Huggard. When should this crude oil be used? R. McD.

Ans.—May or June; in Algoma, probably July; in any case soon after the lice have hatched. Kerosene emulsion is safer than the crude oil. During winter and early spring, as many of the scales as possible should be scraped off the trunk and larger branches. On old trees, this may be done by first scraping with some instrument like a hoe, and then thoroughly scrubbing with a brush dipped in a solution made by adding one part of crude carbolic acid to seven parts of a solution of one quart soft soap in two quarts boiling water.

FREIGHT RATES ON REGISTERED STOCK.

I see by the "Farmer's Advocate," an article on special rates for pure-bred stock shipped between all stations in Canada. We shipped for breeding purposes twelve head of pure-bred cattle from Guelph, Ont., to Arnprior, Ont., and the only rate we could get was 26c. per hundred, at least the railway officials knew of no other rate. I understand this to be the same as for cross-bred animals. Now, I want to know if they have charged us too much; if we were not entitled to half-fare? If we were charged too much, what must we do in order to have things made right? G. A. S.

Ans.—We understand that registered stock is carried by freight by the leading railways at half rates as compared with unregistered stock. Of course, certificates of registration must be presented to the station agent where billed. If you have been over-charged, appeal to the Freight Superintendent of your district for a refund of amount over-charged.

RAPE IN YOUNG ORCHARD.

1. Would it be safe to sow rape for pasture among young apple trees, set four years?
2. Would sheep be likely to peel the trees?
3. How thick should it be sown, if sown broadcast?
4. If more were sown than sheep could eat, would what they left make good cover crop for orchard?
5. What variety of rape would be best?
6. Have also seen thousand-headed kale advertised in seed catalogue for same purpose. Is it as good as rape, or better, or would they be better mixed, or sown in alternate patches?
7. Would kale be good cover crop for orchard?
8. Would it be good practice to sow either year after year on same ground?
9. How thick should kale be sown?

W. D. B.

- Ans.—1. No.
2. Yes; there would be danger of it.
3. Three to five pounds per acre, broadcast; two pounds in drills, two feet apart.
4. It would be of considerable benefit, though not an ideal winter protection.
5. Dwarf Essex.
6. Thousand-headed kale is a good forage crop, but not by any means equal to rape. Prof. Zavitz, of Guelph, in a series of experiments, secured an average annual yield per acre of 24.34 tons of kale, as against 32.30 tons of Dwarf Essex rape under identical conditions (see report, 1898). It might be worth while sowing a small plot of kale and rape mixed, and noting results.
7. Not so good as rape, and not nearly so good as a leguminous crop, such as clover or hairy vetch.
8. No; unless new ground cannot be used.
9. John A. Bruce & Sons, seedsmen, Hamilton, Ont., advise three pounds per acre, broadcast, or one pound per acre in drills, eighteen inches apart.

35th Annual Report of The Mutual Life of Canada FOR THE YEAR 1904.

INCOME.		DISBURSEMENTS.	
Premiums.....	\$ 1,373,364 69	Death Claims.....	\$ 220,304 50
Interest and rents.....	351,944 21	Matured Endowments.....	160,053 00
		Purchased Policies.....	52,394 54
		Surplus.....	83,183 40
		Annuities.....	8,679 90
		Expenses, Taxes, etc.....	300,807 00
		Balance.....	899,886 56
	\$ 1,725,308 90		\$ 1,725,308 90
ASSETS.		LIABILITIES.	
Mortgages.....	\$ 3,760,617 53	Reserve, 4, 3½ and 3 per cent.....	\$7,355,172 24
Debentures and Bonds.....	2,897,496 42	Reserve on lapsed Policies liable to revive or surrender.....	1,967 10
Loans on Policies.....	888,492 41	Death Claims unadjusted.....	28,065 00
Loans on Stocks.....	7,000 00	Present value of Death Claims payable in instalments.....	31,122 82
Liens on Policies.....	31,161 25	Premiums paid in advance.....	5,847 50
Real Estate.....	68,285 53	Amount due for medical fees.....	11,257 96
Cash in Banks.....	136,728 03	Credit Ledger Balances.....	11,257 96
Cash at Head Office.....	4,317 18	Net surplus over all liabilities on Company's Valuation Standard.....	772,072 87
Due and Deferred Premiums (net).....	266,713 94		
Interest due and accrued.....	159,718 16		
	\$ 8,220,530 45		\$ 8,220,530 45

Net Surplus over all Liabilities on Government Standard of Valuation, \$1,049,400.71.

Audited and found correct.

J. M. SCULLY, F.C.A., Auditor.

GEO. WEGLNAST, Manager.

DIRECTORS' REPORT.

Your Directors have pleasure in submitting their 35th Annual Report, showing the transactions for the year, and the financial standing of the Company as at December 31st, 1904. The business of 1904 was most gratifying in all respects, large gains having been made in Income, Assets and Surplus.

INSURANCE ACCOUNT.—The volume of new business exceeds that of any former year, being 3,452 Policies for \$5,048,168, all of which, except \$30,000, was written within the Dominion. The total assurance now in force is \$40,476,970.58 under 27,742 policies, the net addition for the year being \$2,889,419. While many of our native Companies are seeking business abroad, some of them in distant parts of the world, it is thought by your Directors that good Canadian business is preferable to foreign business, which is secured with less certainty as to its quality, and at excessive cost.

INCOME.—The total income was \$1,725,308.90, being \$1,373,364 for premiums, and \$351,944.21 for interest. The gain over 1903 was \$164,238.87.

DISBURSEMENTS.—The payments to Policyholders amounted to \$524,615.34, and consisted of Death Claims, \$220,304.50; Endowments, \$160,053; Purchased Policies, \$52,394.54; Surplus, \$83,183.40, and Annuities, \$8,679.90. The claims by death were exceptionally light, being \$51,404 less than last year, and only 41 per cent. of the amount expected.

THE EXPENSES AND TAXES were \$300,807, being 17.4 per cent. of the total income, or about 1 per cent. less than in 1903.

ASSETS.—The cash assets are \$7,794,008.35, and the total assets \$8,210,530.45, showing gains of \$905,450.05 and \$937,372.05, respectively. The funds are being invested in the same classes of securities as heretofore, principally in Mortgage loans on farms and city properties, Bonds and Municipal Debentures. The latter are taken into account at their book value or cost, which is considerably below their market value. The demand for money was active during the year, at better rates than for some years past, resulting in a slight advance in the rate of interest earned, viz., 5.00 per cent. Payments on Mortgages for interest and instalments of principal were well met, though in the case of our Manitoba loans they were not quite as satisfactory as in former years, due to the partial failure of the wheat crop. The interest and rents overdue at the close of the year were but a small portion of the receipts, being only \$13,740.19, most of which has since been paid.

LIABILITIES.—The liabilities were again computed on the Combined Experience Table with 4 per cent. interest for all business up to January 1st, 1900. From that date to January 1st, 1903, on the Institute of Actuaries' Table with 3½ per cent., and thereafter on the same Table with 3 per cent.

SURPLUS.—After making provision for all liabilities the surplus on our own standard is \$772,072.87, being an increase of \$170,920.20 over 1903, and this after distributing amongst Policyholders \$83,183.40. On the Government standard of reserves, namely, 4½ per cent. for business to January 1st, 1900, and 3½ per cent. thereafter, our Surplus is \$1,049,400.71. The earnings for the year were \$254,103.60.

On behalf of the Board,

ROBERT MELVIN, President.

The various reports having been adopted, the retiring directors, Right Hon. Sir Wilfred Laurier, A. Hoskin, Esq., K. C., Hon. Mr. Justice Garrow and E. P. Clement, Esq., K. C., were unanimously re-elected. After a number of able and thoughtful addresses had been made by members of the Board, prominent Policyholders, the Manager, the agents and others, the meeting adjourned.

The Directors met subsequently and re-elected Mr. Robert Melvin, President; Mr. Alfred Hoskin, K. C., First Vice-President; and the Hon. Mr. Justice Britton, Second Vice-President of the Company for the ensuing year. (Booklets containing full report, comprising lists of death and endowment claims paid, of securities held, and other interesting and instructive particulars, are being issued and will in due course be distributed among policyholders and intending insurants.)

Waterloo, March 2, 1905.

W. H. RIDDELL, Secretary.

C. E. GERMAN, GENERAL AGENT, LONDON, ONTARIO.

REGISTRY OF HOLSTEIN COW.

Pure-bred Holstein cow with pedigree has been bred four years to a grade Holstein bull. If she was bred now to a pure-bred Holstein bull with pedigree, would her calves be pure-bred? Could they be registered? SUBSCRIBER.

Ans.—Yes; if she was eligible to registry before breeding, she is eligible now, unless there is a rule of the Record Association requiring that animals must be registered before a certain age, which is the case in some, while others impose double fees where registration is not effected before the animal is two years old. We are not aware what the rule of the Holstein Association is. The fact of the cow having bred calves to a grade bull would not bar her from the herd-book, nor her produce by a pure-bred Holstein bull, if he is registered or eligible to registry. Write Mr. G. W. Clemons, St. George, Ont., Secretary Holstein Association, for full information.

MONEY GONE ASTRAY.

If A sends a letter to B containing money, and it is lost in the mails, can B be held responsible for it?

SUBSCRIBER.

Ans.—Not unless he prescribed that mode of remittance.

BUFFALOES IN CANADA—RIDING COLT.

1. Can you give me the address of anyone keeping buffalo in Canada?

2. At what age should a colt be ridden? M. H. P. Algoma.

Ans.—1. The Winnipeg Electric Railway keep buffalo at River Park. There are also some in the National Park, Banff, Alta., particulars of which may be obtained from the Ranger, National Park, Banff, Alta. H. A. Chadwick, Deer Lodge, Silver Heights, Winnipeg, Man., could also give you some information re the buffalo there.

2. It depends on the development of the colt. Many Thoroughbreds are ridden and raced as two-year-olds.

DISTANCE PROFITABLE TO SHIP SUGAR BEETS.

1. Where is the nearest sugar-beet factory to Durham County, Ont.?

2. How far do you think it profitable to send them by freight? F. J. C.

Ans.—1. Berlin.

2. The freight rate is practically one cent a mile per ton. A man living conveniently to a station might ship them a hundred miles or even further. It resolves itself into a question of how cheaply you can grow them. If you can induce a couple of neighbors to go in with you and raise half an acre each, you might try a car-load shipment next fall as an experiment.

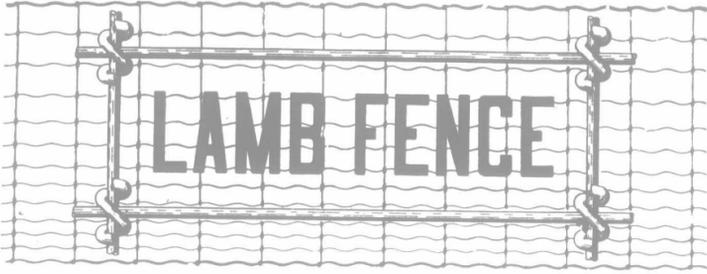
INFRINGEMENT OF PATENT RIGHTS.

1. Is it illegal for a farmer to build a patented fence for his own use without buying the right?

2. Can he build a stock-rack like one that is patented, provided that he buys only the ironwork? SUBSCRIBER.

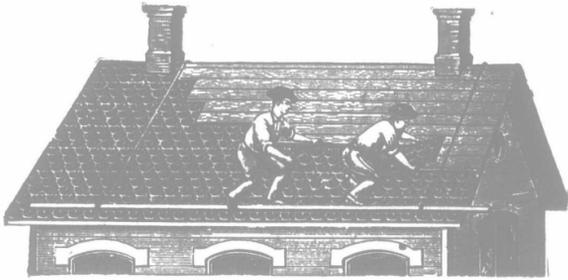
Ans.—1. Yes. 2. No.

In answering the advertisement on this page, kindly mention the FARMER'S ADVOCATE.



What is the tensile strength of that wire you are getting? Do you know whether it is high-carbon or some cheaper grade of steel? No. 9 carbon wire has a tensile strength of over 2,400 lbs. **LAMB FENCE** is made of high-carbon wire. Write us for sample of wire (no charge) and compare this sample with the other wire. The H. R. LAMB FENCE CO., Limited, 687 Bathurst St., LONDON, ONT.

Pedlar's Steel Shingles and Siding



At \$2.00 per 100 Square Feet

We have a complete assortment of Sheet Steel Roofing and Siding, suitable for all kinds of buildings, including plain Brick, Rock-faced Brick, or Stone Siding, at \$2.00 and \$2.35 for Painted Steel, and \$3.50 and \$3.65 for Galvanized Steel. Steel Shingles in Two Styles and Six grades, varying in price from \$2.50 per square for Painted to \$4.50 per square for best galvanized.

Absolutely Wind, Water and Storm Proof.

Nothing on the market compares in price and durability to our Sheet Steel Building Materials. Over 5,000,000 Square Feet sold in 1904. Write for Catalogue No. 11 describing all grades. State requirements, and special prices will be given.

Pedlar People, Oshawa, Ont.

'IDEAL WOVEN WIRE FENCE
Saves Time, Trouble and Money.

You can sleep at night and rest assured that your stock is absolutely safe behind IDEAL fences. This fence once built on your farm will end fence troubles for you.

It is made of No. 9 steel wire. It is made with the famous Ideal lock that can't slip. It is made to last and give good service. It is made on a good common-sense basis by men who know what the farmer needs. No animal can go over or under it.

The IDEAL is a strictly first-class fence at a low price. We believe it is by long odds the best fence on the market, and want you to know all about its construction, so we ask you to write for our new catalogue explaining all about the "IDEAL" fence.

A postal card or letter will bring the catalogue to your home. It is FREE.

THE MCGREGOR-BANWELL FENCE CO., LTD., Walkerville, Ont.

QUESTIONS AND ANSWERS.
Miscellaneous.

DOWER.

Y bought a village lot. He is a married man. At a later date he made an assignment to B. Y's wife would not sign off her interest in the property. The assignee, B, sold the property to C at a sale, the wife not yet having signed off her interest. C having bought the property, moved the dwelling house and the barn also off the property onto his own farm close by, leaving the lot completely bare. C afterwards sold the lot to A—the bare lot only. A afterwards moved a house onto the lot, and sold the house and lot to M, who afterwards built a barn also on the lot.

1. Has Y's wife any claim on the lot—worth about \$35—after the assignee's sale?
2. Has she any claim on the buildings moved off by C?
3. Has she any claim whatever on either lot or buildings after the assignee's sale of the same? If she could by law establish a claim, how much claim could she have on the lot—it is worth about \$35? How much could she claim on the moved-off buildings—worth about \$200? If Y's wife could establish and force payment of her claims, how could A recover any loss, owing to her claim on the lot—value \$35—from C, who sold it to A free from incumbrance, and stated at the time of sale that Y's wife had no claim, owing to Y having assigned to B?
4. Has Y's wife any claim whatever on the building moved on the lot by A, or any claim on the building erected by M, who now lives on the property?

HOUSEHOLDER.

Ans.—Y's wife has no present claim in respect of either land or buildings, other than an inchoate right of dower; that is to say, an estate for life in a third of all the lands and tenements of which her husband was possessed at any time while she was his wife, in the event of her surviving him.

PROBABLY TUBERCULOSIS.

I wish you would tell me what is wrong with my chickens. The first thing noticeable is that the comb and wattles turn an unhealthy color. In some cases there is lameness in one leg; in others there is no lameness, but in both cases a gradual wasting away, until they are so weak they cannot eat, when they soon die. In some cases they live much longer than others, but never get better. It seems to attack fowl coming two years old more than it does older or younger, but all are liable to take it. Their surroundings seem to agree with them, for the flock lays all the year round, except when moulting or attacked with this disease. I have killed four or five, and there are as many more affected. I killed two to-day, one so far gone it could not live much longer. I found the liver three times the normal size, spotted white and so soft it could scarcely be moved, and the bowels were grown over with hard lumps, varying in size from that of a pea to a chestnut, of different shapes and very ugly. The other was not so far gone, all symptoms noticeable being dull color of head, and lameness. All I could see wrong was a couple of those lumps on the bowels, the other organs apparently healthy. Their food is varied—grain, chop, and boiled potatoes mixed, and mangels. This disease has been among them for several years, but seems worse just now. W. D.

Ans.—I am inclined to believe from Mr. D.'s description that his chickens are affected with tuberculosis. I would advise him to ship two or three of the sick chickens to the Bacteriological Department here, and have them examined to make sure that they have or have not this epidemic. In any case the birds that are sick should be isolated from the others, and the birds that die should be buried very deeply away from the house, or else burned. I would also suggest that as soon as the warm weather comes, the poultry-house be thoroughly cleaned and disinfected. The house should be well whitewashed with lime and about five-per-cent. solution of carbolic acid. Open the doors and windows as much as possible, and get all the sunlight that you can inside the buildings. If the disease proves to be tuberculosis, it might be a wise thing to destroy the entire flock, and begin over again.

O. A. C., Guelph. W. R. GRAHAM.

My Offer to Kidney Sufferers

I will give you a full dollar's worth of my remedy free to try without cost or deposit or promise to pay.

I could not make this offer—a full dollar's worth free—if mine were an ordinary kidney remedy. It is not. It treats not the kidneys themselves, but the nerves that control them. The cause of kidney trouble lies ALWAYS in these nerves. The only way to cure kidney trouble is by strengthening and vitalizing and restoring these kidney nerves. That is exactly what my remedy—Dr. Shoop's Restorative—does. Therefore I can make this offer with the certain knowledge that every kidney sufferer who makes this trial will be helped.

When I say "nerves," I do not mean the ordinary nerves of feeling, thought, action, I mean automatic nerves, which night and day, unguided and unseen, control and actuate and operate every vital process of life. These are the master nerves. The kidneys are their slaves. Your mind cannot control them. Your will cannot sway them. Yet when they are strong, you are well; when they are not, you weaken and die.

I have written a book on the Kidneys which will be sent when you write. This book explains fully and clearly how these tiny, tender "inside" nerves control not only the kidneys but each of the other vital organs.

I have made my offer that strangers to my remedy may know. It is not intended for or open to those who have used my remedy. They need no further evidence. But to those who have not heard, or hearing, may have delayed or doubted, I say "simply write and ask." I will send you an order for which your druggist will hand you a full dollar bottle—and he will send the bill to me. There are no conditions—no requirements—simply write me to-day.

For a free order for a full dollar bottle you must address Dr. Shoop, Box 52, Racine, Wis., state which book you want.

Mild cases are often cured by a single bottle. For sale at forty thousand drug stores.]

Dr. Shoop's Restorative

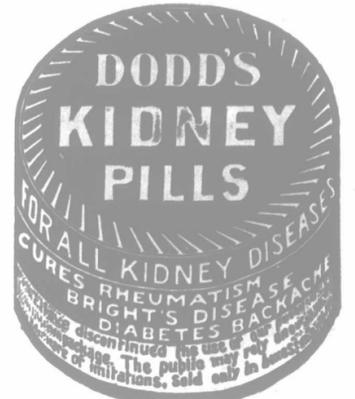
When it is best that we have what we call happiness, happiness is what we get. When it is best that we have what we call sorrow, sorrow is what we get. When it is best that we have riches we have riches, when it is best that we have poverty we have poverty.

Each is a condition that ministers to our needs, and each in its value is equal. The happiness teaches us one thing. The sorrow teaches us another thing. Their value is equal, each to the other. When it is best that we have what we name success we have success.

When it is best that we have what we name failures we have failures. Success brings us one good gift. Failure brings us another gift. The goodness of the gifts is equal.

The power that is born of the exhilaration of successes and pleasures differs from but is no greater or less than the power springing from pain's superb patience, from failure's sublime humility.

Short: Hello, Long! Where are you going? Long: I'm on my way over to the post office to register a kick against the miserable delivery service. Short: What's the trouble? Long: Why, that cheque you promised to mail me ten days ago hasn't reached me yet!



GOSSIP.

To live long it is necessary to live slowly. The gods have given us a long life, but we have made it short.—Cicero-Seneca.

A few rods from the thriving town of Markham in York County, Ontario, only 20 miles from Toronto, is the Shorthorn-breeding establishment of Mr. Ed. Robinson. His spacious barns are comfortably filled with imported females, from some of the best herds in Scotland, and their offspring, which are also by imported sires. Imp. Royal Champion, by Duthie's Morning Pride, a dark roan of good quality, heads the herd. Among the young bulls on hand ready for service is a roan yearling by Imp. Penan Diamond, dam Mary 15th (imp.), a growthy fellow, evenly covered with a good quality of flesh and plenty of hair, and is expected to make a large, good one. A red-roan, by Imp. Rustic Chief, dam Imp. Duchess Gwynne, a great milk-er and breeder, is also a promising fellow with plenty of substance. Another good one is a twelve-months-old roan, by Imp. Rustic Chief, dam Imp. Alice 4th, a mossy-coated, deep-bodied, thick-fleshed chap. There is also a red bull about the same age, by the same sire, and from an imported dam, that should make a good one. The females are a choice bunch, all of breeding age being imported, with one or two exceptions.

Dorothy Princess (imp.) has a choice heifer calf by her side, about a year old, from the imported sire, a smooth one. Moss Rose (imp.) is looking well. She is bred the same as Choice Goods, the World's Fair champion. Mary 14th (imp.), a winner in Scotland, by Duthie's Morning Pride, has a choice roan bull calf, by Royal Prince (imp.), and although inbred has every appearance of being an extra good one. Roan Rose (imp.), the dam of Broadhooks Golden Fame, the bull Mr. Jacobs, of Blyth, paid \$980 for at Thos. Mercer's sale, has a red bull calf at foot, by Royal champion. It is quite young, but has every appearance of making a good one. We also noticed a good heifer from same dam is Broadhooks Golden Fame that is very much like him—full of quality. Of the Jilt tribe, there are two imported cows, which have every appearance of being heavy milkers. They are roans, by Scottish Prince, and have a good pair of daughters by Rustic Chief (imp.), a sire that left many good ones for Mr. Robinson, and is now at the head of Wm. Thomson's herd at Mitchell, Ont. Imp. Princess Alice 4th has proven herself a good breeder, having produced Princess Alice (imp. in dam), by Conqueror's Crown, and another nice heifer calf by Royal Champion.

The Marr Missies are well represented by a lengthy, smooth one that is giving good returns. Love Bird (imp.) has made a name for herself by producing the bull that made a record for himself by his winnings throughout the Northwest during 1903. Many other good ones are in stock here, but space will not permit mentioning them. There are also other families that have not been mentioned. When in that district drop off at Markham, and see this fine herd of typical Scotch Shorthorns.

STRENGTH OF STEEL WIRE. The question is often asked, "What is the real difference in steel wire that makes one kind so much stronger than another, though both look alike?" The difference is generally owing to the chemical quality of ore from which the pig iron was made, and also to the difference in process of treatment of the metal through its various stages of manufacture. Carbon is the element which hardens and strengthens the metal. Hardness can be obtained, though, in low-carbon steel by working it under certain conditions, but hardness thus obtained is at the expense of toughness, and adds scarcely anything to the strength. According to tests made by the Page Wire Fence Co., wire containing three per cent. carbon has ninety per cent. more strength than common steel wire. A high-carbon wire No. 9 gauge has an average strength of 2,400 lbs., as compared to 1,300 lbs. for common wire of the same gauge. As high-carbon steel costs only a little more than other grades, it is evidently poor economy to use low grades under any circumstances.

LAST MOUNTAIN VALLEY Assiniboia

Gently Rolling Prairie and Park Lands.

Rich Black Loam, Clay Subsoil.

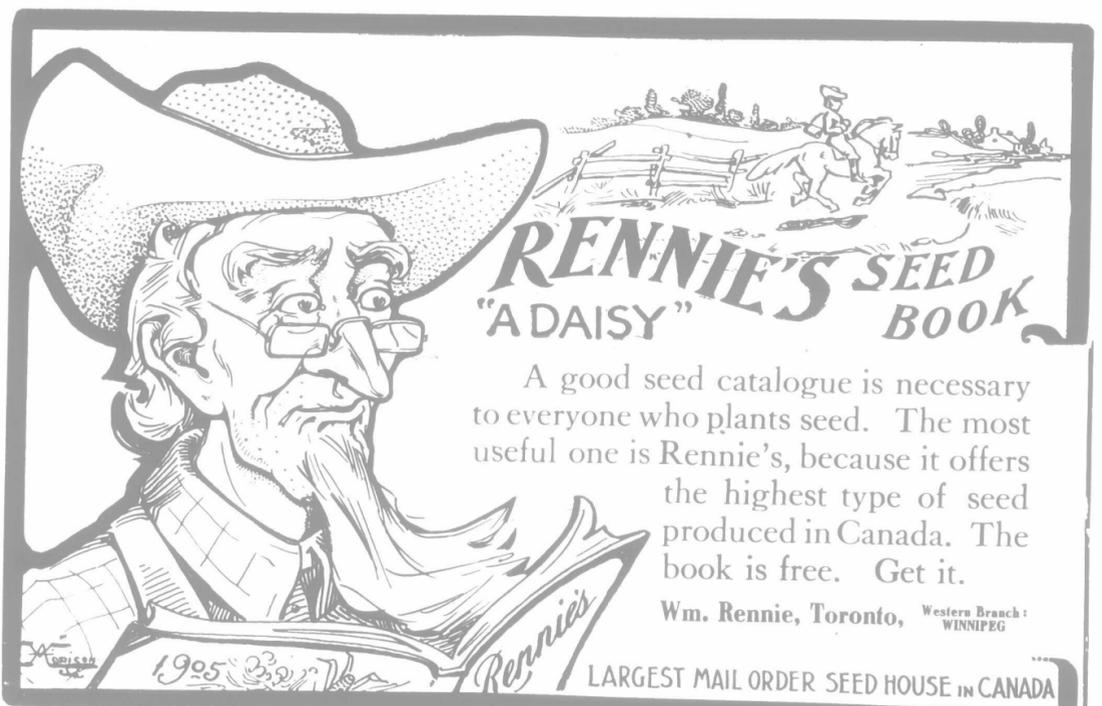
Excellent Transportation Facilities.

Prices from \$9.10 per Acre.

OWNED BY

WM. PEARSON & CO.

230 Portage Ave., WINNIPEG, MAN.

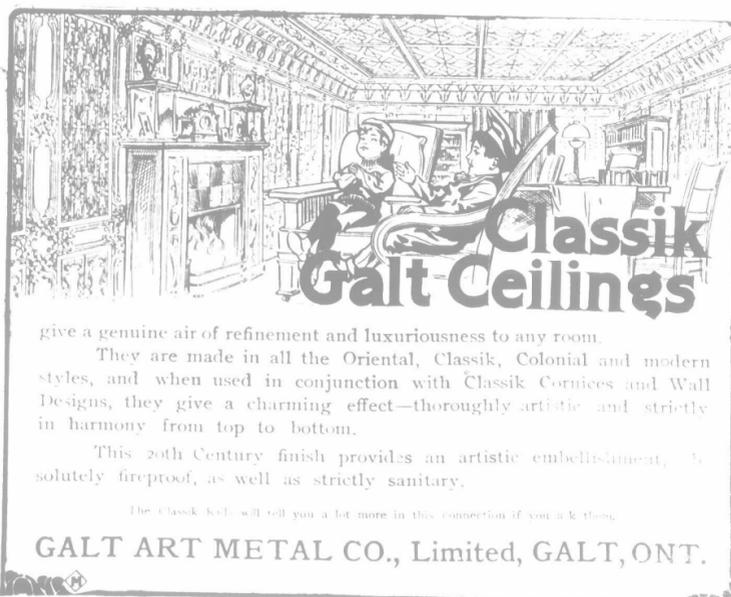


RENNIE'S SEED BOOK
"A DAISY"

A good seed catalogue is necessary to everyone who plants seed. The most useful one is Rennie's, because it offers the highest type of seed produced in Canada. The book is free. Get it.

Wm. Rennie, Toronto, Western Branch: WINNIPEG

LARGEST MAIL ORDER SEED HOUSE IN CANADA



Classik Galt Ceilings

give a genuine air of refinement and luxuriousness to any room.

They are made in all the Oriental, Classik, Colonial and modern styles, and when used in conjunction with Classik Cornices and Wall Designs, they give a charming effect—thoroughly artistic and strictly in harmony from top to bottom.

This 20th Century finish provides an artistic embellishment, is solutely fireproof, as well as strictly sanitary.

The Classik Kell will tell you a lot more in this connection if you ask them.

GALT ART METAL CO., Limited, GALT, ONT.

British Columbia Farms

We have for sale a very large and complete list of selected dairy farms, orchards, poultry ranches and suburban homes, in the valley of the celebrated Lower Fraser and adjacent islands on the Coast. All in the neighborhood of Vancouver. Send for our pamphlet giving weather statistics and market prices of 37 different kinds of farm produce.

The Settlers' Association,

322 Cambie St.,

P. O. Box 329, Vancouver, B.C.

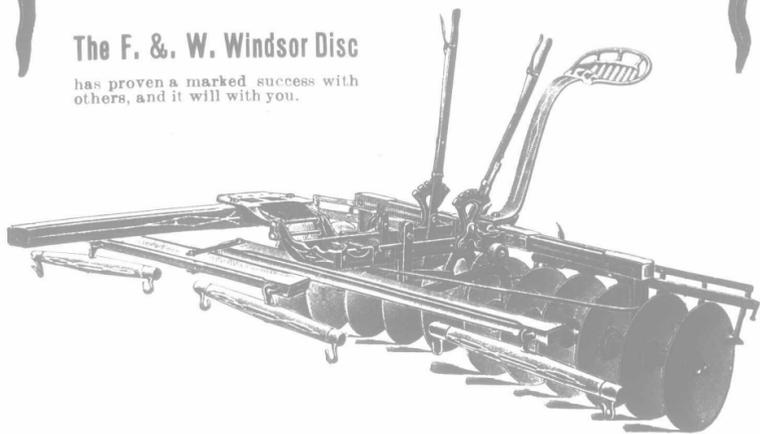
A PROSPEROUS COMPANY.—We have received a copy of the 1904 annual report of the Canada Permanent Mortgage Corporation, head office, Toronto, President Geo. Gooderham. The shareholders' report shows the company to be in a flourishing condition; for besides paying two half-yearly dividends of three per cent. each, and adding \$250,000 to the reserve fund, there remains \$63,934.56 at the end of profit and loss. The statement shows an improvement over last year.

In answering any advertisement on this page, kindly mention the FARMER'S ADVOCATE.

THE Frost & Wood Company Limited
MANUFACTURERS OF
LABOR-SAVING FARM MACHINERY

Now is the time to get your implements in shape for the spring work. A new Disc Harrow will help both you and your land, if you get the right one.

The F. & W. Windsor Disc
 has proven a marked success with others, and it will with you.



Built with 16, 18, or 20 inch Discs.

The DISCS are on the out-throw principle, and equipped with two levers. The WINDSOR disc is fitted with large BALL BEARINGS, which lighten the draft and lengthen the life of the machine. The WINDSOR is one of the greatest levellers on the market. A few seasons' use will make your farm better fitted for the use of Binders, Mowers and Rakes. Send for our Illustrated Catalogue "F."



Head Office & Works, Smith's Falls, Ont.

Winnipeg, Toronto, Montreal, Quebec, St. John, Truro, Charlottetown.
 Man. Ont. Que. Que. N. B. N. S. P. E. I.

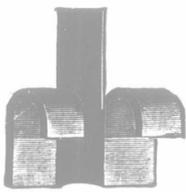
A Farmer's Request

"You must wake and call me early,
 Call me early, Katie, dear,
 For the House and Barn need painting,
 And the Summer Sun is near!"

THE MOST RELIABLE PAINTS—MADE IN A SYSTEMATIC MANNER BY MODERN MACHINERY AND THE FINEST OF STOCK—ARE MANUFACTURED (note name carefully) BY

The Canada Paint Company
 LIMITED.

The Tie that Binds



Anchor Clamp before using.

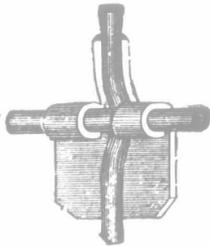
ANCHOR Wire Fences

owe their strength to the famous Anchor clamp. It securely fastens the cross wires and uprights, thus consolidating the strength of the fence. It can be constructed by any intelligent person. Write for information.

Agents wanted.

Esplen, Frame & Co.,
 Stratford, Ont.

It Never Slips



Anchor Clamp after closing

In answering any advertisement on this page, kindly mention the FARMER'S ADVOCATE.

Prizewinners in Live Stock, Eastern Ontario Live-stock and Poultry Show, 1905.

CATTLE.

SHORTHORNS.—Steer, 2 years and under 3—1 and 2, Jos. Armstrong, Speedside. Steer, 1 year and under 2—1, Geo. Armstrong. Steer, under 1 year—1, Pritchard Bros., Fergus. Cow or heifer, 3 years and over—1, W. C. Edwards & Co., Rockland; 2, James Leask, Greenbank. Heifer, 2 years and under 3—1 and 2, W. C. Edwards & Co. Heifer, under 2 years—1, 2, 3 and 4, W. C. Edwards & Co.

GALLOWAYS.—Steer or heifer, 2 years and under 3—1, D. McCrae, Guelph. Steer or heifer, 1 year and under 2—1, D. McCrae. Steer or heifer, under 1 year—1 and 2, D. McCrae. Cow or heifer, 3 years and over—1 and 2, D. McCrae.

BEEF GRADES OR CROSSES.—Steer, 2 years and under 3—1 and 3, James Leask, Greenbank; 2, D. B. Scott, Fergus; 4, T. J. Graham, Mosgrove. Steer, 1 year and under 2—1 and 2, James Leask; 3, James Lindsay, Fergus; 4, Lewis Armstrong, Fergus. Cow or heifer, 3 years or over—1, Jas. Wilson & Son, Fergus; 2, Jas. Leask; 3, R. Reid & Co., Hintonburg. Heifer, 2 years and under 3—1, James Leask; 2, Geo. Armstrong, Speedside. Heifer, under 2 years—1 and 2, James Leask.

THREE EXPORT STEERS.—1, James McQueen, Elora; 2, James Leask; 3 and 4, Thos. Graham, Mosgrove.

GRADE STEER, Sired by SHORT-HORN BULL.—1 and 2, James Leask; 3, J. McQueen, Elora.

SHEEP.

COTSWOLDS.—Ewe, under 1 year—1, 2 and 3, D. McCrae, Guelph.

OXFORDS.—Ewe, under 1 year—1 and 2, J. A. Richardson, South March; 3, and 4, J. A. Jull, Burford.

SHROPSHIREs.—Wether, under 1 year—1, Lloyd-Jones Bros., Burford; 2, 3, 4 and 5, W. C. Edwards & Co., Rockland. Three wethers, under 1 year—1 and 2, W. C. Edwards & Co. Ewe, under 1 year—1, 2 and 3, W. C. Edwards & Co.; 4 and 5, Lloyd-Jones Bros.

SOUTH DOWNS.—Wether, under 1 year—1, Telfer Bros., Paris. Ewe, under 1 year—1, Telfer Bros.

DORSET HORNS.—Wether, 1 year and under 2—1, R. H. Harding, Thorndale. Wether, under 1 year—1 and 2, R. H. Harding. Ewe, under 1 year—1, R. H. Harding.

HAMPSHIREs AND SUFFOLKS.—Wether, 1 year and under 2—1, Telfer Bros., Paris. Wether, under 1 year—1, 2 and 4, James Bowman, Guelph; 3, Telfer Bros. Ewe, under 1 year—1, Telfer Bros.; 2, James Bowman.

GRADE OR CROSS-BRED SHEEP.—Three wethers, under 1 year—1, Lloyd-Jones Bros., Burford. Wether, under 1 year—1 and 2, Lloyd-Jones Bros.

SWINE.

BERKSHIREs.—Barrow, under 6 months—1 and 2, Wm. Wilson, Brampton; 3, R. Reid & Co., Hintonburg. Sow, 6 months and under 9—1, R. Reid & Co.; 2, 3 and 4, Wm. Wilson. Sow, under 6 months—1, 2 and 3, Wm. Wilson; 4, R. Reid & Co.

YORKSHIREs.—Barrow, 6 months and under 9—1, 2 and 3, J. E. Brethour, Burford. Barrow, under 6 months—1, 2 and 3, J. E. Brethour. Sow, 6 months and under 9—1, 2 and 3, J. E. Brethour; 4 and 5, Jas. Wilson & Sons, Fergus. Sow, under 6 months—1, 2 and 4, J. E. Brethour; 3 and 5, Jas. Wilson & Sons.

TAMWORTHs.—Barrow, 6 months and under 9—1, 2 and 4, R. Reid & Co., Hintonburg; 3, A. M. Stewart, Dalmeny. Barrow, under 6 months—1, 2 and 3, R. Reid & Co. Sow, 6 months and under 9—1, 2 and 5, J. A. Richardson, South March; 3 and 4, R. Reid & Co. Sow, under 6 months—1, 2 and 3, R. Reid & Co.

GRADE OR CROSS-BRED PIGs.—Barrow, 6 months and under 9—1, 2 and 3, H. Stewart, Burford. Barrow, under 6 months—1, 2 and 3, H. Stewart. Sow, 6 months and under 9—1, 2 and 3, H. Stewart. Sow, under 6 months—1 and 2, H. Stewart; 3 and 4, Wm. Wilson, Brampton.

EXPORT BACON HOGs.—Pure-breds—1, 2, 4 and 5, J. E. Brethour, Burford;

(Continued on next page.)

Colds Become Pneumonia

AND BRING FATAL RESULTS IN A REMARKABLY SHORT TIME—THE SAFEGUARD IS

DR. CHASE'S SYRUP OF LINSEED AND TURPENTINE

Nearly everybody knows that pneumonia results from neglected colds, and yet there is scarcely a newspaper you pick up these days but contains the report of some fatality from this deadly disease.

Colds are so common that the danger they carry with them is overlooked.

In Dr. Chase's Syrup of Linseed and Turpentine you have a positive cure for colds and a complete safeguard against such serious developments as pneumonia and consumption.

The exceptional curative properties of turpentine and linseed are well known, and in Dr. Chase's Syrup of Linseed and Turpentine they are combined with half a dozen other ingredients in such a way as to be pleasant to the taste, and wonderfully powerful in the cure of throat and lung diseases.

Such ailments as croup, bronchitis and asthma are quickly relieved and entirely cured by this treatment.

There is, we believe, no medicine so well suited for family use as a cure for coughs and colds, and as a safeguard against the deadly ailments which so frequently arise from them.

Dr. Chase's Syrup of Linseed and Turpentine, 25 cents a bottle; family size, three times as much, 60 cents, at all dealers, or Edmanson, Bates & Co., Toronto. To protect you against imitations, the portrait and signature of Dr. A. W. Chase, the famous recipe-book author, are on every box.

GRAND TRUNK RAILWAY SYSTEM

Special One-Way Excursions

FROM LONDON TO

Billings, Mont.....	\$34.25
Colorado Springs, Denver, Col.	38.75
Helena, Butte, Mont.; Ogden, Salt Lake City, Utah.....	39.25
Nelson, Rossland, B. C.; Spokane, Wash.....	39.75
Portland, Ore.; Seattle, Wash.; Vancouver, Victoria, B. C.	42.25
San Francisco, Cal.....	42.25

Proportionately low rates to other points. Tickets on sale from March 1st to May 15, '05. For tickets, and full information call on Agents Grand Trunk Railway System.

48,000 NO. 1 APPLE TREES

For February Sale. Special



Fruit and Ornamental Trees, Shrubs, Roses, Vines, Berry Plants; Seed Potatoes, Eureka.

None better. 25 years direct dealing with satisfactory results. No agents. Send at once for Central Nurseries' best Catalogue; it's Free. There is splendid value in it for you when ordering early. Try us.

A. G. HULL & SON, St. Catharines, Ont.

CURE SCIATICA and RHEUMATISM WESTERN RHEUMATIC POWDER AND BLOOD PURIFIER.

New vegetable remedy, giving wonderful results. Send for one box, two weeks' treatment, and know that it will benefit you. We guarantee it. \$1 a box, or six for \$5, prepaid to any place in Canada. Sold only direct to patients. Send to us.

RHEUMATIC REMEDY CO., Peterboro, Ont.

"The best workmen use the best tools."

The Improved
U. S. Cream Separator

Continues to prove that in the judgment of THE BEST workmen it
Is the Best

Every one of the highest scores and the sweepstakes on Dairy Butter in the four World's Fair contests, at St. Louis were awarded to the products of the improved
U. S. Cream Separator.

Holds World's Record
for Close Skimming.

Investigate it, thoroughly, and you will use no other.

Send for our Handsome Booklet Illustrated in Colors. Free.

THE VERMONT FARM MACHINE CO.
BELLOWS FALLS, VT.

Transfer Points: Sherbrooke, Que., Montreal, Que., Hamilton, Ont., for the East,
San Francisco for British Columbia and Minneapolis for Manitoba and N.W.T.

Imported Clyde, Shire and Hackney STALLIONS.



A few left on hand for sale that I wish to close out at from \$600 to \$1,000 each. These stallions are all bred from the best sires of Scotland and England. Such noted sires as:

King of Fashion (12195), by Baron's Pride (9122).
Prince of Kyle (7155).
Harbling Harold (15649), by Harold (4629).
Gunthorpe Advance (13136), by Bar None (2388).

Write—

J. B. Hogate, Sarnia, Ont., or Lennoxville, Que.

ALEX. GALBRAITH & SON,
JANESVILLE, WISCONSIN.



have on hand a magnificent collection of

CLYDESDALES

Also a few choice

**Suffolks,
Percherons,
Belgians
AND
Hackneys**

Prices, terms and guarantee to suit the buyer.

Twenty-five years in the front rank of importers. Address as above. Send for new Catalogue.



SIMCOE LODGE STOCK FARM
CLYDESDALES

Any persons wanting to purchase Clydesdale fillies and stallions for breeding should call on us before buying elsewhere, as we always have a number of prize-winners in our lot.

HODGKINSON & TISDALE
BEAVERTON, ONT.

Long-distance Phone in connection with Farm
70 miles north of Toronto, on Midland Division of G. T. R.

In answering any advertisement on this page, kindly mention the FARMER'S ADVOCATE.

Prizewinners in Live Stock—Cont.

3 and 7, R. Reid & Co., Hintonburg; 6, Wm. Wilson, Brampton; 8, A. M. Stewart, Dalmeny. Grades—1, 2 and 4, H. Stewart, Burford; 3, Wm. Wilson, Brampton.

Sweepstakes pen of three export bacon hogs—J. E. Brethour, Burford.

DAIRY CATTLE.

AYRSHIRES.—Cow, 36 months and over—1, 2 and 3, J. G. Clark, Ottawa; 4 and 5, R. Reid & Co., Hintonburg. Heifer, under 36 months—1, J. G. Clark; 2, R. Reid & Co.

HOLSTEINS.—Cow, 36 months and over—1, Neil Sangster, Ormstown, Que.; 2, T. A. Spratt, Billing's Bridge. Heifer, under 36 months—1, Neil Sangster.

GRADES.—Cow, 36 months, and over—1, T. A. Spratt; 2 and 3, R. Reid & Co. Heifer, under 36 months—2, R. Reid & Co.

DRESSED CARCASSES.

CATTLE.—Beef, pure-bred—1 and 2, Jos. Armstrong, Fergus; 3, D. McCrae, Guelph. Beef, grade—1, D. B. Scott, Fergus; 2, Jas. Lindsay, Fergus; 3, Jas. Leask, Greenbank.

SHEEP.—Shropshire—1, Lloyd-Jones Bros., Burford; 2 and 3, W. C. Edwards & Co., Rockland. Dorsets—1 and 2, R. H. Harding, Thorndale. Hampshires and Suffolks—1, Telfer Bros., Paris; 2 and 3, Jas. Bowman, Guelph. Grade—1, Lloyd-Jones Bros., Burford.

BACON HOGS.—Pure-breds—1, 4, 6 and 7, J. E. Brethour, Burford; 2 and 3, R. Reid & Co., Hintonburg; 5, A. M. Stewart, Dalmeny. Grades—1, 2 and 3, H. Stewart, Burford. Sweepstakes—J. E. Brethour, Burford.

GOSSIP.

Librarian Putman, of the U. S. Congress library, tells a story of a colored man who came into the library a few days ago and asked one of the assistants for a "good law book." He explained that one of his neighbors intended to sue him, and he wanted to get a book so he could find out the law.

The clerk gave him a copy of a book called "Every Man His Own Lawyer." The colored man sat down at one of the desks and turned the pages of the book for an hour. Then he came to the desk of the assistant and said:

"Deed, boss, can't you get me sumpin' easier? Dis yere is d' fifth edition. Cain't I have d' fust edition? Mebbe I c'u'd understan' dat. I ain't bin gittin' on right smart with dis yere fifth one."

James Rankin Young, the new superintendent of the U. S. dead-letter office, admires politeness.

"It is possible," he said recently, "to be polite always. It is possible to be polite even when discharging a drunken coachman. I know that this is so, for I have seen the thing done."

"A friend of mine found himself obliged last week to get rid of his coachman for drunkenness. He summoned the man into his presence, and discharged him with this polite speech:

"I fear, Montgomery, that we must part. It has been impossible for me to avoid noticing that several times during the past month you have been—er—sober. Now, I don't believe that any man can attend properly to drinking if he has driving to do, and, therefore, at the month's end you will be free to devote yourself exclusively to your chosen occupation."

TRADE TOPIC.

LIFE INSURANCE.—During recent years and concurrent with the general advancement in agriculture, farmers have been taking advantage of life insurance, not only as a means of improving the future provision for their families, but as a form of investing some of their surplus. Among the Canadian companies that rank deservedly high in public esteem is the Mutual Life of Canada, whose 35th annual statement appears elsewhere in this issue, and which should be carefully studied by our readers. It shows a net surplus of over \$1,000,000 above all liabilities, and many other facts of a gratifying nature to those insured.

Fistula and Poll Evil

Do yourself what horse doctors charge big prices for trying to do. Cure Fistula or Poll Evil in 15 to 30 days.

**Fleming's
Fistula and Poll Evil Cure**

is a wonder—guaranteed to cure any case—money back if it fails. No cutting—no scar. Leaves the horse sound and smooth. Free Hook tells all about it—a good book for any horse owner to have. Write for it.

FLEMING BROS., Chemists.
45 Front Street, West, Toronto, Can.

"THE REPOSITORY"

Burns & Sheppard, Proprietors,



Cor. Simcoe and Nelson Sts., TORONTO.

Auction Sales of Horses, Carriages, Buggies, Harness, etc. every Tuesday and Friday at 11 o'clock.

Special Sales of Thoroughbred Stock conducted. Consignments solicited. Correspondence will receive prompt attention.

This is the best market in Canada for either buyer or seller. Nearly two hundred horses sold each week.

30 FULL-BLOOD PERCHERONS



Consisting of stallions and mares, from one year old up, both home-bred and imported. The foundation stock is principally Brilliant blood, a son of the noted Besique, at the head of our stud at present. We have them with size and quality, clean legs and feet like iron. We are prepared to give better quality for less money than can be obtained elsewhere in America. If you need a horse in your locality, we will assist you to form a company. Terms easy. Stock fully guaranteed. Located three miles out of town, or two miles from Ruthven, on the Pere Marquette. We pay livery if not on hand to meet you. Address:

I. A. & E. J. WIGLE,
Essex County. Kingsville, Ontario.

IMPORTED CLYDESDALE STALLIONS AND FILLIES.

Also HACKNEY STALLIONS FOR SALE at reasonable prices. Come and see them, or write to

ADAM DAWSON, Cannington, Ont.

IMPORTED Clydesdale Stallions

For sale, reasonable. Come and see them or write to

Phillip Herold, V. S., Tavistock.

CLAYFIELD STOCK FARM

Clydesdales, Shorthorns and Cotswolds.

41 prizes won at World's Fair at St. Louis, 11 firsts, 5 champions. Will now offer my entire flock of rams and ewes at prices according to quality.

J. C. ROSS, Jarvis, Ont.

FOR SALE: SALOMON, the celebrated imported GERMAN COACH STALLION

which can be seen at Mr. John McRoberts', Township of Caradoc, Lot 5, Con. 2, County of Middlesex, and information regarding the above can be had by writing either John McRoberts, Melbourne P.O., or W. W. Gordon, Glencoe.

GORDON, McROBERTS & McLELLAN, Props.

Burdnet Stock Farm—Clydesdales of the most fashionable strains. Imp. and Canadian-bred mares for sale reasonable. Also Berkshire pigs. For particulars write to

A. S. GORMLEY, Unionville Sta. and P.O.
Large Standard bred STALLION (registered); great hooker. A large Standard brood mare, in foal. Handsome road-ter stallion, with speed (registered). For prices,

DR. R. C. COATES, Thamesville, Ont.

Belgian Stallion—Undersigned has for sale the imported Belgian draft stallion, Armateur, No. 418; dark bay; weight, 2100 lbs. Price reasonable.

JOHN McKENZIE, Hartley P. O., Ont.
Woodville station.

TRUMANS' CHAMPION STUD

READ OUR UNBEATEN RECORD AT ST. LOUIS WORLD'S FAIR:

Premier Championship.
Reserve Grand Championships.
Three Reserve Championships.
Six \$100 Shire Horse Ass'n Gold Medals.
Six Second Premiums.
Three Fourth Premiums.

Grand Championship.
Two Championships.
Five Diplomas.
Nine First Premiums.
Six Third Premiums.
Two Fifth Premiums.

Our fourth load of Shire, Percheron and Hackney stallions just arrived at our London, Ont., stables, at the Reid Hotel, and with those already on hand make the best collection of stallions to pick from in Canada, many of them being World's Fair and International winners. A responsible guarantee given with every horse. We will sell a better stallion for the money than any other firm. **TWENTY-SEVEN YEARS IN THE IMPORTING BUSINESS.** Write for full particulars and new Catalogue Q.

Trumans' Pioneer Stud Farm

BUSHNELL, ILL., U.S.A.

Address
H. W. TRUMAN,
Manager, London, Ont., Branch.

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Whittlesea, England.

AFTER 50 YEARS

As used in the Royal Stables.

Yes, after 50 years' use

STEVENS' OINTMENT



As used in the Royal Stables, is still preferred by leading veterinary surgeons, horse trainers and those who understand horses, and a good thing for curing

Spavin, Splint, Ringbone, Curb,

No Blotch, No Blenheim, No Directions with every Box. and all enlargements in horses and cattle.

Evans & Sons, Ltd., Montreal, Que.
Agents for Canada.

125 Percheron, Shire and Hackney .. Stallions and Mares ..

At the World's Fair at St. Louis I won more Premier Championship awards than any other exhibitor of live stock; I won every Premier Championship offered on Hackneys, also every Gold Medal but one. At Chicago International, 1904, on 20 head I won 34 prizes.

I HAVE THE GOODS and will pay intending buyers' R. R. fare here from any part of Canada, sell you a good Stallion for \$700 to \$1,000, or choice of my barns for \$1,400, delivered in your town. I will guarantee stallions. I will sell against death for two years, and to get 60% mares in foal.

Time of payments made to suit the purchaser.

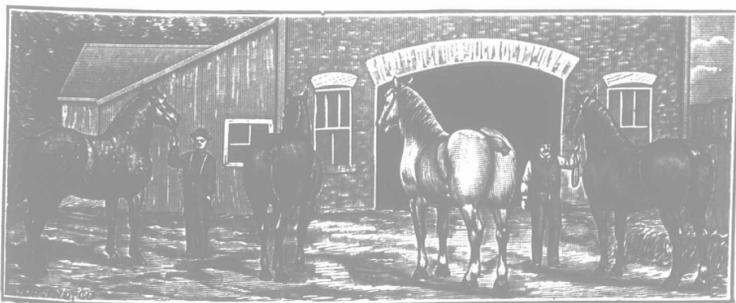
LEW W. COCHRAN, 607 West Main St., Crawfordsville, Ind.



Clydesdale Stallions

Our third consignment since Toronto Fair has just arrived, per S. S. Athina, from Glasgow, which includes several of the best colts ever landed in America. Prices right. See this lot, om

JAMES DALGETY, London, Ont.



20-PERCHERONS-20

Have just arrived with our new importation, Jan. 31st, 1905, direct from France, of 20 high-class Percherons and prizewinners in France, from the best breeders in France. They are descendants of such noted champions as Brilliant, Besique, Romulus. Have personally selected every horse ourselves, using extraordinary caution to select nothing but good, sound, serviceable horses that will do our customers and the country good. Colors, black and dark dapple grays. They are large and blocky fellows, 3 to 5 years old, and can go like trotters, weighing 1600 lbs. to 2000 lbs., with the right kind of feet and legs. We have a few choice German Coachers and Hackneys that are also for sale. We will sell you a better stallion for less money than any other importers in America, with a guarantee as good as gold. Intending purchasers should visit our stables before buying elsewhere. Inspect our stock and get our prices. Terms made to suit purchasers.

HAMILTON & HAWTHORNE, SIMCOE, ONTARIO.
82 miles south-west of Toronto, on G. T. R.

QUESTIONS AND ANSWERS. Veterinary.

LUMP JAW.

Cow has lump the size of a hen's egg on her jaw. It has been lanced, and some stuff put into it. Is there anything I could give her internally. A. L.

Ans.—Give iodide of potassium three times daily, commence with one-dram doses, and gradually increase the dose by say ten grains, until her appetite and desire for water fail, tears run from her eyes and saliva from her mouth. When any of these symptoms appear, discontinue the administration of the drug. Repeat treatment in six weeks, if necessary.

UMBILICAL HERNIA.

Three-year-old filly has lump three inches across and one and a half inches thick at navel. There is a hole that I can insert two fingers in, leading into the abdomen, that can be felt by pressing the fingers into the tumor. Can it be cured, and would it be wise to breed her? G. A. S.

Ans.—This is a rupture. It can be cured, but only by an operation. In younger animals, when the opening is small, a truss will usually effect a cure, but in this case, an operation by a veterinarian is necessary. There are several ways of operating. Most practitioners apply clams; some use scewers, and some cut down upon the parts and stitch. Any of these is successful, but in some cases, notwithstanding all skill, lockjaw will follow, and usually proves fatal. The percentage of this or other diseases following the operation is small, but the operator cannot be blamed when it occurs. It is not considered safe to breed a mare with rupture. If parturition is easy, all is well, but in difficult cases, where excessive straining is necessary, there is a danger of the rupture enlarging enormously.

Gossip.

Mr. Geo. McCormick, Rockton, Ont., writes: "The Ayrshire bull I am advertising is a very fine animal and of the choicest breeding. He is large, of great depth and good length. His dam is from the imported bull, Glenora Sultan, and his sire, Prince Robert of Glenora, is from the great cow, Minnie of Lessness-ock, and sired by Black Prince of Whitehill."

A "Farmer's Advocate" representative recently paid a short visit to the Percheron stables at Simcoe, Norfolk Co., Ont., where Messrs. Hamilton & Hawthorne have their last importation of 17 head, three of the consignment having been sold and delivered before we reached there. Owing to the absence of the proprietors, we were unable to get the breeding of the horses, but we can say frankly that individually they are the best lot by far that this firm has ever imported. Most of them are jet blacks, and, generally speaking, have nicely-sloping pasterns, so different from many we have seen. Anyone desiring to get a stallion of this kind should visit this stable early.

Mr. S. Macklin, Streetsville, Ont., breeder of Holstein-Friesian cattle, writes: "I have just finished testing two more heifers for the Record of Merit, under the supervision of Mr. Harold Horrocks, of the Ontario Agricultural College, with the following results: Dora Pietertje Clothilde 4029, two years old, 373.5 lbs. milk, 11.08275 lbs. butter-fat, 13.85 lbs. butter at 80 per cent. in seven days; Beauty De Kol Clothilde 4277, two years old, 251.5 lbs. milk, 8.0285 lbs. butter-fat, 10.03 lbs. butter. This is a very creditable showing for the latter, taking into consideration that she has been milking over five months."

THE VILLAGE BELLES.

The village belles were wringing: Pray do not turn the hose Upon me when I tell you They were wringing out the clothes. —Lippincott's.

Horse Owners! Use

GOMBAULT'S

Caustic Balsam



A Safe, Speedy, and Positive Cure

The safest, Best BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Blemishes from Horses and Cattle, SUPERSEDES ALL CAUTERY OR FIRING. Impossible to produce scar or Blemish. Every bottle sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars. The Lawrence-Williams Co., Toronto, Ont.

Dr. Page's English Spavin Cure



For the cure of Spavins, Ringbone, Curbs, Splints, Windgalls, Capped Hock, Strains or Bruises, Thick Neck from Distemper, Ringworm on Cattle, and to remove all unnatural enlargements.

(unlike others) acts by absorbing rather than blistering. This is the only preparation in the world guaranteed to kill a Ringbone or any Spavin, or money refunded, and will not kill the hair. Manufactured by DR. FREDRICK A. PAGE & SON, 7 and 9 Yorkville Road, London, K. C. Mailed to any address upon receipt of price, \$1.00. Canadian agents: J. A. JOHNSTON & CO., DRUGGISTS, 171 King Street East, - Toronto, Ont.

BREEDING CLYDESDALES



I have recently filled my stables with just the class of imported

Clydesdale Stallions

that will do the horse-breeder of this country most good. They are a grand lot to select from, and I can give the best possible terms to intending buyers. Be logical, and secure a horse of the approved breed. It is a privilege to show my stock and attend to enquiries by letter. Call or write. T. H. HASSARD, MILLBROOK, ONT.

IMPORTED

Clydesdales



My lot of selected stallions and fillies just landed were got by such noted sires as Senator's Heir, Lord Lovat, Prince of Carrohan (8161), Moncreiff Marquis (8653) and others noted for their individual quality.

GEO. STEWART, Howick, P. Q.

FONTHILL STOCK FARM

50

SHIRE HORSES AND MARES to choose from.



MORRIS & WELLINGTON, FONTHILL, ONTARIO.

Clydesdale Stallions and Fillies.

Imported and Canadian-bred. For sale: Two Canadian-bred stallions, rising 3 years, from imp. sire and dams. Also FOURTEEN Cows and Heifers for sale. Reasonable prices. For particulars write to

JAS. W. INNES, Cityview Farm, Woodstock, Ont.

IMPORTED CLYDESDALES

5 young stallions, 4 two-year-olds and 1 four-year-old, sired by Mains of Auries, Prince Alexander, etc. Prices moderate. ALEX. MCGREGOR, Uxbridge, Ont.

In answering any advertisement on this page, kindly mention the FARMER'S ADVOCATE.

"Time trieth Truth"
and time proveth
the accuracy of the
ELGIN WATCH

Every Elgin Watch is fully guaranteed. All jewelers have Elgin Watches. "Timemakers and Timekeepers," an illustrated history of the watch, sent free upon request to

ELGIN NATIONAL WATCH CO., ELGIN, ILL.

John Morley, at a dinner in New York, praised the devotion of the American husband.

"In America," he said, "the husband is almost more chivalrous and attentive and polite after marriage than before it. To see an American couple together, laughing and joking, one would hardly believe that they were wedded.

"The point, therefore, of a recent happening in a London court of law would be quite lost in an American law court.

"A poor woman was testifying about her dead husband in a London life insurance suit. A lawyer said to her:

"Was your husband good to you during his life?"

"Oh, yes, indeed," she answered. "As good as could be. He was more like a friend than a husband."

One of the largest, if not the largest, Shire horse importing and breeding establishments in Canada is that at Fonthill, Ont., owned by the well-known nurserymen, Messrs. Morris & Wellington. For several years they have been the principal winners at Toronto and other large shows. They have, as usual, a fine, large stock on hand, including five imported stallions and upwards of fifty mares and colts. The stallions are a very drafty lot. Mars [275]—sire Vulcan (4145), dam Galata (10048), sire of dam Royal Albert (1885)—the first-prize aged horse at Toronto Exhibition, is looking fine, although getting no special care. This horse should be a great getter of heavy-draft stock. Imp. Barrow Albert [388] (20232), a good three-year-old brown, with good quality, not as heavy in bone and feather as the average Shire, was also winner of second place at Toronto fall exhibition, and is well worth looking after by anyone in search of a Shire stallion. His sire was Barrow Sir James (17142), dam Lockinge Mistletoe (29264). Coronation [354], Vol. 24, E., is another imported horse that is especially drafty. He is a jet black, with very heavy bone and fine feather, sired by Lockinge Harold (16779), dam Blossom (30909), by Bar None William. He was the champion winner at Toronto in September, 1903. Imp. Bank Statesman [352], Vol. 24, E., is a four-year-old, bay, with white hind feet and strip in face, a heavy-bodied fellow, low-set, on strong, heavy bone, with plenty of feather, and is an all-round good horse. Last, but not least, General Favorite (imp.) [353], Vol. 24, E., is a three-year-old, jet black, a half-brother to Coronation (imp.), being by the same sire, Lockinge Harold (16779), dam Finland Similar (23695), by Bar None William (10903). This composes the string of imported stallions, any of which would suit almost anyone in search of heavy Shire stallions. This firm also has a large bunch of mares and colts to select from, many of the colts being from one or other of the imported stallions above mentioned, and as several of the dams are imported, purchasers have a grand chance to get something young that is also just as good as imported, and several of these mares have been prize-winners in the best company. When any of our readers want to get Shire stock, we would say call and inspect this stud. It is situated about four miles from Fenwick Station, T. H. & B., and about five miles from Welland, G. T. R.



**GOOD POTATOES
BRING FANCY PRICES**

To grow a large crop of good potatoes, the soil must contain plenty of Potash. Better and more profitable yields are sure to follow. Our pamphlets are not advertising circulars booming special fertilizers, but contain valuable information to farmers. Sent free for the asking. Write now.

Potash

liberally by the use of fertilizers containing not less than 10 per cent. actual Potash. Better and more profitable yields are sure to follow.

Our pamphlets are not advertising circulars booming special fertilizers, but contain valuable information to farmers. Sent free for the asking. Write now.

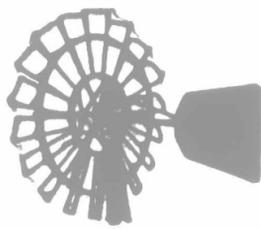
GERMAN KALI WORKS

93 Nassau Street, New York.

Keep in the Front

To do it you must have the best, and the BEST WINDMILLS are the

WOODSTOCK STEEL MILLS



when fitted with GRAPHITE bearings. They run without oil; no more CLIMBING TOWERSTOCK OIL BEARINGS.

Grinders, Pumps, Tanks, and Saw Benches

Woodstock Wind-Motor Co.,
Limited,
WOODSTOCK, ONT.

Asthma

Cured to Stay Cured.

Attacks stopped permanently. Cause removed. Breathing organs and nervous system restored. Symptoms never return. No medicines needed afterwards. 21 years of success treating Asthma and Hay Fever. 38,000 patients. Book 57F Free. Very interesting. Write P. HAROLD HAYES, Buffalo, N. Y.

Portrait of the Late Bishop Baldwin

11 x 15, on heavy plate paper, suitable for framing, together with memoir, the funeral service and sermon on the occasion; price for the two, 50c.; 5 sets, one address, \$1.00; cash with order.

The London Printing & Lithographing Co.,
LONDON, ONTARIO.

If you want Aberdeen-Angus Bull or Cow, a good Aberdeen-Angus write. We have six young bulls sired by Imp. "Prince of Benton," champion Angus bull of Canada in 1903 and 1904. JAMES BOWMAN, Elm Park, Guelph, Ont.

GOSSIP.

CHANGE OF ADDRESS.

Messrs. H. Gee & Sons, poultry breeders, write: "We have changed our address from Selkirk to Rainham Centre, as it is more convenient for us, and we can give our correspondence more prompt attention. We are not changing our location, however, and hope to give our customers better service than in the past."

The Neidpath Ayrshire herd is known almost all over America. Mr. W. W. Ballantyne, Stratford, Ont., the genial proprietor, a good judge of Ayrshires, is still improving his herd. If he has a heifer with small teats, which is the one thing that has militated against the breed in the past, no matter how good a milker she may be, he turns her off to the butcher as soon as he gets her dry. The young stock is all sired by old Royal Peter, and the two-year-old, Sensation, by Douglasdale (imp.), dam Minnie of Lessnessock (imp.), both sweepstakes winners at Toronto in 1902, and himself a first-prize winner at the same place, 1903, which should pretty nearly be a sufficient guarantee of the quality of his stock, and they are coming right. It has not been our privilege to examine the same number that show clean-cut dairy qualities to such a degree as the young stock from the above mentioned sires. Among the young bulls on hand, there are a few especially worthy of mention, among them an eleven-months-old calf, by Royal Peter, and from a dam of the Blue Bell strain, which the Mortons, of Hamilton, imported. Another about the same age is by the same sire and from Daisy of Auchenbrain (imp.), a cow that gave 12,773 lbs. milk in nine months at thirteen years old, and when giving 25 lbs. milk per day in her fifteenth year, several months after calving, tested 4.9 per cent. fat. This bull is mostly white, excepting his neck, and we consider him good enough to head the best herd in America. Another grand bull calf, nearly white, is by Sensation, and out of a dam from Spotty, the cow that has a yearly record of 11,000 lbs. milk, testing 4.2 average, and 555 lbs. butter in one year. Among the younger bulls is one from the Kirsty family, by Sensation, and one from Bessie, by Royal Peter, that also have very appearance of developing choice dairy type; in short, the bulls are a real good lot, and should satisfy the most exacting buyer. The imported cows that have done so well for Mr. Ballantyne, both as milkers and breeders, although getting up in years, are still giving good returns, and Mr. Ballantyne hopes to put them, as well as several of his younger cows, into the Advanced Registry, which it is hoped will soon be in working order in the Ayrshire Association, which will be, we think, a great boon to the breed. Among the young cows and heifers and heifer calves are a number that many good things could be said about did space permit. Suffice it to say the cow that Mr. Ballantyne keeps must not only be a typical Ayrshire, but she must be a heavy milk producer, as it was for the latter that the breed was originated. If you want a good Ayrshire bull, don't hesitate to write, asking for a description of this lot, always mentioning the "Farmer's Advocate."

In a Pennsylvania town where the Friends abound, a prim old Quaker spinster one day attended the marriage of her grandnephew, a young person who had in the course of his twenty-one years received much needed discipline at her hands.

The old lady was at her best on this festive occasion, and at a pause in the wedding-breakfast her young relative looked over at her with a beguiling smile.

"Tell us why thee never married, Aunt Patience?" he said, teasingly.

"That is soon told, William," said the old Quakeress, calmly. "It was because I was not as easily pleased as thy wife was."

As a youth, Daniel Webster was somewhat opposed to physical labor, but he was quick at repartee. While mowing he complained to his father that his scythe was not properly hung. "Hang it to suit yourself, Dan," replied the paternal. The boy immediately hung it on a tree near by. "There, father, it's hung to suit me now."

**THOROLD CEMENT
AND
PORTLAND CEMENT**

FOR BARN WALLS AND FLOORS, HOUSES, SILOS, PIPES, HENHOUSES; AND SEWERS, TILES, ABUTMENTS AND PIERS, FOR BRIDGES, GRANOLITHIC SIDEWALKS; IN FACT, FOR ALL WORK THAT CAN BE DONE WITH CEMENT.

**Estate of John Battle
THOROLD, ONT.**

WHOLESALE IN CAR LOTS ONLY.

THE SUNNYSIDE HEREFORDS

Imp. Onward at head of herd. Special offering: 4 bulls over 1 year old, 6 choice bull calves, 20 choice cows and heifers of the choicest breeding and individual merit. The above are show cattle and prize-winners, and we will quote prices on them that you can buy at. Address O'NEIL BROS., Southgate, O. Iderton Sta., L. H. E.; Lucon Sta., G. T. R.

HURON CENTRAL STOCK FARM

**OF
ABERDEEN-ANGUS**

Our present offering is seven young bulls, 8 to 18 months old. All sired by the champion bull G. derich Chief 3743. All stock registered in the American Herdbook. Also offering the young coach stallion Godolier, winner of 1st at London this year.

E. BUTT & SONS, Clinton, Ont.

BARGAINS for 30 days. Durham cow, 7 years, and bull calf, by a Watt bull, \$100; two dark red bulls, 9 months, \$50 each; Yorkshire boars and sows, 30 to 40 lbs., at \$5 each; our yearling stock boar, quiet and a good getter, \$15.

W. R. BOWMAN, Mount Forest, Ont.

HIGH-CLASS HEREFORDS

We have for sale the following choice young stock which have been bred from imported stock. Intending buyers will do well to inspect the following: 15 young bulls, 20 young heifers, and 15 cows; also 20 Barred Plymouth Rock cockerels. Correspondence invited.

A. S. HUNTER, Durham, Ont.

ABERDEEN-ANGUS.

Three bull calves for sale, out of Imp. Klondyke of the Barn, and females. Drambo Station, WALTER HALL, Washington, Ont.

TAMWORTHS AND HOLSTEINS

Our Tamworths having taken a share of the prizes offered at Winnipeg Exhibition, have taken the diploma for the best herd of four sows, besides other prizes. Boars and sows from one to six months and 2 yearling sows. Also 6 choice bull calves of right type. Bertram Hoskin, The Gully P.O. Grafton, G.T.R.

SHORTHORNS FOR SALE

Six young bulls, 20 cows and heifers, by that grand bull, sire of unbeaten Fair Queen and sister Queen Ideal, first-prize senior heifer calf at the International, 1904.

H. K. FAIRBAIRN, Thedford, Ont.

A. EDWARD MEYER

Box 378, Guelph, Ont.

Breeder of High-class Scotch Shorthorns

Princess Royals, Brawith Buds, Villages, Nonpareils, Minas, Bessies, Clarets, Urys and others. Herd bulls, imp. Chief of Stars (72215), 145417, =32076=, Lovely Prince =50757=. Some choice yearling heifers for sale. Correspondence solicited. Visitors welcome. Telephone in house.

PRICE LIST.

McDOUGALL'S SHEEP DIP
Liquid, Paste and Solid.

20 oz. tin, liquid, 35c.; 1 gal. tin, liquid, \$1.25; 1 gal. tin, paste, \$2.25; 20 oz. tin, paste, 35c.; 5 lb. block, solid, \$1.25; 10 lb. tin, paste, \$2.25; 1 lb. block, solid, 25c.; 5 lb. block, solid, \$1.00. Sold by druggists or dealers, or charges prepaid on 1 gal. or 10 lbs.

THE WORTHINGTON DRUG CO., Guelph, Ont., General Agents.

BOYS FOR FARM HELP

The managers of Dr. Barnardo's Homes invite applications from farmers, or others, for the boys who are arriving periodically from England to be placed in this country. The young immigrants are mostly between 11 and 17 years of age; all will have passed through a period of training in Dr. Barnardo's English Institutions, and will have been carefully selected with a view to their moral and physical suitability for Canadian life. Full particulars as to the terms and conditions upon which the boys are placed may be obtained upon application to Mr. Alfred B. Owen, Agent Dr. Barnardo's Homes, 214 Farley Ave., Toronto.

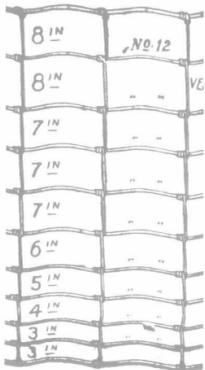
In answering any advertisement on this page, kindly mention the FARMER'S ADVOCATE.

GOSSIP.

Messrs. Brown Bros., Lyn, Ont., write: "We have recently added to our Holstein herd a pair of heifers, bred by H. D. Roe, Augusta, N. J., each of whose dams has an official butter record of over 20 lbs. The sire of one has sixteen daughters in the Advanced Registry. The other's sire is out of Johanna Aaggie, official record 22.80 lbs. butter, and by Sarcastic Lad, sweepstakes bull at St. Louis World's Fair. Our herd now numbers over 50 head. We are now offering for sale the three-year-old bull, Sir Johanna Bessie, whose dam has an official record of 20 lbs. 9 ozs., and both of his grandams official records of over 24 lbs. each. We are also offering a pair of heifers, coming three years old, bred to this bull. They are sired by Lady Waldorf's De Kol, official record of his dam, 22 lbs. 4 ozs. We still have a number of young bulls, fit for service, and a few young cows and heifers, bred to Beryl Wayne Paul Concordia, first-prize two-year-old at Ottawa and Sherbrooke, whose four nearest dams have official records averaging 22 lbs. 11 ozs. each. We have recently sold to W. C. & E. J. Glasgow, Cannamore, the young bull, Paul Wayne De Kol, a prizewinner at Brockville, Sherbrooke, Ottawa and Quebec Provincial Fairs. His dam gave 1,220 lbs. milk in 30 days at two years old, is sired by De Kol 2nd's Butter Boy, and out of Empress Josephine of Brookside, official record 18 lbs. 9 ozs. To A. S. Guess, Kepler, an exceptionally well-bred bull calf, out of Inka De Kol Pietertje, official record of her dam 17.26 lbs. butter, grandam 18 lbs. 9 ozs. Both of these bulls are sired by Beryl Wayne Paul Concordia mentioned above. To John Burgess, Williamstown, the two-year-old bull, Prince Hengerveld De Kol, a prizewinner at four fairs last fall."

Clear Spring Stock Farm is located about two miles from Thorold, in Wel-land Co., Ont. Mr. Jas. Brown, the genial stock proprietor has built up a very creditable herd of Shorthorns, which number now about 35 head. The foundation was laid on individual merit rather than on fancy breed lines. The young stock is sired by British Chief =39748=, bred by the well-known breeders of World's Fair winners, J. & W. Russell, Richmond Hill, sire British Hope =30946=, dam Centennial Isabella 32nd. Previous to this, King Mina =20085= was the stock bull. He was by Norseman =16397=, dam Mina Victor 18231, by Albert Victor (imp.), tracing to Duke of Lavender (imp.). This bull has left Mr. Brown some choice, straight heifers, some of which are now in calf to British Chief (imp.). The herd is now headed by Imp. Strathearn Conqueror, sixteen months old, sire Strathearn Lad (82412), dam Red Rose 5th, by Royal Star (71502). This calf got a set-back in quarantine, consequently is not looking at his best, but Mr. Brown informs the writer that he is going along nicely now, and he expects him to develop into something choice. He has a strong loin and hind quarters, and should make a very good one. With very few exceptions, this herd is solid red in color; one of those exceptions is Jessamine 10th (imp.), a beautiful white heifer, carrying her second calf. She was imported by the Hon. M. H. Cochrane, Hillhurst, Quebec, sire Wanderer's Gift (80211), dam Jessamine 9th. She is one of the thick, low-down, good kind, and has produced a nice roan heifer, by Lord Mountstephen (imp.). Mountain Queen, Vol. 17, is a fine red-roan five-year-old, by Crimson Gem =25753=, dam Peeper =18652=, a pedigree that combines the Crimson Flower tribe, and the Beauty by Snowball tribe. She has a promising young bull calf at foot, by British Chief. Floretta, Vol. 18, is another five-year-old, by Crimson Gem, that is doing good service for her owner. Her dam is Marchioness 3rd 29372, by King Mina =20085=. Among the bulls that are for sale are two nearly ready for service that are going to make good ones. The older one is from Stamford Peach, by King of Stamford =29223=; her dam, Star of Thorold. The young bulls are reds, and are by British Chief. Anyone wanting to get a few good individuals of either sex, reasonably, will do well to write Mr. Brown for further particulars.

PAGE FENCE = The WHITE Brand



All Page Fencing and Gates shipped from our factory in future (except our railroad fencing) will be painted WHITE, a trade-mark as it were, in order that ours can be readily distinguished from others at a glance. There now are other fences which at first appearance look much like ours though they are much different in quality. By coating ours WHITE there can be no confusion among buyers.

While this coating of WHITE gives Page Fence and Gates a distinguishing feature, it will also be a preservative as an aid to the galvanizing in preventing rust. It is now commonly known to everyone that even galvanized wire will, in certain localities, rust.

In addition to these, we are making several other changes and improvements in our goods that will make them still better than ever, and still further ahead of all competitors. Get from us, or local dealers, printed matter explaining everything about our Fences, Gates, Lawn Fences and Netting.

Remember:—Page Fence is WHITE, WHITE, WHITE. And Page Gates are WHITE.

PAGE WIRE FENCE CO. LIMITED

WALKERVILLE MONTREAL TORONTO ST. JOHN WINNIPEG
"Page Fences Wear Best."



Do you want XXX Fruit

Government experts say the only fruit worth shipping is from Sprayed orchards.

Get the foreign buyers into your district by offering them perfect fruit. You want the best prices.

Use a Spramotor.

It's the most economical machine made. It is the only one used by the Dominion and Provincial Governments in their practical work. Made for Hand Power, Horse Power and Engine Power.

Write for Booklet "A". It will tell you all about the Spramotor, and what it will do.

Spramotor Co.

68-70 KING STREET, LONDON, CANADA
107-109 ERIE STREET, BUFFALO, N.Y.

SCOTCH SHORTHORNS

85 head in our herd.

The choice breeding bull, Imp. Green-gill Victor, a Princess Royal, bred by W. S. Marr, heads herd. We have for sale a dozen young bulls of the strong, back, deep-body and short-leg kind; some from our best imp. cows. Also 20 imp. females and 20 home-bred females, all of well-known Scotch families, either in calf or with calf at foot.

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

CLEAR SPRING STOCK FARM

HIGH-CLASS SHORTHORNS

A specialty. Present offerings young bulls and heifers from first-class stock. Correspondence or inspection of herd invited.

JAS. BROWN, Thorold Sta. & P. O.

THREE IMPORTED Shorthorn Bulls

Four imported cows in calf, home-bred cows, heifers and young bulls, all of straight Scotch families. Four imported Shropshire rams, eight imported ewes and any number of Shropshire and Cotswold ram and ewe lambs of the highest class, is what I can show you now, and all will be priced at moderate prices.

Robert Miller, Stouffville, Ont.
Representative in America of Alfred Mansell & Co., Shrewsbury, England.

IT MAKES COWS BREED. MOORE BROS. Veterinary Surgeons. ALBANY, NEW YORK

YOUNG SHORTHORNS for sale, either sex, got by that grand Golden Drop show bull, Kinellar Stamp (Imp.). Inquiries cheerfully answered.

SOLOMON SHANTZ, Haysville P. O.
Plum Grove Stock Farm. o Baden Sta.

WILLOW BANK STOCK FARM — 1855

Old Established Herd. Special offering of SHORTHORNS, either sex; also choice BERKSHIRE PIGS, fit for service. o JAMES DOUGLAS, Caledonia, Ont.

Three Scotch-topped Shorthorn Bulls

FOR SALE. Two got by Prince Gloster =40988=, and one by Collynie Archer (imp.) =28880=. The names of such bulls as Royal Bampton (imp.) =217=, Stanley (imp.) =341=, Prince of the Realm (imp.) =2730=, Earl of March =17252= and Revenue =21053= appear in the pedigrees. Good individuals; must be sold. Inspections solicited. Visitors welcome. Stations: Myrtle, C. P. R.; Brooklin, G. T. R. o WM. D. DYER, Columbus, Ont.

RIDGEWOOD PARK STOCK FARM SCOTCH SHORTHORNS

Special offering, on account of shortage of feed: Imp. and Canadian-bred cows and heifers, some first-class show stuff of the leading families, including Missies, Mayflowers and Village Girls, and by such sires as Imp. Favorite (83469) E. H. B. Imp. Nonpareil Archer and Marquis of Zenda. No fancy prices. Satisfaction guaranteed. Visitors met by appointment and always welcome. E. C. & E. O. ATTBELL, Goderich, Ont.

First-class Shorthorns—Young cows and heifers of fashionable breeding. Also Shropshires of different ages. Write for prices, etc., to T. J. T. COLE, Bowmanville Sta., G. T. R. o Tyrone P. O.

ELMHEDGE SCOTCH SHORTHORNS—Stamfords, Minas, Nonpareils, Crimson Flowers, Marr Floras and Lavinias. Our herd will stand comparison with any. We reserve nothing: 45 head of both sexes, all ages, for sale. o James Bowes, Strathairn P. O., Meaford Sta.

High-class Shorthorns—We have now for sale one bull, 2-year-old heifers of fashionable breeding; also a number of young cows and heifers. BROWN BROS., Lakeview Farm, Orono, Ont. Newcastle Sta., G. T. R. o

6 bulls, 6 to 18 mos., by Proves =37865=. For prices write to RICHARD WILKIN, Springfield Stock Farm, o Harrison, Ont. Wm. Grainger & Son Hawthorne Herd of Deep-milking Shorthorns.

Aberdeen Hero (imp.) at head of herd. Present offerings 6 good young bulls by Scotch sires. Come and see what we have, Lonsdale Sta. & P. O. o

SCOTCH-TOPPED SHORTHORNS

Nine young bulls ready for service; also several heifers by Scottish Baron 40421 (imp.), for sale reasonable. Come soon and get first choice. H. GOLDING & SONS, Thamesford P. O. Stations: Thamesford, C. P. R.; Ingersoll, G. T. R.

BELMAR PARO SHORTHORNS

We offer six splendid young Scotch bulls and a really choice lot of females at prices that will pay you. Address: PETER WHITE, JR., PEMBROKE, ONT.

FLETCHER SHORTHORNS

Our herd of breeding cows, both imported and home-bred, are of the most fashionable Scotch families. Among the really good ones which have been used are Spioy Robin 29300, winner of 3rd prize at Dominion Exhibition, Toronto, and Joy of Morning (imp.) 3970, winning 1st prize at same exhibition, 1904. Stock of either sires for sale. GEORGE D. FLETCHER, Blenheim P. O., Ont. Main Shipping Station, C. P. R. o

Belvoir Stock Farm SHORTHORN BULLS, of various ages; imported and home-bred. They range from herd headers to farmers' bulls, by imp. Gay Lothario, a Cruickshank Lavender. CLYDE STEALLION, 2 years old; sire imp. and dam a winner, grandam 1st Highland Societies' Show.

YORKSHIRES—Sows and boars, various ages; not akin. Three imp. boars and 5 imp. sows to select from, and their progeny. Prices right. Also honorable dealing. RICHARD GIBSON, Delaware, Ont.

SHORTHORNS!

One red bull calf, and one red three-year-old heifer to calf May 1st. All from good milking strain. To be sold cheap. o

GLENAVON STOCK FARM, W. B. Roberts, St. Thomas Sta. Sparta P. O.

LOUST HEDGE STOCK FARM SHORTHORNS

Seven grand young bulls, fit for service, sired by the Princess Royal bull Imp. Prince of the Forest =4040=. o

JAS. & ED. CHINNICK, Chatham, Ont. Box 425.

1864 — HILLHURST FARM — 1905

Scotch and Scotch-topped SHORTHORNS

Broad Scotch =46315= (Sittyton Buttery) at head of herd. FOR SALE: Young bulls by Lord Mountstephen, Joy of Morning and Scottish Beau, 12 to 18 months old. Prices moderate. o

JAS. A. COCHRANE, Hillhurst Station. Compton Co., P. O.

SHORTHORNS and CLYDESDALES

Spioy Count (Imp.), 5 thick, fleshy bulls. 12 months old; a few heifers and 6 splendid Clydesdales; 3 mares registered. All young. o

JAS. McARTHUR

Pine Grove Stock Farm. GOBLE'S, ONT.

SHORTHORN BULLS FOR SALE

Two good young bulls, Queenston Diamond =51761=, calved Jan 20th, 1904, and Wimple's King 2nd =55585=, calved Nov. 9th, 1903. Are show bulls if fitted. Come and see them. Hugh Thomson, Box 556, St. Mary's, Ont.

Scotch Shorthorns—Three young bulls. One dam Lady Ythan 5th. Imp.; 2 others by Invincible, second prize, Toronto, 1904; also heifers of like breeding and quality. G. H. OKE, Alvinston, Ont. o

In answering any advertisement on this page, kindly mention the FARMER'S ADVOCATE.



London Gate

THOR, (Greek God of Thunder and Friend of Man)
To the Farmers of Canada.

Of finest steel throughout, with corners by cold process bended.
Thus stronger, more rigid than the rest.
Cross-braced and fitted with self-acting latch of new design most perfect.
Closely wove of Famous London spring steel wire—colled, not kinked.
Swings either way most easily, nor ever blocks the snow.
A perfect gate—made plain or ornamental as may be desired—
It doth enhance the value of a farm,
Yet costs no more than some not half so good and durable.

London Fence Machine Co
Limited,
LONDON AND CLEVELAND.

Western Agents—A. E. Hinds & Co., Winnipeg, Quebec and East. Ont.—Phelps & Smith, Montreal
Maritime Agent—J. W. Boulter, Summerside, P.E.I.

GOSSIP.

For many years a travelling peddler named Luce has been a well-known character in the country towns of New England. His route lies mostly within Maine and New Hampshire, where he sells needles, pins, soap, extracts, etc., and is always a welcome guest at the isolated farmhouses where he calls. Unlike most itinerant peddlers, he is a man of few words.

Last winter while driving down one of the long hills of North Conway his horse, becoming frightened, ran, finally bringing up at the foot of the hill with an overturned cart, beneath which lay the unfortunate owner, unable to extricate himself from the wreck. A mountaineer approaching asked, with typical brevity, "Tight?" "No," returned the Yankee, "Luce."

CARE OF STALLIONS.

The season of the year is at hand when stallions will be again in demand. As every reader knows there is a great deal of difference in the sureness of stallions as foal-getters. The importance of this property in a valuable stallion cannot be easily over-estimated. The degree to which it will be possessed by him will depend very largely on the way he is handled.

As a rule, the stallions which prove most sure as foal-getters are those which have been fed and exercised with intelligence. This does not mean that all classes of stallions will be fed and exercised in the same way. The treatment in these respects that would be proper for a heavy Belgian or a Shire would not necessarily be proper for a Standard-bred horse or a Cocher. For instance, it might be advantageous to let the heavy horses take all the exercise that they require in a roomy paddock from day to day, whereas the light horses in some instances might be inclined to take too much exercise if allowed to take it in that way. In some instances the draft stallions are so sluggish that it is necessary to set them to work moderately in order to keep them in the best condition possible for fulfilling the mission required of them.

With reference to food no set rule can be laid down. The hay and other products should, of course, be good in quality. Oats, bran, and a certain proportion of barley make a good grain ration, with now and then a handful of oil meal. The digestion of the animal should be closely watched, as nothing will unfit a stallion more quickly for his work than derangement of the digestive organs. In many instances stallions are injured by over-feeding, especially when not enough exercise is given. The feeding, however, should be sufficiently generous to keep the animal in good condition.—[Ex.]

SPECIAL OFFERING OF SHORTHORNS and SHROPSHIRE

(Imp.) Scotland's Pride = 36098 =, 5 years old, a Crulokshank Clipper, by the great sire, Star of Morning.
(Imp.) Scottish Pride = 36106 =, 4 years old, a grand sire, of the Marr Roan Lady family.
2 bulls, 2 years old, and 7 from 9 to 15 months.
20 imported and home-bred cows and heifers.
All of the most approved Scotch breeding.
30 Shropshire ewes, one and two years old.
25 ram lambs.
No reasonable offer refused. For catalogue or further particulars write

W. G. PETTIT & SONS,
FREEMAN, ONT. o
Burlington Jct. Station, Telegraph, Telephone

Queenston Heights Shorthorns

FOR SALE—Two Scotch bulls, from imported sires and dams. Strictly high-class and of choicest breeding.

Write for particulars.

HUDSON USHER, Queenston, Ont.

SHORTHORNS
Clydesdales and Yorkshires.

A few fillies for sale. Also 50 Large English Yorkshires, all imported or bred from imported stock. Will sell cheap, as intend to leave the farm in spring.

ALEX. ISAAC,
Cobourg P. O. and Station, - Ontario.

SHORTHORNS and DORSETS

Write for what you want. Also a number of young Yorkshire sows for sale.

D. Bartlett & Sons, - Smithville, Ont.

HIGH-CLASS Shorthorn Cattle and OXFORD DOWN SHEEP
Present offerings: Young stock, either sex. For prices and particulars write to
JAS. TOLTON & SON, Walkerton, Ont.

THOS. MERCER, Box 33, Markdale, Ont.

Breeder and importer of
CLYDESDALE HORSES, SHORTHORN CATTLE and YORKSHIRE PIGS.
Car lots a specialty.

SPRING VALLEY SHORTHORNS
Herd headed by Bapton Chancellor (Imp.) 10359, 78286. Present offerings: Young stock of either sex, from choice Scotch families. Prices reasonable. For further particulars, apply to
KYLE BROS., Agr. Ont.
Paris, G. T. R. Agr. C. P. R.

SHORTHORNS & CLYDESDALES
Present offerings, a few young bulls, sired by Prince of Banff (Imp.), also one registered Clydesdale stallion, rising 2 years. Prices low, considering quality.
DAVID HILL, Staffs, Ont.

J. A. LATTIMER, Box 15, Woodstock Ont.
Offers Shorthorn Bulls, fit for service. Also two Shropshire sows in pig to imp. bear. All at prices that will induce you to buy. Write for further particulars.

GOSSIP.

Dr. Warre, headmaster of Eton, says: "My impression is that the public school boy of to-day is less rough in manner and language than his predecessors of fifty years ago. I do not see that he is less hardy, or in matters physical less efficient than they. On the whole I can bear witness to improvement. Boys as a rule do more work and learn more than they used to do."

REGULATIONS RE ANIMAL DISEASES

The following regulations are to be found in the Canada Gazette of recent date, and refer to two diseases of live stock, one affecting cattle, commonly known as lumpy jaw (actinomycosis), the other affecting hogs, viz., hog cholera.

Re actinomycosis:

1. The disease of actinomycosis is hereby exempted from the operation of sections 3, 4, 5, 6 and 7 of the Animal Contagious Diseases Act, 1903.

2. No animal affected with actinomycosis shall be exported from the Dominion of Canada.

Regulations Relating to Hog Cholera and Swine Plague.

1. Every owner, breeder or importer, or dealer in hogs, shall, on perceiving the appearance of hog cholera or swine plague amongst the hogs owned by him, or under his special care, give immediate notice to the Minister of Agriculture, and to the nearest veterinary inspector of the Department of Agriculture, of the facts discovered by him as aforesaid.

2. Every veterinary surgeon practising in Canada shall immediately on ascertaining or suspecting that a hog is affected with hog cholera or swine plague, give similar notice to the Minister, and to the nearest Veterinary Inspector.

3. In the Northwest Territories, the notice required to be given by the two preceding sections of these regulations shall be deemed sufficient if given to the Commissioner, Assistant Commissioner, or other officer of the Royal Northwest Mounted Police, or to one of the Veterinary Staff Sergeants of the said force.

4. Hogs affected with hog cholera or swine plague, or which have been in contact with, or close proximity to, hogs affected with either of the said diseases, shall, on an order signed by a duly appointed Inspector of the Department of Agriculture, be forthwith slaughtered, and the carcasses disposed of as in such order prescribed.

5. The Minister of Agriculture is hereby authorized to order compensation to be paid to the owners of such hogs, at the rate set forth in subsection 2 of section 12 of the Animal Contagious Diseases Act, 1903, as amended by chapter 6 of the statutes of 1904.

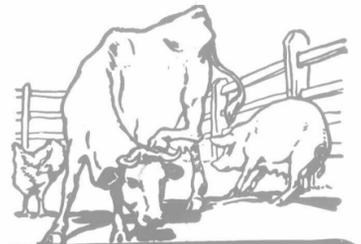
6. Before ordering compensation to be paid to the owners of hogs slaughtered under the provisions of these regulations, the Minister shall require the production of a satisfactory report, order for slaughter, certificate of valuation and slaughter, and certificate of cleansing and disinfection.

7. No hog which has been affected with or has been exposed to hog cholera or swine plague shall be permitted to run at large, or to come in contact with any hog which is not so affected.

8. Any Veterinary Inspector or other duly authorized person may declare to be an infected place within the meaning of the Animal Contagious Diseases Act, 1903, any common, field, stable, cowshed, or other place or premises where the infection of hog cholera or swine plague is known or suspected to exist.

9. No hog shall be removed out of a place declared to be infected on account of hog cholera or swine plague, without a license signed by an inspector or other duly authorized person.

10. Every yard, stable, hopen, or other place or premises, and every wagon, cart, carriage, car or other vehicle, and every utensil or other thing infected with hog cholera or swine plague, shall be thoroughly cleansed and disinfected by and at the expense of the owner or occupier, in a manner satisfactory to a veterinary inspector or other duly authorized person.

Free Them
From Lice

Instant Louse Killer is sold on a positive written guarantee to destroy lice on poultry, stock of all kinds and ticks on sheep, formulated by Dr. Hess (M.D., D.V.S.)

For destroying lice on calves and colts, nothing equals Instant Louse Killer. For sheep ticks it is most effective, doing away with the muss and annoyance of a "dip."

Instant
Louse Killer

Is the original powder louse killer put up in round cans with perforated top. Be sure of the word "Instant" on the can—there are over 25 imitations.

1 lb. 35 cents.
3 lbs. 85 cents.

If your dealer cannot supply you send your order to us.

Sold on a Written Guarantee.

DR. HESS & CLARK,
Ashland, Ohio, U. S. A.

8 First-Class Young Bulls

And an excellent lot of cows and heifers. Scotch cattle, imp. and home-bred. Rich man's cattle at poor man's prices. Also high-class Yorkshire and Berkshire swine.

DAVID MILNE, Ethel, Ont., Huron Co.

Scotch Shorthorns

YOUNG BULLS and HEIFERS sired by Marengo's Heydon Duke, imp. = 36063 =, for sale reasonable. Come and see them or write to
W. J. SHEAN & CO.,
Rosevale Stock Farm, o Owen Sound, Ont.

R. A. & J. A. WATT

Salmon P. O. Elora Station, C. P. R. and G. T. R.
Telephone in house.

Our herd of seventy-five head of Scotch-bred

SHORTHORNS

compares favorably with the best. Inspection and correspondence invited.

SHORTHORNS FOR SALE

Four young bulls, including 22-months son of Mayflower 3rd champion female at Winnipeg and Toronto, 1904; also a few good heifers of same family. Primrose Day (Imp.) at head of herd.

WM. McDERMOTT,
Living Springs, Ont.,
Fergus Station.

SHORTHORNS

Two extra choice young bulls of serviceable age, from imported sires; also heifers

LEICESTERS

Choice yearling ewes, now bred to our stock ram; also a few good ram lambs to offer.

W. A. DOUGLAS,
Caledonia Station, - Tuscarora P. O.

MAPLE LEAF STOCK FARM

4 Choice Young Bulls For Sale.

Also some cows and heifer and prizewinning Berkshire pigs. Terms reasonable.

ISRAEL GROFF, Alma P. O. & Sta., G. T. R.

SCOTCH SHORTHORNS FOR SALE

wo young bulls, 12 and 16 months old, both ovally bred; also fifteen heifers and cows, most of them sired to a son of Lord Gloucester, No. 26395

DR. T. S. SPOULE, Cedardale Farm
Markdale P. O. and Station.

In answering any advertisement on this page, kindly mention the FARMER'S ADVOCATE.

GOSSIP.

Mr. John McFarlane, Dutton, Ont., breeder of Shorthorns and Berkshires, writes: "My offerings in Shorthorns are very choice. Have some fine young bulls for sale, such as Macintosh, a beautiful red calf, nine months old; also Saunders McGlashan, a first-class roan calf, seven months old. Any person visiting will not be disappointed in quality of herd. Prices are reasonable."

When the young mistress of the house entered the kitchen she carried herself with great dignity. She had come to call the cook to account.

"Mary," she said, "I must insist that you keep better hours and that you have less company in the kitchen at night. Last night I was kept awake because of the uproarious laughter of one of your young women friends."

"Yes, mum, I know," Mary replied, cheerfully, "but she couldn't help it. I was telling her how you tried to make cake yesterday morning."

Forty-two head of Scotch and Scotch-topped Shorthorns, as well as a few good Clydesdale mares, are in stock at Pine Grove Stock Farm, the home of Jas. McArthur, Goble's, Brant Co., Ont. This herd is headed by Imp. Spicy Count =36117= (80031) that has proven an excellent stock-getter. He is a red bull, bred by Wm. Anderson, Aberdeenshire, sired by the Marr-bred Spicy King (75717), and is half-brother to the champion, Spicy Marquis. He is very thick-fleshed, long and level in the hind quarters, extra good in the round and twist; in short, is a thick, soggy bull, on very short legs, and weighs 2,200. Mr. McArthur has a bunch of five young bulls by him ready for service, all of good quality. Three of them are certainly above the average of good ones, both in quality and size, being not only large, but smooth and thick, on short legs like their sire, and in color reds and roans. A few heifers by the same sire were to be seen, which promise to do credit to their sire. They are principally from dams of the Gwynne, Princess and Duchess of Clarence, of the famous Dow Park strain, families topped for several generations with the best Scotch bulls, producing a good, happy medium herd combining fleshing qualities with good milking properties. Mr. McArthur is also quite a Clydesdale enthusiast. He has a pair of young mares that are medium in size and of splendid quality. The farm is situated about five miles from Drumbo, C. P. R., and two and a half miles from Goble's, G. T. R.

TRADE TOPICS.

THE OXFORD CREAM SEPARATOR.—In another column will be noticed an advertisement of the Oxford Cream Separator, a machine not as yet very well known to the Canadian farmer, but one the many good qualities of which must commend it, once it has been a little longer on the market. Write for a catalogue to the Durham Mfg. Co., Ltd., Durham, Ont.

THE SPRING'S FENCING MATERIAL.—It is time to be looking after the material for next spring's fencing, and an important point is the gates. The Canadian Portable Fence Co., Ltd., of Toronto, manufacture a neat, convenient and durable gate, which not only commends itself at once upon inspection, but which stands the test of time. Their steel truss posts and portable fence are just the thing, too, for our modern system of farming. Send for catalogue and price list.

Many Women Suffer Untold Agony From Kidney Trouble.

Very often they think it is from so-called "female disease." There is less female trouble than they think. Women suffer from backache, sleeplessness, nervousness, irritability, and a dragging-down feeling in the loins. So do men, and they do not have "female trouble." Why, then, blame all your trouble to female disease? With healthy kidneys, few women will ever have "female disorders." The kidneys are so closely connected with all the internal organs, that when the kidneys go wrong, everything goes wrong. Much distress would be saved if women would only take

DOAN'S KIDNEY PILLS at stated intervals.

Miss Nellie Clark, Lambeth, Ont., tells of her cure in the following words:—"I suffered for about two years with kidney trouble. I ached all over, especially in the small of my back; not being able to sleep well, no appetite, menstruation irregular, nervous irritability, and brick-dust deposit in urine, were some of my symptoms. I took Doan's Kidney Pills. The pain in my back gradually left me, my appetite returned, I sleep well, and am effectually cured. I can highly recommend Doan's Kidney Pills to all sufferers from kidney trouble."

Price 50 cents per box, or 3 for \$1.25. All dealers, or DOAN KIDNEY PILL CO., TORONTO, ONT.

The "STAY THERE"
Aluminum Ear Markers
are the best. Being made of aluminum they are brighter, lighter, stronger and more durable than any other. Fit any part of the ear. Nothing to catch on feed trough or other obstacle. Your name, address and any series of numbers on each tag. Sample tag, catalogue and prices mailed free. Ask for them. Address
WILCOX & HARVEY MFG. CO.,
194 Lake St., Chicago, Ills.

Shorthorn Cattle and Lincoln Sheep

Shorthorn bulls, cows and heifers for sale at greatly reduced prices for the next 60 days. om

J. T. GIBSON, Denfield, Ont.

Scotch Shorthorns

Herd headed by Imp. Royal Champion. Young stock for sale from Imp. sires and dams. For particulars write to

ED. ROBINSON, Markham Sta. & P. O. Farm within town limits.

Barren Cow Cure makes any animal under 10 years old breed, or refund money. Given in feed twice a day. Mr. J. B. Ketchen, Dentonia Park Farm, Coleman, Ont., says: "Have used your Barren Cow Cure very successfully on a very hard case. Particulars from om
L. F. SELLECK, Morrisburg Ont.

For Sale—Two young Shorthorn Bulls, 11 months old, from imp. sires and imp. dams. Bargains if sold quick. om
BELL BROS., Bradford, Ont.

QUESTIONS AND ANSWERS. Veterinary.

BLACKLEG.

In your issue of December 8th, 1904, I noticed directions for the cure of blackleg in cattle. A number of calves have died in this locality from what is called blackhip. Is it the same disease, and, if so, where can the vaccine points be obtained?

N. W. H.

Ans.—The disease is the same. It is called "blackleg," "blackquarter," "blackhip," and "symptomatic anthrax." The necessary antitoxin and instruments for injection, etc., can be obtained from Parke, Davis & Co., Detroit, Mich., or other manufacturing chemists. V.

LUXATION OF PATELLA. ETC.

1. Two-year-old colt is stifled. Can it be cured?

2. I want to breed an aged mare that has never been bred. What can I do to ensure conception?

3. Give treatment for thrush. W. S.

Ans.—1. Of course, you mean partial dislocation of the bone. When a colt is really stifled, or has complete dislocation, he cannot lift the foot at all. You can help the condition, but cannot effect a perfect cure. Keep him as quiet as possible in a box stall and blister the front and inside of the joint, once every month for four or five months. Details for blistering are frequently given in these columns.

2. You cannot do anything more than keep her in good condition, neither very fat nor very lean, and breed her to a sire that is known to be a good producer.

3. Clean out the cleft of the frog thoroughly and put a little calomel in and work it down to the bottom with the back of your knife blade. Keep dry, and apply the calomel every second day, until cured. V.

DEBILITY.

Fifteen-year-old mare raised foal last year. She had sunstroke, and got very thin. She is in foal again, but I cannot get her to gain flesh. Have fed oats, barley and flax, mixed, and changed to corn with good hay. She is hide-bound; hair long and dry, and skin itchy. I have had her teeth dressed. P. W. S.

Ans.—Have her mouth examined by a veterinarian, and her teeth properly dressed. Feed on rolled oats and bran, scalded, twice daily, to which add half a cupful of ground flaxseed. Feed dry oats, either whole or rolled, at noon; also a couple of carrots. Give her a reasonable amount of first-class hay. Get four ounces each of sulphate of iron, gentian, ginger, nux vomica and aniseed. Mix and make into 36 powders. Give a powder night and morning. If she will not eat it in her food, mix with one pint of water and drench her. Give regular exercise. Her coat will not improve until she sheds. A solution of corrosive sublimate, 30 grains to a quart of water, rubbed well into the skin once daily, will stop the itchiness. V.

ITCHY SKIN. ETC.

1. Six light mares, due to foal in March, have an irritation of the skin, especially about the heels and thighs. Their coats are very long, and they have had no clothing in grooming all winter.

2. What food, and how much, should be given to blocky mares about 14½ hands, due to foal within a month?

STIRRUP.

Ans.—1. Skin irritation of this nature is often hard to account for, and is often due to local conditions and want of grooming. As the mares are pregnant, I would not resort to internal remedies, but depend entirely upon local treatment. Dress the itchy parts twice daily with a solution of corrosive sublimate, about 30 grains to a quart of water. Of course, the lotion must be rubbed well into the skin to be effective, and this is very hard to do when the hair is very long and contains dust, etc. I would advise clipping as soon as the weather becomes warm and the mares have foaled.

2. About eight pounds good clover hay per day in two feeds (morning and night), two quarts crushed oats in morning, a gallon of bran, with a little linseed meal at noon, also a carrot or two, and about two quarts of crushed oats again at night. See that they get regular and considerable exercise. V.

Ring-Bone



So common nearly everybody knows it when he sees it. Lameness, and a bony enlargement just above the hoof, or higher and on the upper pastern bone, sometimes extending nearly around the part, sometimes in front only, or upon one or both sides. Cases like the latter are called Sidebone. No matter how old the case, how big the lump, how lame the horse, or what other treatment has failed, use

Fleming's Spavin and Ringbone Paste
Use it under our guarantee—money refunded if it fails to make the horse go sound. Often takes off the bunch, but we can't promise that. One to three 45-minute applications required and anyone can use it. Get all the particulars before ordering—write for Free Horse Book that tells you what to use for every kind of blemish that horses have.

FLEMING BROS., Chemists.
45 Front Street, West, Toronto, Can.

MAPLE SHADE SHORTHORNS



Nine young bulls fit for service. Showing the finest Cruickshank breeding.

Good Size, Quality, Flesh and Bone.

Inspection invited. Catalogues on application. om

JOHN DRYDEN & SON, Brooklin P. O., Ont.

15 YOUNG BULLS



Mostly imported and from imp. sire and dam. Also a choice lot of cows and heifers.

All Scotch
ARTHUR JOHNSTON
om GREENWOOD, ONT.
Pickering, G. T. R. Clarendon, C. P. R.

JOHN GARDHOUSE & SONS

Highfield P. O., Ont., Breeders of Scotch and Scotch-topped Shorthorns, Shire Horses, Lincoln and Leicester Sheep.

A good selection of young stock of both sexes always on hand for sale. Scotch Prince (Imp.) Vol. 4th at head of herd. Royal Albert (Imp.) 5000, at head of herd. Farms 2½ miles from Wexham, G. T. R. and C. P. R., and electric cars from Toronto. om

PLEASE DON'T imagine because we sold some cattle at Hamilton that we have none left to offer.

WE HAVE some good SHORTHORNS, both male and female.

IF YOU want any, write us specification, and we will tell you frankly whether we have it.
JOHN CLANGY, H. CARGILL & SON,
Manager. om Cargill, Ont.

MAPLE LODGE STOCK FARM

1854.
Eight very choice young bulls, of the best breeding and from first-class milking cows. A few handsome heifers also for sale, and a few Leicesters. om
A. W. SMITH, Maple Lodge P. O., Ont.

PINE GROVE STOCK FARM

ROCKLAND, ONTARIO, CANADA. Breeders of choice SCOTCH SHORTHORNS and SHROPSHIRE.

W. C. EDWARDS & CO., Ltd., Props. JOSEPH W. BARNET, Manager. om

T. DOUGLAS & SONS,

Strathroy, Ontario. SHORTHORNS and GLYDESDALES

Present offerings: 12 young bulls of No. 1 quality, ready for immediate service; also cows and heifers of all ages. Also one imp. stallion and two brood mares. Prices reasonable. Visitors welcome. Farm one mile from town. om

Sunnyside Stock Farm—For Sale: A number of choice young BULLS, fit for service, sired by (Imp.) Prince William and (Imp.) Douglas of Cluny, and from imported dams; also heifers in calf to Imp. Brave Ythan. om
JAMES GIBB, Brookdale, Ont.

For Sale—Shorthorns, imported and home-bred; both sexes; herd headed by Imp. Royal Prince. Also Oxford Down sheep. All at reasonable prices.
JOHN McFARLANE,
Box 41, Dutton P. O., Elgin Co., Ont. Stations M. C. R. and P. M. om

TROUT CREEK SHORTHORNS

A few very choice bulls and females, both imported and home-bred, with superior breeding.

SEND FOR CATALOGUE.

JAMES SMITH, om
MANAGER.

W. D. FLATT,
HAMILTON, ONT.

In answering any advertisement on this page, kindly mention the FARMER'S ADVOCATE.

GOSSIP

Mr. David Hill, Staffa, Perth Co., Ont., breeder of Clydesdales and Shorthorns, reports the following sales: Admiral Dewey, Clydesdale stallion, coming two years old, to Mr. R. Clark, near Stratford, Ont. Mr. Clark has made a good selection, securing an excellent young horse that will doubtless be heard from in the show-ring later on, as he is a show animal of high merit. The Shorthorns are coming through the winter nicely. The young bulls have done extra well, and are going to make good herd-headers. Mr. Thomas McKenzie, Mitchell, Ont., was fortunate in securing a grand dark red bull calf, 14 months old, by Prince of Banff (imp.), and out of Duchess Gwynne =40055=. Mr. James Turner, Hill's Green, Ont., purchased a bull calf, the same age and color, by the same sire, and out of Loretta =32387=. Mr. Wm. Oliver, Staffa, Ont., purchased two good yearling heifers, by Defiance =39908=, having for their dams, Glendower =40058= and Merton Lass =19471=. This is Mr. Oliver's first investment in pure-bred Shorthorns, and he has made a good choice in his selection as foundation stock. The young stallion we are offering for sale is doing excellently. He is going to make a right good one, and any person desiring the like should look him up in our advertisement in this issue.

The Queenston Heights herd of Scotch and Scotch-topped Shorthorns, owned by Mr. Hudson Usher, of Queenston, Ont., are thrifty looking, being fed on ensilage and alfalfa hay, without grain, excepting in a few cases. Most of the young stock is by that thick, massive bull, Derby (imp.) =32059=. This bull was especially good through the heartgirth, and has left his calves strong, in this particular, while not lacking in any other particular. Derby's place has been taken by Queenston Montallis =50431=, a Kinellar Bessie, of the same family as Lord Banff. His sire was Lord Montallis =39279=, by Collynie Archer (imp.) =28860=, by Scottish Archer. His dam is Bessie's Maid =47779=, by Royal Prince (imp.) 26062, grandam Beatrice 2nd, by Sittytown Stapp. Some of the other sires that figure in his pedigree are Gravesend, Northern Light, Banner Bearer, and Cumberland, all of Crickshank, Marr and Duthie breeding. This young dark-roan stock bull has one of the best pedigrees that anyone could wish for, along with which he has a level, deep body, evenly covered with flesh, with an especially well-covered loin, a bull that should nick well with Derby's daughters.

Imp. Veronica, a five-year-old roan, has been doing excellent work for her owner. She is now nursing her fourth calf, is in good condition, as is also her calf, and we are informed she gets neither meal nor roots. She is by Brave Archer, by Scottish Archer, dam Verona 4th, by John Bright. This cow has a nice roan heifer calf at foot, by Derby. Her second last calf is a white bull about fifteen months old, by the same sire, and for anyone who is not prejudiced against a white bull, he should fill the bill. He is just in good, thrifty condition, and one would scarcely know where to commence to find fault with him. Indeed, if he were fitted, he would be a credit to any show-ring. He should also be a getter of roans when crossed upon a red herd. Several of the cows that are in the herd are richly bred, among them, Cherry 33325, a red, by Crimson Chief, whose dam was a World's Fair winner (1893), of the Crimson Flower Lady, by Indian Chief (imp.). Her dam is Lady Grace Hutton 20108, grandam Imp. British Statesman (42847). A bull sister to Dorothea, the great winner throughout the U. S., is loaded well with natural flesh, is a heavy milker and good breeder. Isabella 12th, a 10-year-old cow, represents the Isabella strain. Northern Blonde, three years old, bred by the Hon. John Dryden, has not grown large, but is producing good stock. She is by Prince Gloucester, second-prize winner at Toronto as a three-year-old, has a yearling heifer, and a good one, by Clipper Hero, the junior champion at Toronto, 1903, under two years old. Other good ones, not mentioned, help to make up for Mr. Usher a herd that he may well be proud of.

This is Dr. Goldberg's Picture. Detroit's Famous Specialist who sees all patients personally each time they call. EACH TIME YOU WRITE IT RECEIVES HIS PERSONAL ATTENTION



DR. S. GOLDBERG. The possessor of 14 diplomas and certificates, whose methods other Detroit specialists try to imitate.

Ever since locating in Detroit many years ago, I have frequently called attention to the fact, that while some specialists advertise 25 or more years' experience, they do so for advertising purposes in order to mislead the public; the founders of these institutes are dead; while the present owners could buy the furniture and the right to practice under the old name, they could not buy their predecessors' brains.

How many of you have paid your hard-earned dollars to these concerns with the expectation of receiving services from specialists who have 25 or more years' experience, but when you called at their offices you were treated by some other doctor than whose picture you saw in the paper? And how many of you saw the same doctor more than once, but each time a different one? Remember, I am doing business on my own reputation and each time you call you see me personally.

NERVOUS DEBILITY The Latest Method Treatment is a heaven-sent boon to nervous sufferers. There are scores and hundreds of persons suffering from severe nervous disorders resulting from overwork, hurry, worry, business and domestic cares, bereavements, dissipation, etc. To them life is one continuous round of misery, while peace, comfort and happiness are impossible. They suffer from headaches, loss of memory, mental depression, strange sensations, dizziness, dullness, restlessness, irritability, constant indescribable fear, forebodings, sleeplessness, weakness, trembling, heart palpitation, cold limbs, utter fatigue and exhaustion. In this class of cases almost immediate relief is afforded by my treatment. The use of narcotics and poisonous, stupefying drugs is done away with, and permanent cure accomplished.

BLOOD POISON If you have traces of it you are in constant danger until cured; you cannot tell how soon the poison will affect the organs of the body; have you sore throat, ulcers in the mouth or tongue, copper colored patches, sores breaking out, sore bones, hair falling out, itching skin? Call and see me as I give you a written guarantee to cure you by my LATEST METHOD TREATMENT, without mercury or potassium, and remember,

not one penny need be paid until you are cured.

I CURE NERVOUS DEBILITY, VARICOCELE, STRICTURE, EARLY DECAY AND WASTE OF POWER, BLOOD AND SKIN DISEASES, AND ALL CHRONIC TROUBLES

X RAY EXAMINATION, ADVICE, CONSULTATION, FREE

WRITE If it is impossible to call, write for a Question Blank for Home Treatment. I have the most perfect system of Home Treatment known to medicine; science; many are cured by mail who otherwise would be unable to take advantage of my expert skill and wonderful success in curing. Consultation Free. All dealings sacredly confidential. All medicines for Canadian patients sent from Windsor, Ont., all duty and transportation charges prepaid.

DR. GOLDBERG 208 Woodward Avenue, Suite 235 DETROIT, MICH.

Shorthorns, Cotswolds, Berkshires
FOR SALE: Bull and heifer calves, seven to fifteen months. Also yearling and two-year-old heifers and young cows.
CHAS. E. BONNYCASTLE, Campbellford, Ont., P.O. and Station

12 SHORTHORN BULLS
20 Cows and Heifers
Good ones, Scotch-bred, at moderate prices. Catalogues on application.
H. SMITH, Exeter, Huron Co., Ont. Station adjoins farm. Long-distance telephone in residence.

SHORTHORNS PRESENT OFFERINGS:—Roan Robin 29575, a Watt bull; Prince Charley 50412, a Russell bull. Also four other young bulls. For price and particulars write W. H. WALLACE, Woodland Farm, Mt. Forest, Ont.

Shorthorns—We have for sale several young bulls ready for service, sired by Royal Duke, he by Royal Sailor (Imp.). Also a few heifers and cows, bred to Wanderlog Court, by Wanderer's Last (Imp.).
J. R. McALLUM & SONS, Toms Stn., Ont.

MOUNTAIN VIEW SHORTHORNS
Imported and home-bred, male and female, prize and sweepstakes winners, various ages. Anything for sale.
S. J. MCKNIGHT, Epping P. O., Thornbury Station

Auction Sale of Green Grove Shorthorns
I will sell on my farm, February 14th, a choice selection of 25 bulls and heifers. Catalogues will be ready by Jan. 25th.
W. G. MILSON, Goring P. O., Markdale Sta.

J. WATT & SON—1 imp. BULL; also a number of imported and home-bred cows and heifers, in calf or with calves at foot from (imp.) Royal Archer and Royal Star.
Salem P. O., Elora station, G.T.R. & C.P.R.

FOREST VIEW FARM 4 bulls from 8 to 12 months old; prizewinners and from prizewinning stock. Several heifers bred on the same lines; choice individuals, for sale.
JOHN A. GOVENLOCK, Forest Sta. and P. O.

Forest Hill Stock Farm—A special offer for the next six weeks, to make room for some young stock: five choice young Shorthorn bulls, mostly roans, from 8 to 13 months old; also a few good heifer calves. For particulars apply to G. W. KEAVS, Hyde Park P. O., Ont.

JERSEYS
For sale: Yearling bull, dam gave 6,000 lbs. milk with first calf; bull calf, from 1st-prize three-year-old heifer, Toronto, 1903; also a fine lot of heifers. Also Cotswold ewes, a few good ones.
WILLIAM WILLIS, Newmarket, Ont.

140 - JERSEYS - 140
to choose from. 74 First Prizes, 1904. We have what you want, male or female.
B. H. BULL & SON, Brampton, Ont. Phone 68.

MERTON LODGE HOLSTEINS
Are prize-winners as well as producers.
Forty head to select from. Such great sire as Sir Hector De Kol at head of herd. Present offerings: Young bulls, cows and heifers, all ages. Am booking orders for our entire crop of spring calves with gilt-edge pedigrees. We quote prices delivered at your station. Safe arrival guaranteed.
H. E. GEORGE, ORAMPTON, ONT.

We want you to remember that HOLSTEIN COWS
owned by me (formerly at Brookbank Stock Farm, Currie's) won all sorts of honors in milk tests at Toronto, Ottawa and Guelph (5 years), and among many other prizes in the show-ring, including sweepstakes at Toronto and Pan-American in competition with the best in the world. Our herd is always improving. We have now 5 cows whose official test average 22 4 lbs. butter in 7 days, 10 cows whose official test average 20.4 lbs. butter in 7 days, 15 (3 yrs. and up) whose official test average 19 0 lbs. butter in 7 days, 10 (3 and 4 yrs.) whose official test average 17 lbs. butter in 7 days, 10 heifers (average age 26 mos.) whose official test average 11 lbs. butter in 7 days. That is our idea of a dairy herd, and the kind of stock I handle. A few good young bulls, 1 to 13 mos., for sale.
GEO. RICE, Annandale Stock Farm, Tilsonburg, Ont.

Lyndale Holsteins
Over 50 head to choose from. A number of young cows and heifers for sale. Six young bulls from 8 to 11 months old.
BROWN BROS., Lyn, Ont.
IMPERIAL STOCK FARM HOLSTEINS.
For Sale: Four bull calves, 4 months old, whose sire's 2nd grandams average 21 lbs. of butter in 7 days. Also young bulls by the sire of first-prize herd at London.
W. H. SIMMONS, New Durham, Ont.
Maple Grove Holsteins—In official tests they stand 1st for cow, 1st for 3-year-old, 1st 2-year-old and 1st under 2 years old. If you want bulls or heifers from such stock at reasonable prices, write H. BOLLERT, Cassel, Ont.
Maple Glen Stock Farm offers for sale two choice Bull Calves, grandsons of Carmen Sylvia; also one from a daughter of the world's famous Linka Sylvia. Nearly ready for service. All are sired by sweepstake show bull, Ottawa, 1903. Address: G. J. GILROY & SON, Glen Buell Ont.

Riverside Holsteins
80 head to select from. 8 young bulls from 6 to 10 months old, whose dams have official weekly records of from 17 to 21 lbs. butter; sired by Imp. Victor de Kol Pietertje, C. A. R. of M. No. 3, and Johanna Rue 4th Lad.
MATT. HUBBARDSON & SON, Haldimand Co., Caledonia P. O., Ont.

Woodbine Holsteins
Herd headed by Sir Meobthide Posch, whose four nearest ancestors average 25 lbs. of butter in 7 days in official tests. Cows, heifers and young bulls, sired by Homestead Albino Paul De Kol, a grandson of De Kol 2nd Paul De Kol, sire of 41 A. R. O. daughters, the greatest sire of the breed. Write for extended pedigrees and prices.
A. KENNEDY, AYR, ONT.

HOLSTEIN-FRIESIANS at RIDGEDALE FARM
6 bull calves for sale, from 3 to 9 months old, bred from rich milking strains. Special prices to quick buyers. Port Perry, G. T. R., and Myrtle, C. P. R., Shipping Stations, Ontario County. R. W. Walker, Utica P. O., Ont.
HIGH-CLASS HOLSTEINS AND TAMWORTHS
Bulls ready for service, by the invincible sweepstakes bull, Judge Akkrum De Kol 3rd, and out of choice dams; also some choice bull calves. Tamworths of the most approved type. A few sows in farrow to offer. Write at once for prices.
A. C. HALLMAN, Waterloo Co., Breslau, Ont.

Dehorned Cattle free Catalogue
KEYSTONE DEHORNER
Cuts four sides at once. Leaves it smooth and clean cut, no breaking or crushing of horn. More widely used than all others. Fully guaranteed.
R. A. MCKENNA, PICTON, ONT.

FOR SALE: HIGH-CLASS AYRSHIRES
Special offering for next 30 days: Two cows at \$65 each; one bull calf, \$35; one yearling bull, \$15; also a few heifer calves, from \$20 to \$30 each, according to age. Poultry—Eggs for hatching, from W. Wyandottes, Silver-gray Dorkings, R. P. Rocks, Houdans and Black Spanish at \$2 per 15 eggs. All correspondence cheerfully answered.
WILLIAM THORN, Trout Run Stock Farm, Lynedoch, Ont.

Springbrook Ayrshires are heavy milkers and high testers. For sale: Three bulls, 9 months old; 2 bull calves, dropped in January last; also females of all ages.
W. F. STEPHEN, Springbrook Farm, Trout River, Que.
AYRSHIRES FROM A PRIZEWINNING HERD
Hover-a-Blink, one of my stock bulls, and heifers for sale at reasonable prices. For particulars, etc., write to W. M. STEWART & SON, Campbellford Sta. Meale P. O., Ont.

AYRSHIRES, 4 choice bull calves four to service, six months old; 1 bull fit for production. Females all ages, bred for size and production. DAVID LEITCH, Prices right. Cornwall, G. T. R. CORNWALL, ONT. Apple Hill, C. P. R.

In answering any advertisement on this page, kindly mention the FARMER'S ADVOCATE.

CALVES ALL LIKE "Cream Equivalent"



"This 'Cream Equivalent' do smell beautiful—I almost wish I was a calf."

BIBBY'S UNRIVALLED CALF MEAL CREAM EQUIVALENT

For raising calves without any milk whatever after a few weeks old, and to enrich skim or separated milk when these products are available. No other production does the work with the same effectiveness.

Note the conditions on which this meal is sold: Cash returned if satisfactory results not obtained. Price, 50-lb. bag, \$2.25; 100 lbs., \$4.00.

MADE IN ENGLAND—SOLD IN NEARLY EVERY TOWN IN CANADA—BY LEADING MERCHANTS.

Canadian Representative: WM. RENNIE, TORONTO.

Distributing Points—Toronto, Montreal, Winnipeg, and St. John, N.B.

Church's

ALABASTINE

is a perfect and everlasting WALL-COATING, made from a cement base, in twenty tints and white. One that HARDENS WITH AGE; is ready for use by mixing in COLD WATER, and may be re-coated whenever necessary to renew the wall surface.

NEVER SOLD IN BULK

Anyone can put it on—no one can rub it off.

Write for booklet on Alabastine and how to use it It's free.

The Alabastine Co. Limited, Paris, Ont.

Special Notice to Our Readers.

When writing any advertiser in this issue kindly state plainly that you saw Ad. in the

FARMER'S ADVOCATE AND HOME MAGAZINE.

In answering any advertisement on this page, kindly mention the FARMER'S ADVOCATE.

GOSSIP

CANADIAN PONY SOCIETY.

At a meeting of the Canadian Pony Society in Toronto on March 3rd, resolutions were passed indorsing the open-air horse parade and show, which is to be held in that city on July 1st, and it was decided that the members of the Association would do all they could to make it a success in the pony classes. Secretary Gerald Wade reported on behalf of the delegates to the Canadian Horse Breeders' Association, and stated that the Canadian Horse Show Committee had given thirteen classes, with prize money amounting to nearly \$500 to pony classes.

The prize lists in the pony classes at the National Exhibition, and the third annual Open-Air Horse Parade were discussed. It was decided to give a silver challenge cup at the National Exhibition. The Society are also donating a handsome cup, valued at \$75, at the coming Canadian Horse Show, to be held here on April 26th to 29th.

It was decided that the members should do all they could to make the entries in the pony classes at the coming Canadian Horse Show as large as possible. It was announced by the chairman that in addition to the pony classes at the Canadian Horse Show, the Horse Show Committee have added the following class at the request of the Society:

Class 78, pony brood mare, 14 hands and under, in foal, or foal at foot, 1st prize, \$15; 2nd prize, \$10; 3rd prize, ribbon.

Prominent among the new herds of Berkshires in Canada is that of Messrs. Geo. Thomson & Son, of Woodstock, Ont., who have started right by heading their herd with the grand imported boar, Polegate Doctor (78492)—8403—, from the Duchess of Devonshire's famous herd that won over 100 prizes at leading English shows last year. He won several important prizes in England, and has never been beaten so far in Canada. His sire is Baron Kitchener; his dam, Polegate Daily Bread, champion over all breeds. He is on strong short legs, and is both lengthy and thick, one that should nick well with the large, growthy sows in this herd. His assistant is Willow Lodge Emperor—13346—, a first-prize winner at the Western Fair, London, last fall, as under six months. His sire is Longfellow 10th, dam Belle of Milton, by Star One (imp.). This young hog has an excellent back, good quality of bone and good length. The choice among the sows is Snelgrove Kate—13733—, bred by Snell & Lyons, sire Longfellow 10th, dam Morning Mist, by Prince Highclere, grandsire Imp. Enterprise. This is one of the best sows of any age or breed in Canada, which is saying a great deal. She was an easy winner in a large ring of good ones at the Provincial Winter Fair at Guelph last December. Highclere 60th—13704—, bred by T. A. Cox, is another yearling sow of splendid quality, very deep-sided and heavy-shouldered, sire Southern Major—8757—, dam Highclere's Favorite, granddam Highclere 50th, winner of Silver medal at Toronto Industrial, 1903. Concord Marion—13547—, farrowed March, 1904, the last one we name, was bred by Thos. Teasdale, President of the Dominion Swine Breeders' Association, sire Perfection (imp. in dam) from the herd of P. L. Mills, Ruddington, Eng., dam Maud S. 11073, tracing to Royal Winner (imp.). This young sow won 2nd at Toronto last fall under six months in a strong class. She has done well since then, and promises to make a choice one. In short, it would be difficult to find three sows in any one herd that equals this trio. They are bred to the above mentioned imported boar, and Messrs. Thomson naturally expect some extra good spring pigs, for which they are now ready to book orders. It may not be amiss to state that the senior member of this firm is an experienced breeder of Berkshires of first class character, who had retired from farming, and is giving the benefit of his experience to his enterprising son, Mr. Douglas Thomson.

MILBURN'S LAXA-LIVER PILLS.

Stimulate the sluggish liver, clean the coated tongue, sweeten the breath, clear away all waste and poisonous matter from the system, and cure Sick Headache, Biliousness, Constipation, Heartburn, Jaundice, Water Brash, Catarrh of the Stomach, etc.

Mrs. C. Windrum, Baldur, Man., writes:—I suffered for years from liver troubles, and endured more than tongue can tell. I tried a great many different remedies, but they were of little or no benefit to me. Some time ago I got a trial package of Laxa-Liver Pills, and they proved so beneficial to me that I procured more. I highly recommend them to anyone suffering from disordered liver.

Price 25 cents or 5 for \$1.00, all dealers, or

THE MILBURN CO., LIMITED
Toronto, Ont.

Lincolns are Booming

We have only a few more ewe and ram lambs and breeding ewes for sale. We have seven choice young bulls, Scotch topped, and a grand lot of heifers and young cows for sale at reasonable prices. Write or come and see us.

F. H. NEIL & SONS,
Telegraph & R. R. station. LUCAN, ONT.

Sheep Breeders' Associations.

American Shropshire Registry Association, the largest live stock organization in the world. Hon. John Dryden, President, Toronto, Canada. Address correspondence to MORTIMER LEVERING, Secretary, Lafayette, Indiana, U.S.A.

Champion Dorsets
Dorset ewes in lamb; also ewe lambs for sale. Prices low, considering quality.
R. H. HARDING,
Mapleview Farm. o Thorndale, Ont.

Champion Cotswolds—Silver medal ram, silver medal ewe. Won all first prizes except one at Toronto, 1904. A number of choice ewes, bred to imported ram, for sale. E. F. PARK, Burgessville, Ont. o

SHROPSHIRE

20 yearling ewes, 45 lambs, both sexes included, from Imp. ram. For particulars write to GEO. HINDMARSH, Alisa Craig P. O., Ont. o

W. W. CHAPMAN,

Secretary of the National Sheep Breeders' Association.

Secretary of the Kent or Romney Marsh Sheep Breeders' Association,

and late Secretary of the Southdown Sheep Society.

Pedigree Live Stock Agent, Exporter and Shipper. All kinds of registered stock personally selected and exported on commission; quotations given, and all enquiries answered.

Address: MOWBRAY HOUSE, NORFOLK ST.
LONDON, W. C., ENGLAND.
Cables—Sheepste, London.

Oakdale Berkshires

Of the largest strains. Imported fresh from England. The produce of these and other noted winners for sale reasonable. Let me book your order for a pair or trio not akin.

L. E. MORGAN, Milliken Stn. and P.O.

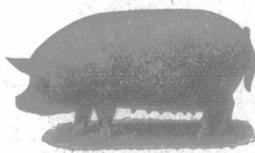
WOODSTOCK HERD OF BERKSHIRES

Am booking orders for spring pigs, bred by Polegate Doctor (imp.) No. 78492. Geo. Thomson & son, Box 1, Woodstock, Ont. o

Owing to unforeseen circumstances, I have been unable to supply customers for

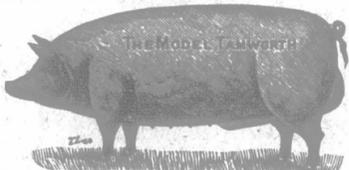
Poland Chinas.
Write me if you want any. For sale, cheap, pure-bred Berkshire boar, registered.
F. S. Wetherall, Rushton Farm, Cookshire, Que. o

LARGE ENGLISH YORKSHIRES



Pigs of the most approved type, of both sexes, all ages, for sale at all times. We have more imported animals in our herd than all other breeders in

Canada combined. We won more first prizes at the large shows this year than all other breeders combined. We won every first but one and all Silver medals and Bacon prizes at Toronto and London and at St. Louis we furnished all the first-prize hogs in the breeding classes except two; also supplied both champions and grand champions. Prices reasonable. **D. O. FLATT & SON**, MILLGROVE, ONT.



Improved Chester Whites and Tamworths

From this herd have been winners at leading exhibitions of Ontario and Quebec for a number of years. New importations, direct from England, will arrive in May. We have for sale choice lot of young sows, bred; also boars, 3 to 4 months old. Am booking orders for spring pigs. Pairs furnished not akin. Express charges prepaid. Pedigrees and safe arrival guaranteed.

H. GEORGE & SONS, Crampton, Ont.

Woodstock Herd of Large White YORKSHIRES



Present offering: A choice lot of young sows, bred to Craig-crook Hero, 1st prize boar at Edinburgh, 1904. Also a number of imp.-in-dam boars and sows of September farrow. Pairs supplied not akin.

H. J. DAVIS, WOODSTOCK, ONT.

SNELGROVE BERKSHIRES

A number of large, good sows, to farrow in March and April, and expect to have some choice young pigs for sale. Now is a good time to order. Our herd has won more first prizes at leading shows in Ontario than any other. Pigs of different ages for sale. Write for prices.

SNELL & LYONS, Snelgrove, Ont.

ENGLISH BERKSHIRES.

See Grace the Duchess of Devonshire's Berkshire Herd. Winners of 102 awards in 1904, including champion against all breeds in carcass competition, London Fat Stock Show. The breeding sows are sired by the champion boar, Baron Kitchener 8403. Polegate Decoy, Polegate Dame, Polegate Dawn—winners in England, Canada and United States—were exported from this herd. For prices and particulars apply to: Compton Estate Office, Eastbourne, or to **F. A. WALLING**, 7 Cavendish Cottages, Eastbourne, Sussex, England.

ORCHARD HOME HERD (Registered)

Large English Yorkshires and Berkshires
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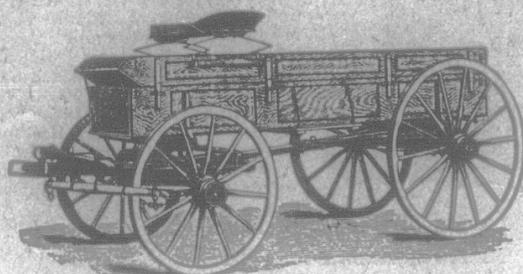
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