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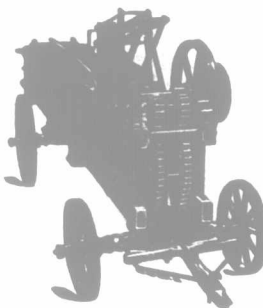
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We guarantee it the best belt press made or no sale. Capacity, 50 tons in 10 hours. Write for full description and agency.

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Opens January 4th in all departments of the CENTRAL BUSINESS COLLEGE, Yonge and Gerrard Streets, Toronto. Our Catalogue explains our superiority in Equipment, Staff, Methods and Results. You are invited to write for it if interested in the kind of school work which brings best success. Address W. H. SHAW, President.

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 13 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, 50-52 Peter St., Toronto.

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THE SPICE OF LIFE.

SURPRISED THE PARSON.

In a logging camp a few years ago a man called Peter Grimes was accidentally killed and his widow was left in rather poor circumstances.

Joseph Breed, a particular friend of the unfortunate man, being somewhat of a carpenter, decided to make Grimes' coffin, and so cut down the funeral expenses. He told the widow of his intention, and also of carving the name and age of her late husband on the lid; but he was rather worried when he found the age was 28 years.

"I am awfully sorry, Mrs. Grimes," said Joe, "but I never could cut a figure 8."

"That's too bad," replied Mrs. Grimes; then, as a happy thought came to her, she asked him if he could cut a figure 7.

"Yes, I can cut a first-rate figure 7." "Well, then, why not cut four 7s? Everybody knows four 7s are 28."

So the following day Joe completed the coffin as she suggested.

The day of the funeral came, and the clergyman was reading the service over the body, and had arrived at that part where he was saying:

"Our dearly beloved brother, who departed this life at the age of—"

Here he glanced at the coffin-lid for reference, and his eyes alighting on Joe's row of four 7s, he gave a gasp and, with a startled look in his eyes, exclaimed:

"Good heavens! How did he ever miss the flood!"

HE DIDN'T ADVERTISE.

A hen knows enough to advertise when she lays her egg, and the business man would better not go into business until he has at least learned as well as the hen. The New York Farmer tells this story about a breeder who had not learned to advertise:

He went into the breeding of pure-bred cows. He bought a \$4,000 bull and thirty \$300 cows and started in determinedly and intelligently. In due course of time he was the owner of 100 fine young heifers and bulls, and began to count on sales that would mean large profits to him. He put prices on the youngsters, ranging from \$100 to \$500 a head, and sat down to wait for buyers. He waited. No buyers appeared. He went on waiting, and the animals went on growing and also eating. They ate most of the time. He said they were eating their heads off, but that statement did not in the least impair their appetite or digestion.

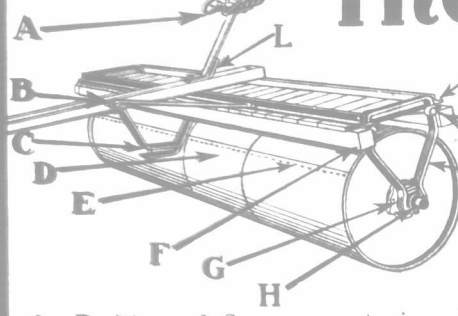
One night at the crossroads store he complained to the neighbors that he could not sell his fine animals at all, and he was discouraged and wished he could sell them at any old price. There was a stranger present who said nothing. The next day the stranger strolled out to the farm and asked the breeder where he could buy some fair to middling heifers and bulls. The breeder showed him his animals, and the stranger fairly gasped when he saw the young beauties, but he showed no emotion. He found that the breeder had not advertised the stock and was discouraged, and he offered him \$15 a head for the 100 animals.

The breeder, after a parley, accepted, and the stranger handed him \$1,500. The purchaser then bargained to have the animals fed at his expense until he could dispose of them. Then the purchaser put advertisements in the farm papers, giving the pedigrees of the animals and the records of their sires and dams, and in a month buyers began to arrive. Some of the animals sold at \$150 a head, and some at \$500, and a few at \$1,000 a head, and their average price \$300. The breeder had got \$1,500 for the bunch. He did not advertise. In fact, he had "always considered advertising no good and just a waste of money." The purchaser got \$35,000 for his. He advertised. In fact, he thought and knew that "No business can succeed without advertising."

Then the breeder started to breed another bunch, and he began to advertise right away, and three years later he sold 100 animals in one day for \$40,000, and the stranger was present and paid \$1,500 for one young bull, which was the sum he paid for 100 head in the former deal. Moral: The old hen knows enough to advertise when she lays her egg, and the business man would better not go into business until he has at the very least caught up with the hen.

The "Bissell"

Excels at Every Point



The arrows point to several features wherein the "Bissell" excels, but all the good points cannot be told here.

- A—Position of Seat prevents jars and jolts.
- B—Heavy Bolts attaching Brace.
- C—Draw Bracket for low hitch.
- D—Centre Drum supports axle.
- E—Seams tightly rivetted every two inches.
- F—Heavy Hardwood Girders make sagging impossible.
- G—Large Roller Bearings, 1/2 in. by 3 3/4 ins. long.
- H—Solid Heavy 2 in. Steel Axle passing through the three drums.
- I—End Hangers formed from one piece of steel.
- J—Truss Rods add to strength and stiffness of frame.
- K—Angle Steel Railing on top of frame.
- L—Double Leaf under spring.

We invite you to send for our FREE BOOKLET, which describes the "Bissell" Roller in detail. Drop us a Card NOW before you've a chance to forget it, to DEPT W or ask your local dealer.

T. E. BISSELL COMPANY, Ltd., ELORA, ONT.

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We have issued a handsome illustrated booklet giving outline of Course, with reduced plates of some of the drawings, and explaining the Heath System in detail. This booklet will be sent free to you on request.

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Winnipeg, Can.
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Cuts a trench to a perfect grade, passing over the work but once. Big money to the owner. We make an open-ditch machine that cuts a sloping bank. See article by Prof. William H. Day on page 1993. Write for drainage catalogue for tile machine and folder for open ditch.

THE BUCKEYE TRACTION DITCHER CO.,
Findlay, Ohio, U. S. A.

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LONDON, ONTARIO.

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The greatest improvement in sound-reproducing instruments was made when Mr. Edison invented Amberol Records for the Edison Phonograph

No one thing has added so much to the pleasure of the Edison Phonograph as a Record which plays more than four minutes, and reproduces the melody or voice so clearly and perfectly that the illusion almost defies detection.

Edison Amberol Records are the same size as the ordinary Edison Records. They can be played upon any Edison Phonograph by the addition of an attachment which any dealer can supply and any dealer can affix.

Longer selections are now available for the Edison Phonograph than have ever been available before for any sound-reproducing machine, and these selections are better given.

No Edison Phonograph outfit is complete without the attachment to play Edison Amberol Records.

You can hear these new Records at any dealer's. Learn about the attachment and equip your Phonograph with it today. If you haven't an Edison Phonograph, you can now buy one which plays both styles of Records—the two-minute and four-minute.

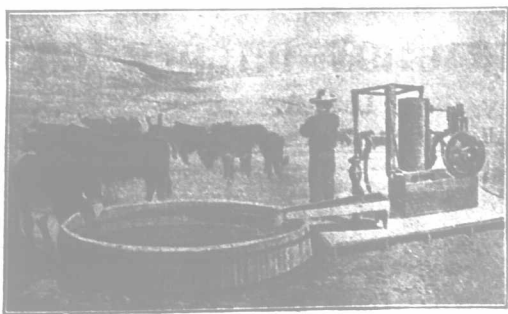
We will be glad to send to anyone, however, a booklet describing the new attachment, describing the Amberol Records, giving a list of the music now available on these Records and giving all the other information necessary to make it possible for you to get more than twice as much enjoyment out of your Edison Phonograph as you are now getting.

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De Laval Cream Separators

Get just a little bit more every time

THAN ANY OTHER MACHINE
or skimming system used in the
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the best, and cost's no more than
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Get the SAMSON FENCE Agency, and you will have pleased customers and a profitable business. Now is the time to get our terms, and good proposition to agents.

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Is the most effective and economical spray material. Its extensive use throughout the United States and Canada establishes this fact beyond doubt.

It will destroy San Jose scale, oyster-shell louse and other sucking insects, and at the same time all fungous diseases of the orchard, vineyard and garden.

One 50-gallon barrel will make 12 bbls. of spray material for winter use, and 25 to 30 bbls. for summer use.

This solution takes the place of the home-boiled lime-sulphur wash and Bordeaux mixture. Arsenites will combine with the solution.

Quality and quantity fully guaranteed by the manufacturer. Ask your dealer for Niagara Brand, and take no other. Address:

NIAGARA SPRAYER CO.,

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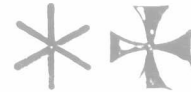
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"Persevere and Succeed."

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No. 848.

Vol. XI, III.

LONDON, ONTARIO, DECEMBER 24, 1908.

EDITORIAL.

Housing the Winter Fair.

The question of suitable building accommodation for the Ontario Winter Fair crops up regularly as the event annually materializes, and the universal cry is for more room. The promises of the past year, that enlarged accommodation would be provided, having failed of fruition, and another show having been held under unsatisfactory conditions, the need of more room is emphasized, and the agitation again raised for the removal of the Fair to a more ambitious and more central location, although it is gratifying to note that public opinion has united almost unanimously on the position which "The Farmer's Advocate" has steadily contended for, that Guelph, for many good reasons, is the most suitable place for the holding of an exhibition such as this, with its accompanying educative features. And if that city, and the County of Wellington, which is equally interested in keeping the show where it is, will do their part towards supplying the necessary funds for enlargement of the Exhibition Building, we are satisfied that public sentiment is in favor of the fair remaining where it is. Its contiguity to the Agricultural College and Macdonald Institute, where a large contingent of farmers' sons and daughters are in attendance at this season, where the annual meetings of the Provincial Experimental Union and Women's Institute assemble at the same time, and the benefit to students of the College of seeing together and handling high-class specimens of the many classes of farm stock, alive and as dressed carcasses, are all strong arguments in favor of keeping the Fair at Guelph. But the fact remains that lack of room for display of the exhibits and for the comfort of visitors, robs the show of one-half its interest and usefulness. There is poor satisfaction to persons coming long distances, on expense, to see cattle covered with blankets, where the seating capacity around the judging-ring is so limited that only a fortunate few can see the animals uncovered; while the pigs occupy the passages for the most of the two days devoted to judging them. The fact is, there is no room for farmers' wives and daughters to see the show in comfort, and only comparatively few men witness it satisfactorily. The demand for a more suitable setting for the event is urgent, and must be met if it is to remain at Guelph. The Provincial Government and the City, it must be acknowledged, have been fairly liberal in their grants for enlargement of the Fair Building. The Legislature voted \$20,000 towards the purpose, and the city declared in favor of a by-law to raise \$10,000, and grant a site for extension on the market-square, adjoining the present building. Unfortunately, the lowest contract in conformance with the architect's plans was over \$40,000, which left \$10,000 to be raised, as the city council did not see its way clear to accede to such alteration of the plans as would be necessary to bring the cost of the work within \$30,000. It was decided, then, to appeal to the county council and the local township councils, though so far without very satisfactory result. If the council of the County of Wellington, which is quite as intimately interested as the city, fails to do its share in supplying the needed funds, the responsibility will rest upon them very largely should the Fair be removed from Guelph. Wellington County farmers are and will be advantaged by the show in many ways over others, advantaged in the matter of travel and freight expenses, and of having, save for one week in the year, the use of the largest and best covered market building in the Province.

besides drawing a much larger share of the prize-money than they would be likely to do were the show held elsewhere. The Winter Fair has greatly benefited the County of Wellington by advertising it as a live-stock center, and has brought their buyers from widely-distant points, and the county will do itself grave injury if, from being parsimonious in the matter of providing the means necessary for proper housing, the show finds a home elsewhere.

Is Substance Lacking in Clydesdales?

Frequent contributions and expressions of opinion found in these columns urge farmers to raise horses more extensively. Almost invariably the draft horse is advocated as the most desirable for the average farmer. Recently, a prominent and experienced horseman, and one who supports the heavy draft as being the most suited to money-making, as well as to farm uses, asked the following questions: "Are not Clydesdale breeders of to-day going too much to action and quality, at the sacrifice of quantity? Are not a great many so-called draft horses simply medium-sized agricultural animals?"

In many districts both these questions would have to receive an affirmative answer. The lack of sufficient weight in heavy horses is only too evident at agricultural fairs. The cause of the deficiency was laid by our friend to the fact that in the Old Country, animals of quality and action, but lacking in substance, could be procured at much less money. Heavy horses in this country that were of sufficient size, he claimed, frequently were defective in one or more particulars. Some were decidedly rough, some had small middles, and others were below the standard in various points.

This is a question that could be discussed to advantage by farmers and horsemen. Canadians want the type of heavy horse that is best adapted to this country, and the kind that will attract buyers from all parts of the world. The sooner a proper start is made, the easier it is to reach the desired goal. Canadians have acted wisely in demanding quality in preference to quantity, but if quality and scale can be combined to a high degree, so much more to the credit of our horsemen. Is it not true, also, that, in cases where sires meet the requirements in most regards, the offspring fails to come up to the mark because of lack of care and feeding until the colt has reached its second summer?

What Makes the Difference?

The detailed annual statements of cheese factories afford some striking contrasts that should set men thinking and doing. Here is a case in point, noted by an Eastern Ontario correspondent: One patron received the past season for the milk of six cows sent to the adjacent factory, after taking out the home supply for two families, \$300.35. One of the half-dozen cows was a two-year-old heifer, and another a three-year-old. Scanty pastures were supplemented with supplies of corn and peas and oats. Another patron, with the same number of cows, received for the season's milk, sent to the same factory, just \$107.29. Why this difference in returns? The cows composing one herd may have been better to begin with than the other, but good cows do not come by accident, and, even allowing for variation in natural capacity, so wide a variation—nearly three to one—must surely, in large measure, have been due to the general care, feeding and water supply requisite to the making of milk, which is not a magic product, called forth like water from some rod-smitten rock.

Education of Future Mothers.

Our good friend Mr. Bollert, of Oxford County, Ont., strikes the nail on the head in a contribution, which we have entitled, "Train the Home-makers." Reviewing and endorsing the ideas which have been editorially advanced by "The Farmer's Advocate," anent the subject of keeping the boys on the farm, he concludes by urging that the greatest influence will not be exerted in this direction until the mothers have been trained to be good home-makers, and imbued with a love for the farm and country life. The greatest influence is the home-interest, and the mother moulds it to a very large extent.

There is no doubt of the truth of this. In order that our boys and girls may truly appraise farm life and occupation, both school and home influence must be rational; but the school influence is important not only for the effect it has on the inclination and efficiency of the present generation, but also for its influence on the fathers and mothers of the next generation. The school children of to-day are the farmers and home-makers of to-morrow; thus, any school influence, wholesome or otherwise, is bound to have a cumulative effect. One great reason the home influence to-day is not as well balanced and rational as it should be, is found in the irrational educational influence to which the present fathers and mothers were subjected in their time, and so of grandparents and great-grandparents. The effect of schooling extends on into future generations, because it acts upon and helps to shape the home influence. The trend and character of our schooling is, therefore, a matter of the very greatest importance to the State, and, as Mr. Bollert rightly contends, the education of the country girl is probably more important and far-reaching in its effects than the education of her brother. Not only should she receive some elementary instruction and practice in the principles of household science, but school-gardening, nature study and, probably, manual training should be for her also, while both boys and girls should receive in the country school a kind of general education that will not divorce them from but rather draw them towards agriculture and rural life. To this end, of course, the first and fundamental requisite is proper training of rural-school teachers, for a teacher who is blind to the beauties of nature and the attractions of farm life will inevitably tend to wean her pupils from the land, no matter how well the school curriculum is shaped.

Must Have More Milk.

Factorymen are viewing with apprehension the waning milk supply and lessened cheese output. A leading maker advises us that his expenses during the past year, owing to the increased cost of boxes, labor, milk-hauling, etc., amounted to over \$1,000 above what they were a couple of years ago, while the make was 27,000 pounds of cheese less. He made the cheese, supplied everything, hauled the milk, sold and delivered the cheese, at \$2 per cwt., but, unless he received a vastly-increased supply of milk, he would be facing an unprofitable proposition, reduction of the cost of running the factory not being in sight. With the high prices prevailing for cheese, and the splendid returns derived from the better class of herds, properly supplied with food, surely there is room for increasing the milk supply of factories in 1909.

To show that an abuse is prevalent is no defence of it. To show that it is of long standing is only to point the necessity of energetic action to end its existence.

THE FARMER'S ADVOCATE AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE
DOMINION.

PUBLISHED WEEKLY BY
THE WILLIAM WELD COMPANY (LIMITED).

JOHN WELD, MANAGER.

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

LONDON (ENGLAND) OFFICE:
T. SAXON WELD, 26 Baron's Court Road, Kensington, W.

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

It is impartial and independent of all cliques or parties, handsomely
illustrated with original engravings, and furnishes the most
practical, reliable and profitable information for farmers, dairymen,
stockmen, gardeners, stockmen and home-makers, of any publication
in Canada.

2. TERMS OF SUBSCRIPTION.—In Canada, England, Ireland
and Scotland, \$1.50 per year, in advance; \$2.00 per year when
not paid in advance. United States, \$2.50 per year; all other
countries 12s. in advance.

3. ADVERTISING RATES.—Single insertion, 25 cents per line,
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discontinued.

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side of the paper only.

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of address should give the old as well as the new P. O. address.

12. WE INVITE FARMERS to write us on any agricultural topic.
We are always pleased to receive practical articles. For such as
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matter. Criticisms of Articles, Suggestions How to Improve THE
FARMER'S ADVOCATE AND HOME MAGAZINE, Descriptions of
New Grains, Roots or Vegetables not generally known,
Particulars of Experiments Tried, or Improved Methods of
Cultivation, are each and all welcome. Contributions sent us
must not be furnished other papers until after they have
appeared in our columns. Rejected matter will be returned on
receipt of postage.

13. ALL COMMUNICATIONS in reference to any matter connected
with this paper should be addressed as below, and not to any
individual connected with the paper.

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

Train the Home-makers.

Editor "The Farmer's Advocate":

The problem of keeping the boy on the farm is, to my mind, one of the most important questions of the present day, touching, as it does, upon the future welfare of our great country. Agriculture is beyond all doubt the main pivot upon which the prosperity and enterprise of our vast and great country turns. Even the partial failure of one single crop causes a wide and hard-felt depression in all other business lines, such as we are experiencing just at the present time; consequently, it is of the utmost importance that our bright young men are retained on the farm, to devote their brain and energy to the successful development of this important industry. Successful farming now depends more on a combination of brain and muscle than on muscle alone, and it has to be carried on on a principle entirely different from what it used to be when we older men first started in the primitive woods, and it opens up a wide field for our bright young men to exercise their faculties for the advancement of successful farming, the noblest of all callings, and reward is sure to follow, not alone in dollars and cents, but also in an independent, healthy and happy life, brightened by the close proximity and recourse to beautiful mother nature, free from the many delusions and vices which daily surround the city man. It is true that many of the brightest and most successful men in nearly all branches in the cities have originated in humble country homes, and this will always remain so, for there is no place like the country and country life, with its healthful exercise, its wholesome food and invigorating pure air, to develop brain, muscle, and a broad mind, which are required to successfully fill the highest positions in life. It is not these men whose leaving the farm we object to or deplore, but the equally bright men who flock to the cities, to work in factories and other dependent positions, where, in time, with the monotony and constant daily connection with a certain machine, they, so to say, become a piece of this cold machine. Many ideas have been advocated to stop this disadvantageous flocking to the city, such as giving our boys an agricultural-college training, which, indeed, is very helpful to a level-headed young man; also, giving the son an interest in the farm, by giving him a brood mare, or a cow or pig, to make out of them what he can. This, I

think a very mistaken idea. What other business concern would think of allowing each member of a firm to run a little show of his own in the same line of business that they are following? They know that it would simply mean failure to the whole concern, and farming is a business as all other enterprises are. I would think it much better to make your son a silent partner, by consulting with him in all the dealings and working of the farm. Let him feel that you take an interest in him, and that you want him to take an interest in the business. Occasionally send him to market; let him do some selling and purchasing; do not make him feel that you know it all alone. Take his ideas occasionally, and work them out together, and in nine out of ten cases the boy will take interest in the work. But to my mind the real keynote has never been struck. To my mind it is to our mothers that we have to look to accomplish this important task successfully. To my mind our mothers are our nation builders. To a great extent it is the mother's loving and guiding influence that moulds the future character and usefulness of the son, but to accomplish this successfully she must be inspired with love for agriculture, country life and nature, and must possess the faculty of making a home happy and cheerful, for nothing tempts a boy more to stay at home than a cheerful and happy environment. To accomplish this we must educate our daughters along these lines. To my mind it is in the education and bringing up of our daughters where we make the most serious mistakes of our life, for neither the average university graduate, with all her education and accomplishments, nor the schoolmarm or office girl, will become the type of a woman desirable for a happy country home. Woman, the greatest of all blessings from our Creator, was designed to be a helpmeet to man—that is, to be a happy home-maker. To give our boys a proper education is necessary, but I would further say, let us give our daughters a proper education; let us fit them and inspire them with love for their true calling, to be helpmeets and happy home-makers, and we will have gone a long way to solve the intricate problem of how to keep our boys on the farm.

Oxford Co., Ont.

H. BOLLERT.

USEFUL AND CONSTANT REMEMBRANCE.

The ideal Christmas present possesses two virtues. It is useful, and of a nature that makes it a constant remembrance, bringing the giver repeatedly to the recipient's mind. It is not too late to make your friend a Christmas or New Year's present of a year's subscription to "The Farmer's Advocate and Home Magazine." It can be done by any present subscriber for 75 cents, in this way: Send us \$2.25, being \$1.50 for the new subscription and 75 cents for your own renewal, the other 75 cents being allowed by us as a premium on the new name. Send two new names with \$3.00 (\$1.50 for each), and your own renewal will be free.

Renew Now.

The easiest time to pay for a paper is in advance. A duty unperformed bothers one every time he thinks of it. A debt paid is off the mind. There is a great satisfaction in keeping obligations attended to as they fall due. It means much to the publisher, also, to have all his subscribers pay up promptly. A dollar and a half to each of them is a dollar and a half, whether in December or March, but fifty thousand dollars is worth \$625 more to us now than three months hence, to say nothing of the labor of keeping track of unpaid accounts, or the inconvenience of financing a large publishing business without plenty of cash in hand. It costs hundreds of thousands of dollars a year to publish "The Farmer's Advocate," all of which expenses

have to be met by us in advance. In order that the standard of the paper may be maintained, and the quantity and quality of its reading matter and illustrations steadily increased, prompt payment of subscriptions and active effort on the part of its friends to obtain new subscribers are necessary.

A large number of farmers at this season are considering what journals they will take during 1909. A word for "The Farmer's Advocate" will secure many, and enable a large proportion of our present subscribers to help us, as well as themselves, by sending two new names and \$3.00, thus obtaining their own renewals free.

Are Farmers' Institutes Waning?

Editor "The Farmer's Advocate":

As the season for Farmers' Institute meetings is here again, can we, as we attend these meetings, after noting the sentiment and interest prevailing on the part of those present, refrain from asking ourselves the question, "Has not the Farmers' Institute, at least, outlived its days of greatest usefulness to the farmers of Ontario?" Many are the outward indications of decreasing interest and enthusiasm on the part of farmers. The co-operation between the members and officers, so necessary to make these meetings the greatest success, is lacking; the idea is not backed by the earnest support of those who should be most interested; but why should this relationship exist? Farmers are, it would seem, curious to hear something new and startling from any stranger coming into their midst to tell them about their occupation. In this the Institute delegates seem to disappoint their hearers; not that what they have to tell should not be of interest to farmers, but seemingly we have listened to the same talks on the same subjects so often that they have lost their charm.

Time was when Institute meetings created much greater enthusiasm. To any member who has regularly attended the annual meetings for the last ten years, this fact is very evident. Then they were looked upon as an annual event in which much interest centered, and were attended by all members of the family, making large audiences that must have been an inspiration to the officers and delegates in charge. How different now. Then, the delegates were disappointing if they could not give an oration more suitable as an after-dinner speech than an address at a Farmers' Institute meeting, and, in conjunction, intersperse this oration with a number of good stories. Good musical selections from local talent made up a varied evening's programme of highly-entertaining and interesting nature. If these delegates told us anything along agricultural lines, it was some remarkable achievement they had heard about; some wealthy aristocrat who farmed by way of a diversion; some phenomenal records his stock were making in butter-fat tests or in show-rings, and a description of his elaborate farm equipment; and the audience concluded that it was a pretty good story.

Then followed the practical delegates—so-called only in a few instances, and in other instances genuine. These were the men who made Institutes helpful to farmers. They were well received, as they told us some things a little nearer applicable to average farm conditions than their predecessors. They introduced discussions, and the meetings were very practical and inspiring. But the story has now been long told; we have listened to addresses on the subjects, "Feeding the Dairy Cow," "Bacon Production for Profit," "Corn Crop and the Silo," etc., so often that we want something newer. Our inquiring minds and curiosity demand it, although there may still be much for us to learn in these same subjects. Not only do we have a repetition of subjects presented to us, but occasionally the same delegate visits us again; and when this is the case, there seems to be less interest than ever, not that his previous labors were unappreciated, but each year we want at least a new man. While these men may have made a very practical success of their time and talent in the following of their occupation, in every community there are men who feel that they have made as good, and their neighbors regard them in the same light, and conclude that they can gain valuable lessons from their successful neighbors' methods, in which they have much greater faith than in those of a stranger. And then, the discussions. How often is their worth not lost by some local man, "loading" himself, so to speak, for the occasion, first ascertaining the delegates' subjects, and then preparing to give the speakers as much trouble as he can? To a large proportion of the audience this is amusing, and so the local man monopolizes the time allotted the delegate for his subject, and little is gained from the time spent at the Institute.

Another weakness of the present system is the diversity of conditions under which often the delegate and his audience labor. A delegate from Western Ontario is sent to address Institute ridings in Eastern Ontario, and vice versa. Now, farming practices vary in even adjoining counties,

let alone a difference of the length of our Province. Crops and varieties of the same crop are adapted to certain localities, but when tried in other localities are failures, and so farmers are often disappointed in yields obtained from tests of ideas presented by Institute delegates. For instance, I have listened to a delegate spending the afternoon session of an Institute meeting explaining and endeavoring to convince his audience that their clover crop should be cut, cured and stored in the barn in one day. Now, while that man may have experienced the greatest measure of success with this plan, his hearers knew by experience that this plan was not applicable to their conditions. Another delegate proclaims winter dairying equally as profitable as summer dairying, forgetting that while he may have conditions surrounding him that make his winter dairy very profitable, his hearers are so situated that they cannot dispose of their winter dairy products at prices that will compensate them and prove as profitable as summer operations.

And another weakness is the point of attendance. I have heard those who attend the Institute meetings regularly often remark that only the same ones attend each year. This is very true, and in nine cases out of ten these men are the best farmers of the community, and not the ones most in need of the instruction afforded at these meetings. The ones most in need do not come out, and in some instances there is no response from either needy or anyone else, the officers and delegates having the meeting to themselves.

Now, I trust the inference taken on reading this will not be that I am biased or prejudiced against the Farmers' Institute. I have always been and am a staunch supporter of the Institute, and am quite aware of the inestimable good accomplished through the agency of Farmers' Institute meetings, but the point strikes me forcibly, have they not enjoyed their days of greatest good to Ontario Agriculture? With an appropriation from the Provincial Government of \$30,000 for their maintenance, is the greatest good being disseminated among the greatest number. Farmers are ever eager for definite information, and my contention is that the diversity of conditions affecting agricultural operations throughout our Province renders it impossible, in not a few cases, for delegates to give definite information along agricultural lines. This the farmer must find out for himself, or, in at least his own county. Could not the Government aid be more advantageously spent in this direction—helping each county to solve its own particular agricultural problems? CLARK HAMILTON.

Dundas Co., Ont.

Aims and Objects of the Grange.

Editor "The Farmer's Advocate":

The New Grange, as it is called, or the organization formed by the union of the old Grange and the Farmers' Association a year ago, seeks to accomplish two great objects for the farmers of Canada: to educate them, so that they may clearly understand the public questions of the day, more particularly those which affect their own calling, and to give to them an adequate means of expressing and enforcing their views on these matters. The first object is to be accomplished in the working of the Subordinate Granges, and the second through the Dominion Grange, which is composed of delegates from the Subordinate Granges, and which, when the organization is completed, will become a truly representative farmers' meeting, and, with the weight of a powerful organization behind it, cannot fail to accomplish the object we have in view—to impress upon our Governments the needs and rights of the agricultural interest, in such a way that they cannot be disregarded.

The real need of farmers is education along public lines. We are not sufficiently alive to our own interests and rights, and to the needs of our nation. If our people could clearly understand the real facts relating to the public questions of the day—as, for instance, the question as to the need and effect of a protective tariff for our manufacturers, the effects of the bounty system, the question of railway taxation, and many others—we could safely trust the enlightened public opinion thus formed to give a just and reasonable solution to these questions. I am convinced that if the light were thoroughly let in on these and if many other questions relating to the life of our nation, many needed reforms would be accomplished without trouble. But we are, for the most part, in darkness as to these vital questions, which have so much to do with our prosperity now, and with the future of our calling and of our nation. Our main sources of information are the papers of the two political parties, our only meetings to discuss these questions are those held in the heat of the campaign, and addressed by the advocates of one or the other political party. It is plain that such sources of information are, at best, partial and unreliable, and may be worse, and so the people gen-

erally remain in darkness, and those who would despoil the nation for their own benefits are able to do their work in peace, unmolested by public opinion.

The Grange does not seek to form a new political party; neither does it seek to change or influence in any way the party leanings of its members. It recognizes these leanings as existing conditions which it has no right or wish to interfere with. But it does seek to clear the minds of its members, and to give to them same views on public questions. It believes that the people are, after all, the real rulers of this country, and this being the case, that they should have some means of enlightenment, and some place where these questions may be discussed calmly and intelligently, free from the disturbing influences of political factions. That is what the Grange aims to do—to get farmers together, to impart information on these great questions, to promote free and friendly discussion, and thus to teach them to know their own minds on the great public questions affecting them. Then, when they know their own minds, to give to them an adequate means of expressing and enforcing their wishes.

Will it be effective? We believe it will, most assuredly, provided only that we can get farmers generally organized. A third political party, such as that formed by the Patrons of Industry, might be crushed as they were, by the already existing party organizations. An enlightened and awakened public opinion, working through both the present political parties, and expressing itself in a strong organization, would be irresistible. Neither party would dare to oppose it, and whichever party were in power, our wills would be accomplished for our own good, and the good of our country. Of all the plans proposed at any time, I believe the sanest, soundest, most effective, is

ers of his own neighborhood for this purpose. We are firmly convinced that the best hope of our calling, and of our country, is in this movement. Do what you can to help it on.

E. C. DRURY,
Master of the Dominion Grange.
Simcoe Co., Ont.

HORSES.

Best Horse for the Farmer.

Throughout Canada farmers are found to be making money out of horses, while neighbors are unable to derive sufficient profit therefrom to induce them to raise more than one colt each year, and frequently none are found. In some cases the difficulty is lack of attention, or lack of knowledge as to how to handle horses, particularly brood mares. In other cases, however, the disappointment lies in the fact that poor judgment was used in the class of horses raised.

"Of the four classes of horses—draft, carriage, road and saddle—I prefer the draft," remarked W. F. Kydd, of Norfolk Co., an experienced horseman and competent judge, to a representative of "The Farmer's Advocate," recently. "The draft horse is most desirable as a money-maker. From the time he has reached the age of two and one-half years he can earn his feed, without danger of injury to his limbs. Then, supposing he is marked from one cause or other, it does not detract much from his actual value. To the average farmer, perhaps, a most important argument in favor of the heavy horse is that very little time is lost in breaking him in or in fitting him for market, whereas, with light horses, much time is required in training and fitting to catch a desirable price.

"At the agricultural shows throughout the Dominion, the brood mares in the light classes; as a whole, are inferior animals. In fact, many are unsound with hereditary unsoundnesses. How can any man expect to raise valuable horses from such dams? Brood mares in the heavy classes, though not as near perfection as they should be, are of higher quality. If, however, the farmer wishes to make money out of raising colts, he must be prepared to keep the best heavy mares on the farm.

"Even at the present, when horses are not as salable or as high-priced as they were a year or two ago, a heavy gelding of quality brings \$200. The mother of that gelding was in condition to do light work every day until the colt was born. Again, after 2 weeks' rest she was able to do light work, if ordinary intelligence was used in care and feeding. It has been estimated by those in a position to give an opinion that, including the cost of a first-class sire, a colt can be kept on the average farm until three years old at a total cost of not more than one hundred dollars. Under such conditions, is not the rearing of a colt or two ever season as profitable as any branch of farming?"



Ardgowan Commander.

Ayrshire bull, two years old. First, and champion male at Ayr Show, 1908. Owned by James Howie, Kilmarnock.

the one at present being worked out by the Grange. No objections can be raised to it. It does not interfere with party affiliations or religious beliefs. It is not a combine of farmers, seeking to get the better of other classes. It is a broad, intelligent, patriotic movement, worthy of the heartiest support of every farmer citizen, and of the approval of every patriotic citizen, whatever his calling.

There never was a time when the necessity for such a movement was so great in our country; when the faith of the people is shaken in the present political parties; when corporations and combines and favored interests are despoiling the state; when wealth is being rapidly concentrated in the hands of a few, and the equality of our people is threatened by a new aristocracy of wealth, surely it is time something should be done. If we could impress upon every farmer that the solution of these questions meant more to him now, in dollars and cents, than all his municipal taxes put together, and that this would determine, in very large degree, whether his children and children's children should be free, independent, prosperous farmers, or ignorant, oppressed peasants, surely we could shake this lethargy from us, and act.

It is our intention, through these columns, to discuss the public questions outlined in the Grange platform. Meantime, we would call upon every intelligent farmer to take some interest in this great cause, and to organize, if possible, the farm-

It stands to reason that it is not good for horses to stand constantly on hard, cement-concrete floors, unless more deeply bedded than the supply of straw on most farms admits. It is well to have the stall platforms filled in with cement, but plank should be placed over it.

Horse stables need not be particularly warm, but they should be free from drafts. Half a dollar's worth of tar or building paper and a few cleats will do much toward keeping the stable comfortable and the horses in condition with a minimum feed.

Wind-sucking, manger-gnawing, stamping and kicking are not the best forms of exercise. A run in a field or paddock, or, failing that, a drive, is much better for either horse or colt.

Treatment of Draft Horses.

Editor "The Farmer's Advocate":

As a farmer, I am greatly in favor of the draft horse; only men who are born horse-lovers, and have considerable time to spend on their horses, can raise roadsters or saddle horses profitably. The farmer should not buy his work horses, he should raise them. He can do so at a profit. In the first place, it is necessary to secure first-class sires. By all means see that they are well bred, and possess size, style, conformation and quality. I advocate nothing but registered sires, as the better bred the animal is, the more satisfactory are the results. By doing this, you raise a colt that the people want, and it will cost no more to raise him.

The average farmer should breed the draft horse, as this class of horses is born with an inclination to walk and work. It is inherited. A good draft stallion crossed on mares with good dispositions produce colts that naturally are quiet, and easily trained to do slow and steady work on the farm. Trotters are born to go, and the restraint of slow work makes fretters that soon wear themselves out.

Moderate work does not injure the mare when carrying a colt, but judgment must be used. It is better to have the colts come after fly-time, or, if they come early, take them in during the day time and turn them out at nights. Give the baby colts the choicest of the hay. Ground oats, with some wheat bran, oil meal and a little molasses, is good for them. A stunted colt never will make as good a horse as one kept vigorously growing. The main point is to see that the weanling gets the most nutritious food, plenty of it, and a chance to eat it and digest it in peace. Plenty of exercise should be given in the open air on pleasant days, no matter what age the animal is.

The two-year-old colts should be handled in harness in the winter. The earlier the process is gone through, the better broken the animal will be in the spring to do some light work. It is easier to keep colts from learning bad tricks than to break them of such habits. For that reason, have every strap and rope used by the colts so strong that there is no danger of a break. Once a colt finds out that he can get away from a halter or other part of a harness, there will be trouble, perhaps for all time.

Don't fail to give the colts or work horses, when idle, sufficient exercise to keep them in a healthy condition. When a horse does not thrive on ordinary feed, and does not gain when additional food is given, something is wrong with his digestive system. First, have the teeth examined by a competent veterinarian, and see that the grinders come together evenly, and have the sharp points smoothed off. Then see that the mangers are kept sweet and clean, as sour, mouldy feed will soon put a horse "off his feed," and a lack of nervous energy soon follows. Use slatted mangers, not overhead hay racks, as the horse is compelled to inhale dust. This is bad for the lungs.

In fitting horses for spring work, or for exhibition, molasses—the old-fashioned black kind—has a wonderfully good effect upon the digestive organs. This is a grand appetizer and an economical food. Dilute it and sprinkle on the hay. A variety of feed is always beneficial. All hay should be well forked and shaken; also, dampened with diluted molasses or fresh water. For hard-working horses, well-cured timothy hay is best. Always use well-fanned oats and fresh wheat bran, sprinkled with diluted molasses occasionally. Salt is also very helpful.

The feeding should always be done by the driver or one who knows how the horses are working, and always at regular hours, or as regular as possible. When horses are idle, crushed oats, bran and roots (carrots) are the best. There is no economy in using a horse that is in low condition. It is a leak on the farm, for the horse cannot do so profitable an amount of work. It also injures a man's credit to use a poor, heart-broken horse. When idle, some men take away the grain and increase the hay ration. This is unwise. Give a lighter grain ration and no increase in hay. Never leave a reeking mess of wet straw and manure under the horses. It ruins the health and eyes, and is a disgrace to any horse-owner. Always shake the bedding, and bed well at night. This keeps the animals from bruising their knees on the floor. Keep the floors level, if you wish to have sound horses.

If the mane and tail are kept clean, the horse will not be apt to get in the habit of rubbing these parts. If an animal is in the habit of rolling or getting fast in the stall, this may be overcome by widening or narrowing the stall.

At nights, judgment should be exercised in putting a horse in the stable, when heated from work or driving. Give him a thorough rubbing with a towel or cloth, and put on a light woollen blanket. If this becomes damp, put on a dry one for the night. It is still better to rub the animal until it is dry; it does not take long, and it pays, though few farmers do it. Thorough grooming is one-third the care and feed of a

horse. Proper grooming, feeding and driving is all a horse needs to make him the noblest brute on earth. Therefore, be generous in the use of the comb and brush, especially the brush. In using a currycomb, see that the teeth are not bent. Such a comb is an instrument of torture. Teach the boys to use it gently, as many horses are given ugly tempers by cruel and careless currying. To hurt a horse will cause him to hate the operation and the operator.

Half the pleasure of country life lies in the ownership of a good quiet, gentle horse, and every farmer should have one that his wife or daughter can drive. The boys may want the farm horses to "get up and go" when they are on the road. This is a mistake. Hold them steady for all-round farm work. It is not wise to think exclusively of speed; speed is not needed in much of the farm work.

When driving a horse, make it your business. More horses are spoiled by slack drivers than in any other way. Of all fools who drive horses, the ones who rush a horse down hill are the worst. It weakens the tendons and nerves, jars the shoulders, and springs the knees. A man who is in the habit of buying vicious horses when he can buy them cheap, and by proper handling makes good horses of them, says that no horse ever was born balky, but may be made so by the driver.

When you are working in the woods with a team, do not have them sharp-shod, unless it is slippery, as they are liable to inflict bad wounds upon themselves, or perhaps a blemish for life. In hot weather use as little harness as possible. Be sure to see that the collars and hames fit properly. Every horse should have a collar of his own, which should not be used on other horses, as the shoulders are not all of the same shape. Also see that the belly-bands are not too tight, as this often causes sores on the top of the neck. Use long whiffletrees, so that the jugs do not get bruised or chafed. Every precaution should be taken to have the horse as comfortable as possible while doing his work.

Always keep the stable well ventilated. In the summer put screens in doors and windows to keep flies and mosquitoes out. Do not forget that fly-nets or muslin covers are a great comfort to horses when working in fly season.

When a pair of horses become accustomed to working together, do not keep changing them around and breaking up the team, as it is hard on both the team and the driver. Never teach your horse to start faster than a walk, as it may sometime avoid an accident. Nor is it fair, when a team is pulling heavily, and one gets behind the other, to make him pull up even; rather, stop and give them an even start. Always see that the horses are well shod when travelling on slippery streets or icy roads.

Do not allow your blacksmith to fit your horses' feet to the shoes. See that the shoes are fitted to the feet. By the right kind of shoeing, many defects in gait may be overcome, but it takes a blacksmith who understands that kind of work.

Horses can do a farmer's work, or always can be sold to advantage and profit. If you have a horse that has long passed his prime, do not sell him to a huckster. If you cannot afford to keep him in his old age, it is far more humane to put him to death by shooting or chloroform than to condemn him to several years of beating and semi-starvation in the hands of an ignorant and brutal master.

Elgin Co., Ont. ROBT. SPENCE, JR.

LIVE STOCK.

Saving the Liquid Manure.

Save the liquid manure—every drop of it. Urine contains a large percentage of the fertilizing constituents of the animal's excreta. To lay tile from the stable gutter and drain it away, is to drain away every year a portion of the farm—or the farm value, which is much the same thing. Straw, sawdust, leaves, air-dried muck, land-plaster and raw ground phosphate rock are effective stable absorbents, which contain in themselves a greater or less quantity of one or another of the elements of fertility. Lacking any of the above absorbents, horse manure may be used to advantage in the gutters of the cattle stable, though this is not to be recommended for a stable where milking cows are kept. Where the horse manure is not used in this way, it is desirable to throw the surplus liquid of the cattle stable onto the horse-manure pile.

Every Department Good.

Your paper is good in every department. Both old and young can get the best of reading. It is truly an advocate we can consult, and get good advice from. Wishing you and all your contributors a Merry Christmas and Happy New Year. A PERTH COUNTY PUBLISHER.

Conditions of Importation.

In the November number of the Census and Statistics Monthly, published by the Dominion Department of Agriculture, at Ottawa, Geo. Hilton, Acting Veterinary Director-General, explains the reasons for and nature of the precautions observed to prevent the admission into Canada of contagious or infectious diseases of animals, and describes the course to be taken by importers of live stock in order to comply with the regulations of the Health of Animals Branch.

One of the most important duties of the Health of Animals Branch is the enforcement of effective measures for the protection of Canadian live stock against the introduction of diseases from outside sources. In view of the geographical position of the country, it is necessary to guard against infection through importations from Europe and countries over seas, and also to prevent the possibility of diseased animals gaining entrance from the United States. While such measures naturally cause considerable inconvenience and additional expense to the importer, the immense value of Canadian live stock, together with the large annual expenditure required under usual conditions for the maintenance of an adequate corps of trained veterinarians and other officers to deal with and keep under control contagious diseases originating in the country, unquestionably warrants the most earnest vigilance toward incoming stock. The indiscriminate importation of animals is not, therefore, permitted, and in order to prevent the possibility of the enforcement of stringent measures against valuable animals which might be shipped in good faith, contrary to the regulations, intending importers of stock, other than the equine species, from any part of the world except the United States and Newfoundland, must first forward an application to the Minister, stating the number and species of animals it is desired to import, together with full particulars regarding the country and point of origin, port of embarkation, date of shipment, and point of landing, with probable date. Such applications are considered, and if it is found that the district from which the animals originate is free from contagious diseases and that effective measures are enforced by the authorities thereof, a permit is granted. It is further directed that such a permit is presented to the officer in charge of the vessel before the stock are allowed to be placed aboard, the responsibility resting upon that officer should a consignment be accepted and presented for entry at a Canadian port unaccompanied by the necessary permit. While a permit is essential, it is also necessary that animals be accompanied by certificates from the authority of the district whence they came, to the effect that no contagious diseases have existed therein for six months previous to the date of intended removal, as also a certificate from a qualified veterinarian, stating that the animals are free from any infectious or contagious disease, and are in a healthy condition.

For reasons which are quite obvious, importations are allowed to land only at specified ports. These have been specially selected for their convenience and isolation advantages. At ports where animals subject to quarantine are landed, suitable buildings are provided and equipped with all necessary facilities for the housing and comfort of stock during the prescribed quarantine period. While such measures materially assist in guarding against the introduction of disease, it is further necessary, owing to the lengthy incubative periods of some undesirable maladies, to keep susceptible animals isolated under supervision after landing for intervals varying from thirty to ninety days.

The ports available for the importation of animals from countries other than those of North America are Halifax, St. John (N.B.), Charlottetown and Quebec on the Atlantic seaboard, and Vancouver and Victoria on the Pacific Coast; the two latter, however, being naturally but seldom used, except for animals entering from the United States.

By far the most important quarantine station is situated at Quebec, the majority of animals entering at this port from Europe during summer navigation. This quarantine station accommodates nearly five hundred head of cattle and about three hundred sheep, and is laid out so as to admit of the absolute isolation of the stock of each importer.

While the detention for lengthy periods in quarantine of cattle, sheep and swine is essential, owing to the peculiarities of their maladies, the equine species are detained only for short periods. Horses, mules and asses are, therefore, permitted to be landed at Montreal, where they are subjected to a rigid inspection, and if found healthy, and accompanied by the necessary certificates, are allowed to proceed to destination.

In view of the existing conditions along the international boundary, as also the relation of the American live-stock trade to that of Canada, consignments of stock are allowed under certain conditions to pass in transit or in bond through their respective territories. Special attention is, however, directed toward the inspection of stock cars at the boundary, and any which are not found

in a sanitary condition are immediately returned for disinfection. With the exception of swine, which are not admitted under any circumstances until they have been first detained in quarantine for thirty days at the boundary, lengthy detention periods are not now enforced upon animals presented for entry from the United States and Newfoundland.

There are 28 quarantine stations and 39 inspection ports along the international boundary, through one of which consignments of animals must be presented for entry, as at no other point are they admitted under any circumstances. All such animals, however, are subjected to a careful inspection, and if any suspicious symptoms are detected are immediately returned. They must also be accompanied by a statutory declaration or affidavit, made by the owner or importer, stating clearly the purposes for which they are imported, viz., whether for breeding purposes, for milk production, for work, for grazing, feeding or slaughter, or whether they form part of settlers' stock, as provided by the regulations. The said declaration or affidavit must be presented to the collector of customs at the port of entry, who decides whether the animals are entitled to entry under the regulations, whose duty it is also to notify the Veterinary Inspector of this Branch in order that the necessary inspection may be carried out.

In view of the difficulty and frequent impossibility of making a rigid inspection of range horses, mules or asses, their importation is forbidden unless they are gentle and broken to harness or saddle. They must, nevertheless, be accompanied by a satisfactory mallein-test chart, dated not more than thirty days prior to the date of entry, signed or endorsed by a Bureau Inspector, in default of which they are detained at the boundary and submitted to mallein by the veterinarian in charge of the station, and if any are found diseased the whole consignment is immediately returned to the United States and the authorities of that country promptly notified.

Owing to the large influx of settlers' horses at certain periods of the year it is impracticable at times to detain them for the mallein test at the boundary. Under such circumstances they are carefully inspected, and if no suspicious symptoms are detected are allowed to proceed to destination to be there tested. If any reactors are found they are destroyed without compensation. A provision is also made for the testing of other horses at destination when undue hardship would result by their detention at the boundary. In such cases, however, the terms of the special license served upon the owner prohibit him from bringing his horses in contact with others, or disposing of them until they have been tested by an officer of this Branch and released by him. Such procedure, however, is only considered in cases where the greatest possible hardship would otherwise result.

Cattle for breeding purposes and milk production, six months old or over, if unaccompanied by a satisfactory tuberculin-test chart, signed by a veterinarian of the United States Bureau of Animal Industry, are detained in quarantine for one week, or such further period as may be deemed necessary, and subjected to the tuberculin test; any animals reacting thereto are returned immediately to the United States, or slaughtered without compensation. All range cattle, however, entering Canada, except those for transit in bond, are detained at the port of entry and dipped, or otherwise treated to the satisfaction of the Veterinary Inspector, unless such cattle are accompanied by a certificate from the United States Bureau, stating that they are not affected with and have not been exposed to the contagion of mange, or that they have within the thirty days preceding the date of their arrival at the Canadian boundary been dipped or otherwise treated in a manner satisfactory to the officers of the said Bureau.

All other ruminants undergo rigid inspection at port of entry, and if the officer has reason to suspect the animals have been exposed to contagion they are detained, isolated, dipped, or re-

turned to the United States. All swine entering Canada must be accompanied by a certificate signed by a veterinarian of the United States Bureau of Animal Industry, stating that neither swine plague nor hog cholera has existed within a radius of five miles of the premises on which they have been kept for a period of six months immediately preceding the date of shipment. Such swine are, nevertheless, inspected and subjected to a quarantine of thirty days before being allowed to come in contact with Canadian animals.

Fair Profit from Hog-feeding.

Editor "The Farmer's Advocate":

In your December 3rd issue I noticed your Prince Edward County correspondent giving his experience feeding hogs this summer, also your invitation for anyone else to give his experience. I was somewhat in doubt last spring whether there was anything in feeding hogs at present prices of feed or not. I bought five hogs from a neighbor for \$12; they had been weaned about a month. I put them in a pen and kept a barrel for them, out of which I fed them only. They got middlings almost entirely, which cost me \$24 a ton; they also got a little pea meal at the last. They were very seldom out of their pen; occasionally I would let them out for a run. At first they were given a little skim milk, which was not charged, but all they had did not amount to much; they got none at all the last three or four months I had them. They were sold a couple of weeks ago for \$6 a cwt., and when I figured up the returns I found I had \$16.48 for my work, which, while not a very large profit, still is on the right side of the account—considerably better than our Prince Edward County friend's experience, I think. I have been in the hog-feeding business for seven years, in a small way; have always bought the feed, and have never lost a dollar, while I have cleared as high as \$6 a head sometimes.

A. G. TAYLOR.

Waterloo Co., Ont.

Another Successful Hog-feeder.

Editor "The Farmer's Advocate":

In response to your inquiry for itemized statements in regard to hog-feeding, in issue of Dec. 3rd, I would like to give our experience with last shipment. Sow farrowed May 23rd; pigs shipped Oct. 22nd; No. of pigs, 10; weight of 9 pigs, 1,635 lbs.; average, 181½ lbs. Pigs were sold at \$5.90 per cwt.; cash received, \$96.46; value of feed, \$76.55; charge for weighing, 15c.; leaving a profit of \$19.76; also one pig of about 150 lbs., which was not shipped. The feed charge includes the feed of sow for about two weeks before farrowing. The feed consisted almost entirely of middlings till the pigs were three months old; after that heavier feed was introduced gradually, and this mixed feed was valued at \$1.50 per cwt. The sow was a grade Yorkshire, and the hog a pure-bred Chester White.

LENNOX FARMER.

Sheep-breeding Records.

A flock of about 240 breeding ewes has been kept for some years at the Wisconsin Experiment Station, and during the last five seasons very detailed records have been kept. An analysis and study of these records bring out some interesting facts, which appear to be common to all the breeds kept. The only exception to the latter statement is that Shropshire ewes appear to be more prolific than any other breed. So far as more prolific are concerned, it was found that ram lambs weighed about one-half pound, on the average, heavier than ewe lambs at birth; that the age of the ram does not have any effect on the sex of the offspring, neither does its size nor weight have any effect on either the number or size of the lambs, and that a ram is at his best size at from two to three years old. The ewes seem to play the most important part in connection with the lambings. Ewes six years old produce

the largest percentage of increase, being found to be due to twin lambs, younger ewes having invariably the largest percentage of single lambs. The percentage of ram lambs were found to increase, and the percentage of ewe lambs to decrease, as the age of the ewe advances. The larger and heavier the ewe, the larger and heavier the lambs were found to be, the ram's weight and size showing no effect in this respect.

With regard to the period of gestation, this was found normally to range from 145 to 151 days, the greatest percentage of ewes lambing 147 days after service. The gestation period was slightly longer for ram lambs than for ewe lambs, and the number of male and female lambs were about equal. The larger percentage of lambs born on or before the 147th day after service were invariably strong; after this time, the number of weak and dead lambs increased. The number of days a lamb was carried had no effect on its size, but it was found that, generally, the production of twins and triplets was detrimental to the strength and vitality at birth of such lambs.

Milk Fever Discussed.

The discussion of common ailments in cattle, forming an important feature of the lectures at the Provincial Winter Fair, at Guelph, and in which Dr. H. G. Reed, of Georgetown; Robert Miller, of Stouffville, and W. F. Stephen, of Huntingdon, Quebec, were the chief speakers, showed that milk fever, a common disease in newly-calving cows, was a source of great loss. As a rule, the best cow in the herd was affected. Preventive treatment was advised. According to Dr. Reed, a careful dairyman need not have a case to give him worry. No stimulating food, such as pea meal or crushed wheat, should be given for a period of two weeks previous to calving. Feeds of a succulent and juicy nature, such as silage or large proportions of succulent roots, were recommended. Then, for a week or ten days after calving, also, withhold the concentrated foods. Cases have been frequently caused by too completely emptying the udder of milk during the early milkings after calving. If conditions similar to those given when the calf is left with the cow were provided, the udder would not be emptied for at least forty-eight hours.

In treating the disease, the services of a competent veterinarian were advisable. It was dangerous even to try to drench the cow, because the muscles of the throat are partially paralyzed, and the drench was likely to go to the lungs. Practitioners have been successful in introducing oxygen into the udder. The udder was emptied of milk, and then filled with pure oxygen, according to the manner so often described in these columns. Many readers will recall that the oxygen treatment was first introduced on this continent by "The Farmer's Advocate." When a veterinarian is not at hand, a bicycle pump may be used to pump ordinary air into the udder, tying the teats with a tape to prevent its escape for some hours. There is an element of danger, though, of introducing germs into the udder by this means, and causing complications, particularly when thorough antiseptic precautions have not been observed.

Question.—What are the first symptoms?

Answer.—The cow would appear to be nervous or excited. The disease is one affecting the entire nervous system, and not of the udder, as commonly thought.

Q. Would milking for a time previous to calving tend to prevent a cow having milk fever?

A. No. In the case of garget, milking in this way may have good results. That greater loss was due to garget than milk fever, was the opinion of Robert Miller. He had known successful treatment by giving no water for ten days or two weeks previous to calving, excepting that which had been prepared as follows: Three-quarters pound bicarbonate of soda dissolved in a pail of water, and 1½ pounds Epsom salts dissolved in a pail of water, and the two pails emptied into a tub already containing four pails of water. This treatment scarcely ever failed to prevent either garget or milk fever. If the animal became more feverish, she naturally drank more of the preparation, which was just what she needed.

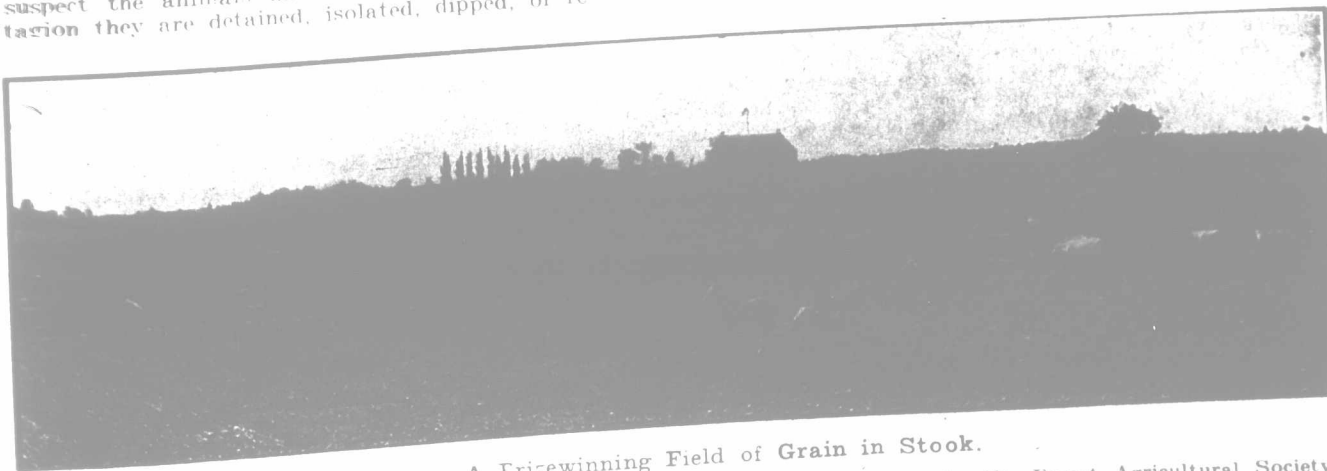
Success with the air treatment for milk fever was reported by W. F. Stephen, of Huntingdon, P. Q., but prevention was the best remedy. For several weeks previous to calving, the food should be reduced. On no account should the cow be allowed to gorge herself, and the bowels must be kept open.

Q. Did you ever have a heifer with first calf to become affected?

A. No, never. It usually occurs in cows about five years old.

Q. Have you known the disease to come two weeks after calving?

Dr. Reed.—I cannot say that such



A Firewinning Field of Grain in Stook.

Field of oats on farm of Thos. Grills, Wellington Co., Ont. One of the winners in the Mt. Forest Agricultural Society's competition in fields of standing grain, 1908.

never has been the case, but it is very, very rare.

Q. Is it wise to give a large purgative, or several smaller doses?

A. I always give a full dose when an animal needs a purgative. Farmers consider one pound a dose. I give two pounds to an ordinary cow, and for a large one three pounds. A half pound of common salt added hastens the action.

Are Our Breeders Patriotic?

Editor "The Farmer's Advocate":

In considering the above question, let your attention be again drawn to some facts.

The average production of the dairy cow in Ontario is 3,000 pounds milk per year. If you pick up any leading daily paper, you may notice, among quotations for beef cattle in England, "States steers" quoted about two cents per pound higher than Canadian steers.

During a conversation with a breeder of some repute, he told me, when on a visit to another well-known breeder, when going through the stables, he saw an animal had given birth to a calf, which, although under a week old, showed signs of debility, pus coming from the calf. The owner said to the visiting breeder he could have it if he wished to take it away. The visitor immediately closed with the offer, keeping it till it reached the age of two years, using it as a stock bull.

The curse of stock-breeding throughout Canada to-day is, to my mind, breeders selling to the public animals they know conscientiously not to be the best. Will breeders realize that the above condition of affairs (and it is typical of all classes of breeding) is due to them only? Can our breeders be as patriotic, for instance, as the Japanese have shown themselves to be? If so, they will sacrifice, for the good of Canada, to the shambles all stock they know cannot be above reproach. We, the public, quite understand to be patriotic is to lose some immediate gain, but is it not fit that our breeders should ennoble their calling by striving to place it on the highest plane—that of perfection?

York Co., Ont.

Mix the Manure.

Mix the manure as it is made, unless it is all being applied directly to the land. Horse manure piled loosely alone ferments excessively, a part of the pile often becoming "fire-fanged," thus losing much valuable nitrogen. On the other hand, cow manure piled alone is liable to lose a considerable proportion of valuable liquids by drainage and leaching. Keep the two together, along with the cleanings from the pigen. It is worth making considerable effort to do this. Manure is capital, and should be as carefully and intelligently husbanded as cash.

THE FARM.

Root and Fodder Crop Yields.

According to the November number of the Census and Statistics Monthly, published by authority of the Dominion Minister of Agriculture, the total value of potatoes, turnips and other roots, hay and clover, fodder corn and sugar beets grown this year in Canada is \$186,591,816, of which 3½ per cent. was credited to Prince Edward Island, 9 per cent. to Nova Scotia, 7½ per cent. to New Brunswick, 28.3 per cent. to Quebec, 48.1 per cent. to Ontario, 1.8 per cent. to Manitoba, 0.7 per cent. to Saskatchewan, and 1.1 per cent. to Alberta.

Potatoes are best in the Maritime Provinces, both yield and quality being excellent, especially in New Brunswick and Prince Edward Island. The average acre yields for 1908 in these Provinces are estimated at 209 and 208 bushels, respectively. They are higher than in any other Province, and considerably exceed the average yields of 1907. In Nova Scotia the yield has been about 9 bushels per acre less than last year, quality being good. In Quebec, the yields were better than had been anticipated, and, while the tubers were small, the quality was good. In Ontario, the average yield is a little better than in Quebec, the figures being 142 and 120 bushels per acre, respectively. The quality is described as good, except, perhaps, in Eastern Ontario, where many correspondents described the crops as poor. Following are estimates of the acreage, yields and value of the five crops referred to at the outset of this article, the figures being for the whole of Canada:

	Acreage	Total Yield	Total Value
Potatoes.....	503,600	71,511,200*	\$34,818,626
Turnips and other roots.	271,143	98,805,252*	17,530,303
Hay and clover.....	8,210,900	12,234,241†	121,884,551
Fodder corn.....	259,770	2,867,860†	11,780,733
Sugar beets.....	10,800	108,800†	577,600

*In Tons. †In Tons.

General Farm Crop Experiments.

Each year finds the results of tests made by members of the Ontario Agricultural and Experimental Union more valuable. As years roll by those connected with the work become more expert, details are noted and every precaution is taken to ensure accuracy. Professor C. A. Zavitz, in his report at the annual meeting recently, stated that the applications were so numerous that it was found necessary to withhold some for next season's list.

Before giving the results of the experiments with potatoes, Prof. Zavitz pointed out that over half the area devoted to that crop in Canada, omitting Quebec and British Columbia, was in Ontario. The money value of potatoes in this Province totalled over twelve million dollars in 1908. The chief drawback was too many varieties. Enquiries sent to various parts of the Province to prominent growers brought replies including the names of ninety varieties as being the most popular. The majority, however, made mention of nine common varieties, and five of these had been distributed by the Experimental Union. Even this was too many. Districts should co-operate and establish a reputation for producing potatoes all of one variety. Rural New Yorker, Empire State and Early Rose were very frequently included in the popular list.

This year's test for late potatoes included Dempsey's Seedling and Empire State. The former showed an average yield of 175.68 bushels, while the latter was one bushel less. The Empire State, however, was the most popular, because of more desirable shape and size. It is a white oblong potato, with shallow eyes. Dempsey's Seedling is rose colored, and has rather deep-set eyes, but it is of good quality. The yields in medium season potatoes stood: Burpee's Extra Early, 155.36 bushels; Rose of the North, 143.03 bushels, and Green Mountain, 135.92 bushels. There were 243 satisfactory reports regarding early potatoes. Extra Early Eureka, a round white variety, and a heavy yielder, was most popular, with 130.60 bushels per acre, while it was out-yielded by Early Puritan by almost two bushels.

GOLDEN-BANTAM CORN POPULAR.

The results of tests with sweet corn for table use showed Golden Bantam to be by far the most popular of all varieties so far known. The comparisons for plots, one rod by two rods, gave Mammoth White Cory 158 ears, and Golden Bantam and Malakhoff 152 ears each. Consideration of flavor and juiciness, however, invariably favored Golden Bantam. President Creelman said he never had used corn to equal it. There was as much difference between Golden Bantam and corns used on the tables in cities as there is between Snow apples and Ben Davis. Professor Hutt stated that some years ago it was used as early corn in the College garden, and other later varieties planted. Now Golden Bantam is almost exclusively used, the supply being maintained by successive plantings.

In fodder corns, Henderson's Eureka yielded 15.6 tons to the acre; White-cap Yellow Dent, 14.8 tons, and Reid's Yellow Dent, 14.3 tons. The White-cap is suitable to Central Ontario, while Reid's is adapted only to southern portions of the Province.

Results with the sorghums were: Early Minnesota sugar cane, 9.9 tons; Early Amber sugar cane, 9.0 tons, and White Kaffir corn, 4.0 tons. The millets stood: Japanese Panicle, 5.1 tons; Golden Wonder, 4.9 tons, and Hungarian grass, 4.7 tons.

A comparison of grass peas and vetches gave results as follows: Hairy vetch, 12 tons; grass peas, 9 tons, and common vetch, 8 tons. The grass peas are immune from weevil, and are being grown in some sections to provide pea meal. Cabbage has been added to the rape and kale class of fodder. The reports stood: Sutton's Earliest Drumhead cabbage, 17 tons; Thousand-headed kale, 16 tons, and Dwarf Essex rape, 16 tons. The cabbage was sown thick, and treated in the same way as rape. Members were urged to exercise care in ordering millet, rape, and other such seeds.

GRAIN CROP YIELDS.

In reporting on grain crops, Professor Zavitz pointed out that for years the aim had been to test varieties, but recent work at the College in cross-fertilizing indicated that soon a test of strains of the leading varieties as well as new varieties would demand attention.

In oats, Yellow Russian, a variety grown at the College for five years, headed the list, with an average yield of 46.42 bushels to acre. Irish Victor was second choice, with 45.04 bushels, and Daubney, an early oat, specially adapted to certain localities and for mixing with barley, stood third, with 43.08 bushels. Siberian and American Banner had been dropped from experimental samples because they already are well known.

During the past ten years the area devoted to barley crop in Ontario had increased from 438,000 to 734,000 acres. The average yield for the past ten years was 23½% higher than for the ten years preceding 1898. An attempt had been made to improve the Mandscheuri barley. Special work

with one strain, known as Number 21, had resulted in the new strain standing at the top for the second year in succession. The figures place Number 21 at 31.13 bushels, and Mandscheuri at 33.53 bushels per acre. Oderbrucker yielded 31.60 bushels. Two-rowed varieties, though not common in Ontario, had been sent out for testing. As usual, the reports were disappointing. Hanna yielded 26.88 bushels, and Two-rowed Canadian only 19.38 bushels to the acre. Hulless barley, from ten reports, gave Guy Mayle 29.91 bushels, and Black Hulless 25.67 bushels. This crop had been grown in some sections where the weevil made pea-growing impossible.

SPRING WHEAT YIELDS.

Though not as largely grown in Ontario as in former years, spring wheat had been tested as usual. Wild Goose, a durum variety, averaged 17.7 bushels; Hungarian, a bearded variety of hard wheat, obtained from Argentina, and a promising one, stood 14.59 bushels; and Red Fife, the stand-by of the West, 14.26 bushels.

With buckwheat, as a rule, wet seasons gave Silver Hull the preference over Japanese varieties. This year Rye buckwheat had stood at the top, with 30.32 bushels per acre, and Silver Hull second, with 24.68 bushels.

Tests of emmer and speltz showed that emmer was ahead of barley, and almost equal to oats. Speltz was disappointing. The yield of emmer was 43.28 bushels, and of red speltz, 25.06 bushels. On the experimental plots, efforts at improving these grains promised success.

In winter wheats, Imperial Amber yielded an average of 25.92 bushels; Abundance, 23.29 bushels, and Number 5 Red, 22.20 bushels. Other satisfactory varieties, already thoroughly known throughout the Province, were not included in the tests.

Mammoth White rye had given excellent yields, averaging 34 bushels per acre. Common winter rye gave 28.60 bushels.

Field peas were increasing in area after the weevil scare. New Canadian Beauty stood top, with 27.35 bushels, and Early Britain, 25.06 bushels.

Marrowfat headed the list in field beans, with 26.44 bushels; White Wonder was second with 25.61 bushels, and New Prizewinner third, with 21.65 bushels.

Experiments with corn showed King Phillip to yield 46.33 bushels of grain; Compton's Early, 43.23 bushels, and Genesee Valley, 38.79 bushels.

SOWING MIXED GRAINS.

The mixing of grains was said to be fruitful of results. Oats and barley gave highest returns, and showed vast increases over either grain alone. Different cereals showed increases when different varieties gave no increase. Peas and oats were not so advisable as barley and oats. Experiments had failed to indicate any grain that could be added to oats and barley mixture to further increase the yield. Daubney oats and Mandscheuri barley gave 1,580 lbs. to the acre; Siberian oats and Two-rowed Canadian barley, 1,406 lbs., and Siberian oats, Two-rowed Canadian barley and Wild Goose wheat, 1,320 lbs. In Ontario last season the area devoted to mixed grains was equal to that given to corn-growing for grain and fodder.

Prof. Zavitz pointed out the value of such tests, both in giving more satisfactory varieties to farmers, and as an educational force. It would be the aim to take every possible step to make the work even more extensive and more beneficial.

Example of India.

Editor "The Farmer's Advocate":

Having read a few articles in recent numbers of "The Farmer's Advocate" about sparrows, I wish to give my opinion as to what should be done with these troublesome birds. It is true that they eat insects if they cannot get anything else, but we all know that sparrows will not hunt bugs if there is plenty of grain to be had in the fields. Then, when winter comes they all flock into the barn, if there is a chance to get in. In "The Farmer's Advocate" of December 3rd, J. Sims writes "On Behalf of the Sparrow." I think if the people were all like him Canada would soon become like India, where a great part of their crops are destroyed by monkeys, rats and birds, just because the natives will not kill them. I would prefer keeping one hundred hens than two or three thousand sparrows. It would be a good thing to encourage schools to collect sparrows' eggs, for, if something is not done to exterminate these birds, the country is going to suffer.

Stormont Co., Ont.

R. H.

Anticipated and Enjoyed.

We are taking "The Farmer's Advocate," and I must say that it is a long-looked-at and long-looked-for paper.

JAMES D. ROSS,

Glangarry Co., Ont.

A Satisfactory Ditching Machine.

Many times during the past four years of drainage surveying the Department of Physics at the O. A. C. has been asked if there was any ditching machine that could be used satisfactorily for digging tile drains. Wherever we could hear of one being in use we have made enquiries concerning it. Some time ago it was reported to us that a machine owned by Mr. Jacob Schihl, Essex County, Ont., was giving good satisfaction. Accordingly, I went to see it working, taking a surveyor's level along to test the grade left by it. I watched it carefully for two and a half hours, or one-quarter of a day. In that time, in very heavy clay, it dug 30 rods of ditch, full depth, in one transit over the ground, leaving the most beautiful ditch bottom I ever saw. This is equal to 120 rods a day, not allowing for laying out ditch. It averages from 90 to 100 rods a day, including all stops and the laying out of the drain. It is a traction machine, and is operated by two men. In the hands of a careful workman it digs true to grade, no matter what the unevenness of the ground traversed, leaving the ditch bottom ready for the tile. The price charged per lineal rod was 7 cents for each foot in depth—that is, 17½ cents a rod for a ditch 2½ feet deep, and 21 cents a rod 3 feet deep. In addition to this, the fuel amounts to about 2 cents a rod, and the board of two men and one horse, 1½ cents a rod, making the total cost of a 2½-foot ditch 21 cents, and of a 3-foot ditch, 24½ cents. Digging by hand and plow in that same heavy soil would cost from 40 to 50 cents a rod 3 feet deep, and even in the lightest soils about 30 to 35 cents; hence, if a few of these machines were introduced into Ontario, and ditches dug at the same price as in Essex, the price of under-draining would be reduced very materially.

Being so favorably impressed with this machine, which is a 1905 model, I visited the manufacturers to see the later types. These are improved in many details. There I saw one digging five feet per minute, or 180 rods per day, and the manager made the proposition that they would dig 7 feet a minute, or 252 rods a day, on condition of selling the machine. In Ohio the price of digging is 10 cents a rod for the first two feet, and half a cent an inch thereafter, making a 3-foot ditch cost 16 cents for digging, a total cost of 19½ cents a rod when the price of fuel and board is added. This is very cheap ditching. Of course we could not expect so low a rate in Ontario, for the duty on a machine being imported is about 30%. The price of the ditcher varies with the size. The smallest, cutting a trench 11½ inches wide, and any depth down to 4½ feet, costs \$1,200, f.o.b. factory. The next size, 14½ inches by 4½ feet, \$1,400; and the next, 15 inches by 5½ feet, \$1,700. Much larger ones are made for contract work. I saw one capable of cutting a trench 26 inches wide and 10 feet deep; another 42 inches by 7½ feet. Mr. Schihl, whose machine is of the smaller size, says he would buy a larger one again, because it is built stronger, and will handle stones better. Personally, I would favor the third size, for the two reasons already given, and also because occasionally one must, in going through a knoll, go deeper than 4½ feet, which of course the first two cannot do.

The mention of stones suggests the query whether the machine will work in stony land. The College of Agriculture at Cornell University, Ithaca, N.Y., has one of them specially equipped with rooters and steel cutters, to enable it the better to handle stones. Prof. Minns writes me that it has given good satisfaction, even where numerous stones occur. Of course the speed is slower, and sometimes it is necessary to raise the digging wheel and dig out a large stone by hand. Smaller ones are elevated by the machine. In very stony land the machine is not a success; such land, however, is not drained as a rule. Prof. Minns states that in good land their machine is perfection.

The accompanying cuts will give an idea of design, details and method of operation. I have written this lengthy report in the hope of interesting someone in various parts of the Province to the extent possibly of investing in one of them, and then doing ditching in his vicinity, as Mr. Schihl is doing in Essex. Mr. Schihl states that he could be busy all the time with it if his other duties would allow him. The outlay would be \$1,600 to \$2,300, depending on the size of machine bought, and the earning power, along with two men, \$18 to \$21 a day, at present Essex prices. Query: How long would it take a machine to pay for itself? How much longer would it last? For anyone in a position to undertake it, wouldn't this be a good investment?

One other point should be mentioned, viz., that one of the two men with a machine should have some knowledge of levelling and determining grades, and, in fact, drainage surveying in general. Some knowledge of the theory of drainage would be helpful too.

WM. H. DAY.

Ontario Agricultural College.

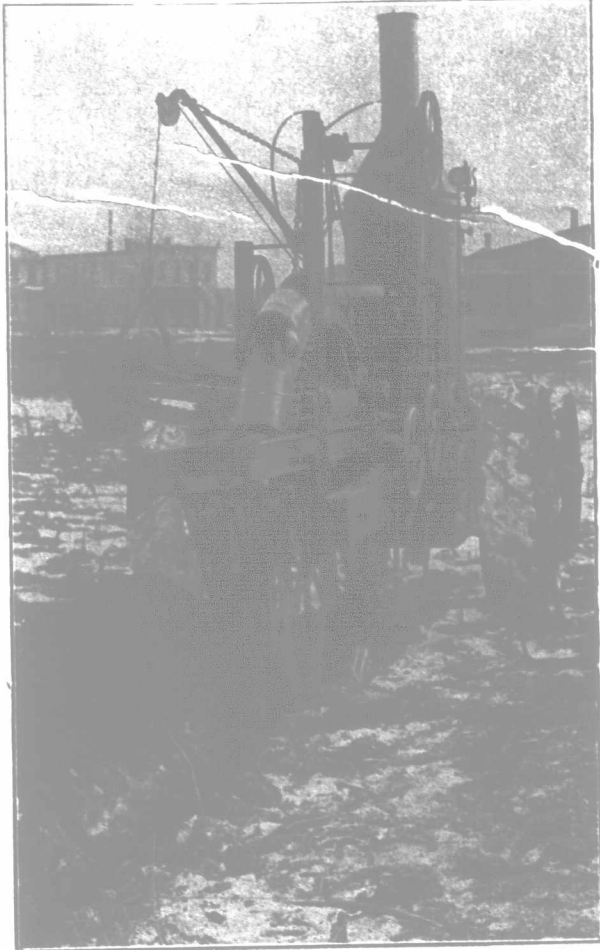
Poisoning Sparrows.

Editor "The Farmer's Advocate":

In your issue of December 3rd you ask for the mind of your readers in regard to the English sparrow. As one who has long been a reader of your valuable paper, "The Farmer's Advocate and Home Magazine," and likes it better all the time, let me say the sparrow is no friend of mine, and I have no friendly feeling towards it. Although not one of them falls to the ground without our Heavenly Father's notice, yet, where they are so numerous as we have them now, they become a public nuisance. I have wished many times that the man who first brought them here could be made to take them all back. Although they increase and multiply very fast here, they

to a lot of climbing about buildings that would be dangerous, and cause accident, and perhaps loss of limb and life. How would this plan do, now that our summer birds are away at winter quarters, for every farmer to erect a pole, with a small platform on top, out of the way of his domestic fowl, then put poisoned grain on the platform, such as would kill them; then sweep them into the manure pile. THOS. BROOKS.

[Note.—The plan proposed is open to the objection that there is danger of poisoning other birds that winter in our midst, for example, the chickadee. There is also a chance of some of the poisoned grain being dislodged and consumed by poultry, while it is considered possible that poisoned sparrows eaten by cats might result in the death of the latter animals. On the whole, it would seem that shooting of birds and destruction of eggs, along with care not to leave grain needlessly exposed, are the best remedies for the sparrow nuisance. Protection from sparrows is a very good argument in favor of roofing silos.—Editor.]



The Traction Ditcher at Work.

are not a native of our country. They have driven away many of our native birds, such as the swallow, martin, phoebe and others that were so useful in our orchards and gardens, because they lived chiefly on insects caught on the wing. There is neither beauty nor song with the sparrow. To say nothing of their depredations on our grain fields, think of their filth on the roofs and in troughs of our buildings, to be washed by every rain into our cisterns; and then, the sparrow paint on our implements and tools! I have never been able to see that they in any way compensate for the nuisance they create. Now, while I would exterminate them flesh and feather, I do not like the idea of offering prizes to school children to destroy eggs or birds; it would lead

Clover and Fall Wheat Acreage.

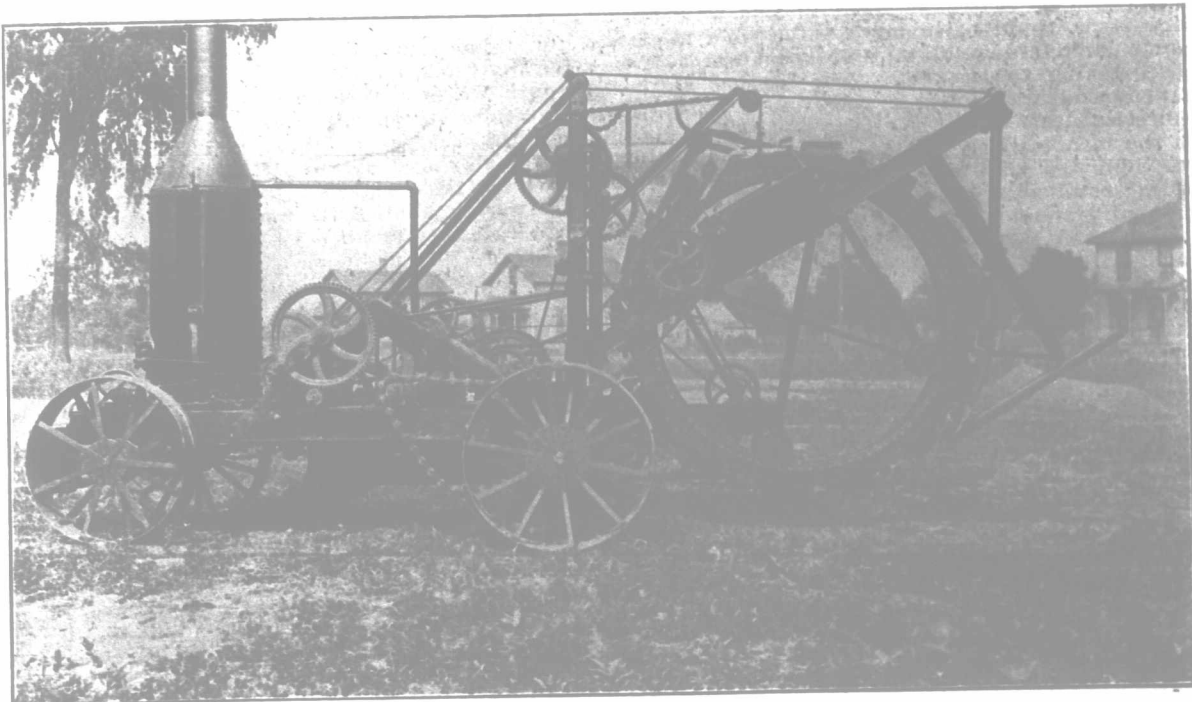
Per cent. areas of fall wheat sown this year, of land in red and alsike clovers and of land plowed for fallow, compared with like areas last year taken as 100, are shown in the following table for the Dominion and the several Provinces:

Provinces.	Fall Wheat.	Red Clover.	Alsike Clover.	Fallow Land.
Canada	95	129	116	97
P. E. Island...	—	—	—	105
Nova Scotia...	103	105	110	93
New Brunswick	95	103	95	102
Quebec	120	96	70	71
Ontario	86	182	117	90
Manitoba	197	—	—	113
Saskatchewan	128	—	—	113
Alberta	124	125	120	106

The acreage sown to fall wheat is five per cent. less for the Dominion, although there are important increases in Quebec and the three Northwest Provinces. In Ontario, where the bulk of this grain is sown, the area is only 86 per cent. of last year's. The decrease in this Province is largely owing to the prevailing drouth at seeding time, which made the land difficult to work. The same state of drouth also affected fallowing operations. The proportion of red clover in crop is 29 per cent., and of alsike clover, 16 per cent. greater than last year—the chief increases being shown for Nova Scotia, Ontario, and Alberta. The average price of red-clover seed, computed in November by the Census and Statistics Branch, Ottawa, from the quotations of correspondents, was \$7.50 per bushel, against \$9.77 last year, and of alsike seed, \$9.57, against \$9.06 last year. The highest prices were in Quebec, where the percentage of yield has been low.

How to Renew.

Show "The Farmer's Advocate" to two neighbors or friends. Tell them what you think of it. Point out the advantage of having a live, up-to-date, reliable, wholesome, all-round agricultural weekly in the home. Advise them that, by subscribing now, they will get the 1908 Christmas number, the price of which is 50 cents, as a premium, free of extra charge. Urge them to sign at once. Send in \$3.00 (\$1.50 from each) and we will advance your own date label one year as a reward for helping to extend our circulation. Thousands are taking advantage of this offer. Be one.



The Traction Ditcher, Not in Operation.

THE DAIRY.

Massachusetts Agriculture and Dairying.

The State Board of Agriculture for the commonwealth of Massachusetts arranged a rather novel programme for their winter meeting, at Greenfield, December 1st, 2nd and 3rd. It was novel to Canadians in that but one subject and one regular speaker was announced for each session. For instance, after the addresses of welcome and reply thereto by Secretary Ellsworth, the remainder of the first session was devoted to a discussion of "The Sheep Industry of Massachusetts," after a lecture by a Vermont man. The second session was wholly given up to "The Planting of a Commercial Orchard," introduced by Prof. F. C. Sears. "The Poultry Industry" occupied the evening session of the first day, and so on. When we contrast this with the Canadian plan of having from three to eight set addresses at one session, it is little wonder that we were surprised at the novelty of the idea. How did I like it? Well, I must say that, for a man who is filled to overflowing with his subject, and one who is usually limited to about ten minutes to unburden himself, the plan of having a whole afternoon, without any long-winded speakers preceding him, was nearly overwhelming. The speaker realized the immense possibilities of an afternoon devoted to dairying. However, the writer did not occupy all the time. He would have been sorry to have done so, as, in that case, he would have missed a rare treat in the form of a burst of rare eloquence by "Uncle John," one of the natural-born orators of the New England farm.

WHAT OF THE YOUNG MEN?

In the large hall there were not more than five or six young men. What is to become of the New England farm when these stalwarts of the past move out into the great beyond? Where are the young men to take their places? Is it true, as reported by the Tax Commission of 1897, "Agriculture in Massachusetts is a declining industry—regrettably so, but undeniably so"? The reasons given by the Commission for the state of affairs at that time were: "Competition from the West, and growth of manufactures in the State, which attract farmers to the city, thus causing a diminution of profits in agriculture and a fall in value of farming property." So far as we could judge from a hasty survey of matters, things are pretty much the same to-day as depicted by the Commission eleven years ago. Only a small proportion of the population of the State, so we were told, is engaged in agriculture, thus making it difficult to secure appropriations of State money for the development of farming.

COW-TESTING ASSOCIATIONS.

One of the live topics discussed was the forming of cow-testing associations. A number agreed that it would be a good thing if they could be started, but they objected to the expense (estimated at from one to three dollars per cow), and to the difficulty of getting the work properly done. There was some difference of opinion as to whether the Agricultural College and Experiment Station or the Dairy Bureau should supervise the work. One farmer thought the College should do the work, and utilize students so far as possible, claiming that time spent in this way on a dairy farm would be of more value to a student than a similar amount of time spent at the College listening to lectures. The speaker claimed that agricultural colleges were altogether too theoretical, and that they were not training men for the farm as they ought. One of the College men admitted that not so large a proportion of College graduates went back to the farm as he personally should like to see, but he was of the opinion that the State Agricultural College would in future train even less men for the farm than in the past, as most of their graduates were finding professional work allied to or connected with agriculture. He thought that the men required to take charge of cow-testing associations and to do similar work would in the future be trained in the Secondary Agricultural Schools. This is a very interesting point. Are the present agricultural colleges to devote their energies to training professional agriculturists, and is the actual scientific farm training to be given at the agricultural high schools, or in secondary schools of agriculture? It begins to look that way.

One of the staff in the Educational Branch of the University gave me a very interesting account of the work he is doing among the rural schools, and among the High Schools, along the line of stimulating greater interest in the farm and the home.

Mention was made of President Roosevelt's

Rural Commission, and several speakers urged the importance of stirring up local interest in the matter. One told of how prominent farmers had been interviewed, and all were agreed that much good could be done, and a meeting had been arranged for as soon as the Commission would be available. As someone said, there is need for a good old-fashioned revivalist to go among farmers and rouse interest in matters pertaining to farm life. He recounted that in a neighboring State it was impossible to get a cow-testing association formed until they found a man of the "revival spirit" who had been able to get several associations formed after starting the fire in rural sections.

MILK SUPPLY THE FEATURE OF DAIRYING.

The dairy industry is a rather peculiar one in the State of Massachusetts. Most of the milk produced in the State is sold in Boston. Boston prices for dairy products rule almost everywhere in the State. There are no cheese factories, and only a few creameries. A number of the latter are being bought up by milk dealers, who are using them as milk depots. It was stated that these men buy milk testing from 11 to 15 per cent of solids, and mix all together. So long as the "mixture" will pass the Boston standard, no complaint is made, hence there is little need for the individual farmer to test his cows. Then, again, very few farmers within fifty miles of Boston raise their own cows. These are purchased chiefly in Vermont, Western New York and Maine. However, one man said it was becoming more difficult each year to buy cows, and he was of the opinion that more would have to be reared by the milk producers, hence they were more likely to take more interest in cow-testing than formerly. All were agreed that the work would be of most value to breeders of pure-bred dairy stock and to dairymen who were building up grade herds by the use of a pure-bred sire. One breeder of dairy Shorthorns was inquiring about the possibilities of securing milking strains of this breed in Canada.

While a New England audience is inclined to be serious, and to treat a stranger with a somewhat distant, refrigerating air until they have been able to pass judgment on him, when once they have been thawed and aroused, and the speaker has won their hearts, they can appreciate a joke, and will tell him frankly that they liked the lecture.

FRUITS OF BOVINE AFFECTION.

We must mention one incident before closing. One speaker told of raising and milking a heifer, and she became so fond of him that she would run after him in the field, lick his hands and face; in fact, looked upon him as her calf. No one else could get anywhere near the same amount of milk from her.

Another speaker said he had swapped cows recently with a preacher. He had guaranteed his cow to give ten quarts of milk a day, and the preacher his to give four. The preacher came back in a few days, saying the cow had been misrepresented to him, as she gave twelve quarts, instead of ten. The farmer said that the preacher's cow had been also misrepresented, as he couldn't get any milk at all from her.

A farmer in the audience, commenting on these stories, said it was all very strange, as he had always understood that when a calf ran with a cow it always dried her up, and that he had further understood that men of the cloth never told a lie, but that a cow-dealer could always be depended upon to stretch a cow's capacity in milk production to the limit. H. H. D.

High Prices for Butter Boxes.

"Some newspapers in Canada," writes J. S. Larke, Canadian Trade Commissioner for New South Wales, Queensland and New Zealand, "have published statements that Australia is going to ship its butter in a box recently invented, made up of clay and straw. The information appears to have been obtained from an Irish newspaper. The report has for its foundation that some time ago two very small samples of this material were brought to Sydney. The proposed box is a wooden one, lined with the alleged material. No one here appears to have thought that it could be a substitute for the present wooden box, either on the plea of economy or of quality."

"There is no doubt that the butter manufacturers are concerned as to the material for their boxes. Prices are 80% higher than they were twelve years ago; a box which could be had for 10d. is now 1s. 6d. Some sample boxes have been ordered from Norway, made of what is termed here white pine. The material has the texture of Canadian spruce, but is somewhat darker in color, and in all probability contains more resin. Boards cannot be cut wide enough to make the side of a box, and hence the material has to be tongued and grooved. This is a very strong objection. The price is as yet uncertain, but so far as known will be higher somewhat than the butter boxes made from New Zealand white pine."

Problems of the Dairy.

By Laura Rose.

CARE AND RIPENING OF CREAM.

Closely following the creaming of the milk comes the care of the cream till the time it is ready for the churn.

A good tin can, well soldered and free from rust, is preferable to a crock for holding cream. The can is easier to lift, being lighter in weight and having a handle, and is easier to wash and scald. The can should be kept in a clean place, free from bad odors, and should always be covered.

There is great need that the cream should be stirred each time fresh cream is added. In all cream there is considerable skim milk. The skim milk being the heavier portion, naturally sinks to the bottom of the can. If allowed to remain undisturbed, it becomes a hard curd, when the cream sours. It is this hard curd which makes those undesirable white specks in the butter. The cream stirrer should be such as to lift the cream. A stick or a spoon is not good for the purpose; a ladle with a long handle, or a small, shallow tin saucer, with a heavy piece of tinned wire soldered in the center to form a handle, is the proper thing to use. The motion should be an up-and-down one, not merely around and around; then we get the cream thoroughly stirred right from the bottom to the top. This makes it ripen evenly, and keeps it free from lumps.

Cream from the shallow pans has usually developed enough acid not to require any special treatment to get it ripe. Do not keep it in too warm a place, or it will become over-sour.

Occasionally we find cream and butter with a bitter flavor. This is apt to occur if but a few cows are kept, and the cream held for a long time at a low temperature. The lactic-acid germ ceases practically to develop when the cream falls below 50 degrees, but other germs which produce this bitter flavor are able to grow and multiply in a low temperature. To prevent this bitter flavor, either pasteurize and cool each day's cream before adding it to the cream can, or add a little good-flavored sour milk or cream to the first skimming, and hold the cream at a higher temperature, so as to give the lactic-acid bacteria a chance to develop.

I prefer to assist the cream to ripen, rather than let it sour when and how it likes. I do not think it practical for the average farm butter-maker to make and keep on hand a pure culture made from the pasteurized skim milk. If care be taken in all the steps, the easiest method is to take half a pint of the sour cream about to be churned and add it to the first skimmed sweet cream. This amount should be sufficient for the ordinary churning held at 50 to 60 degrees, depending on the length of time the cream is kept before churning. But remember, if the flavor of the cream which you use as a culture is not desirable, your are seeding the fresh cream to produce the same flavor, only it is likely to be worse. If your cream has gone wrong, try to get a cup of good sour cream from your neighbor; it is exactly the same as borrowing yeast; or, you may fill a sterilized glass jar with clean, sweet, fresh milk; keep it at a temperature between 60 and 70 degrees. If, when sour, it has a pleasant, clean, acid taste, use it as a culture.

In winter, cream from the deep cans may have to be heated to about 60 degrees, before adding it to the can; otherwise, its being so cold would lower the temperature of the cream in the can, and cause it to ripen too slowly.

The cream which needs the most attention is that which comes from the separator. Many people who have invested in a machine are not making as good butter as when they used the cans, for two reasons: the separator is not well washed, and the cream is not properly cooled. Too much emphasis cannot be placed on the necessity of cooling the cream immediately after it is separated. If left to itself, cream takes so long a time to part with its heat that a splendid opportunity is given for all kinds of bacteria to thrive and produce bad flavors.

It is not sufficient to set the vessel containing the cream in the cold air. It must be set in cold water, and frequently stirred, until the temperature is reduced to 60 degrees, or lower. The quicker the cooling, the better for the cream.

I have talked of ripening cream, but it is not necessary to ripen it; sweet cream may be churned, and a mild, creamy-flavored butter produced. My experiments have shown very little, if any greater, loss in the buttermilk from churning sweet cream. The majority of people like the higher aroma and more pronounced flavor obtained by ripening the cream.

To get good butter, the cream should be churned at least twice a week in summer, and three times in two weeks in winter.

Cream ready for the churn should have a mild pleasant, acid smell and taste, should pour smooth, velvety and free from lumps, and contain in the neighborhood of 25 per cent. butter-fat, or make about 100 pounds of butter to the gallon. This amount is for farm-dairy butter.

Praise for Canadian Cheese

Since the inception of the cheese season, now happily ended, and during which exports for eight weeks, involving an amount of thousands depending on the wages earned at the mills, the sale of cheese was remarkably finished, some estimating as much as 33 per cent., says P. B. McNamara, Canadian Trade Commissioner in Manchester, Eng., under date of November 14th. "Now that the operatives have resumed work," he added, "a better feeling prevails, and prospects for prices are brighter." At time of writing, the ruling price for Canadian was 69s. to 62s., and for Cheshire and Lincolnshire from 60s. to 70s. After stating that stocks on the other side are less than last year, he concludes: "It is gratifying to note that the quality of cheese is perfect, including good keeping qualities in every way. A case in point of 1,000 boxes that was waxed and put away the first week in August, on averaging same this week, a gain was found, and the quality perfect. For keeping purposes, it is advocated that all cheese should be treated in this way. It is very gratifying to learn that there are no complaints, either as to marking the weights or as to quality of the boxes."

A Representative Eastern Ontario Cheese Factory.

Bloomfield Cheese Factory is situated in the Village of Bloomfield, on the C. O. R., in about the center of Prince Edward Co., Ont. This factory was erected in 1902, of hollow concrete blocks. It contains spacious separate apartments for the manufacture of cheese and butter, with modern appliances, such as steam hoist for unloading milk cans, agitators for the milk vats and whey vat; also, boiler, metal whey tank, and large cold-storage apartments. It is kept running nine months in the year; makes cheese about seven months. For the season of 1906 it made 4,703 cheese, weighing 412,911 pounds; season of 1907, 4,774 cheese, weighing 420,066 pounds; season of 1908, 4,580 cheese, weighing 393,605 pounds. Its officers are: President, Colonel Angus Lighthall; Sec.-Treas., David S. Hubbs; Salesman, Joseph J. Brown. Directors—Benjamin L. Young, Walter R. Leavens, Arnold D. Foster, Frank Storey, Wm. J. Gerow. The cheesemaker in charge of this fine factory is Mr. G. A. Sheriff.

What the Figures Tell.

The past season has furnished an excellent object-lesson to dairy farmers, as to the wisdom of providing against the conditions which prevailed this year, by planting and growing fodder corn. The records of the cow-testing associations conducted by this Branch show that some herds have maintained a good flow of milk up to the end of the season, and in almost every case we find this is the result of supplementing the pastures with fodder corn or other soiling crops. Some farmers have also fed, with excellent results, silage which was carried over from 1907.—[J. A. Ruddick, Dairy and Cold-Storage Commissioner, Ottawa.

Whey Butter Output.

The whey butter manufactured by the St. Lawrence Dairy Produce Co., at the Picton, Ont., factory from whey cream collected from a group of Prince Edward Co. cheese factories during the past season amounted to 28,224 lbs., the return for which, less sale expense and packages, was \$5,913.85. One-third of this amount went to the company, one-third to the cheesemakers, and one-third to the patrons. It is said that the output would have been greater but for initial troubles with the separators, due to inexperience, resulting in a great deal of the whey not being separated in some factories.

A Decided Improvement.

Your Christmas number of "The Farmer's Advocate" has just come to hand, and we wish to congratulate you on the excellence of same. Think it is a decided improvement over anything you have had in past years. We are also very much pleased with our advertisement as it appears in this number. Wishing "The Farmer's Advocate" continued success, we remain,
THE BANWELL HOXIE WIRE FENCE CO., Ltd.

GARDEN & ORCHARD

Prince Edward Island Fruit-growers will Co-operate.

The annual meeting of the Prince Edward Island Fruit-growers' Association was held in Prince of Wales College on Tuesday, the 8th day of December. A large number of Prince Edward Island's most successful fruit-growers were present, full of enthusiasm, and eager to discuss the fruit situation and seek better methods in the growing and disposal of the horticultural products of the Province.

vanced that sowing clover for a cover crop took too much moisture from the trees. Another suggestion was to sow clover late and cut it, and leave it as a mulch.

There was a splendid array of fruit on exhibition: apples on plates and in barrels and boxes, and also fine collections of winter fruit. The competition was keen, and Messrs Macoun and Vroom did excellent work in awarding the prizes, which numbered between thirty and forty.

In the specials for fruit in packages which were given by Charlottetown merchants, John Robertson, of Inkerman Farm, a veteran apple-grower, got all the prizes, and also the lion's share in the other exhibits. Among others prominent in the prize-list were A. A. Moore and A. E. Dewar.

The evening meeting was in charge of Vice-President D. J. Stewart, of King's County. J. A. Annear gave an excellent paper on "Orchard Experience." He advised heading the trees pretty high, for easier cultivation, even if it was more difficult to spray and to gather fruit. He said, in order to secure a healthy, vigorous tree, the young tree, when set out, should be well pruned back, as, on account of so many of its roots being destroyed, it could not provide moisture to nourish a full crop at first. He had no trouble in producing good fruit, but his great trouble was in disposing of it.

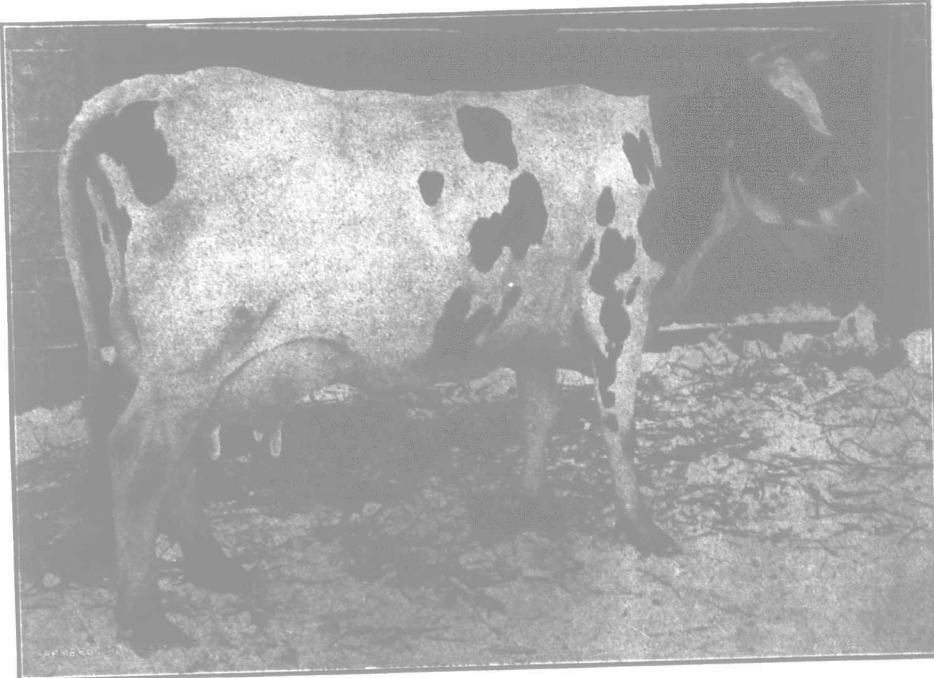
This brought on a discussion on how to get a market for our apples. Mr. Vroom suggested a way to overcome the difficulty. He said a number of fruit-growers should get together, and adopt a brand which, with strictly honest packing, would in a few years become so popular that fruit-dealing firms would be seeking this brand of fruit, and the resulting competition would assure growers good prices.

At the morning session, Mr. Vroom delivered an excellent address on "Packages and Packing," in which he gave explicit directions as to the proper way to pack for shipment in boxes and barrels so that the fruit would not be damaged in transportation.

Prof. Macoun gave a very interesting address on judging fruit at exhibitions. There were four things the judge looked for: large size, freedom from blemish, high color, and finish. This address was listened to very attentively and profitably by fruit exhibitors, who had opportunity to learn a lot that will be useful to them in future.

A question from the question-box brought on a discussion on "Model Orchards," as to their value to the fruit industry. It was replied to by Mr. Vroom, who said they had been a success, as they showed what variety of fruits suited different localities, and saved planters much time and expense in experimenting.

In answer to the question, "What six varieties of apples would you plant in a commercial



Lady Aggie De Kol 4127.

Holstein cow; born May, 1902. Winner of championship over all in three-days' dairy test, at Ontario Provincial Winter Fair, Guelph, December, 1908. Owned by M. L. Haley, Springford, Oxford County, Ontario.

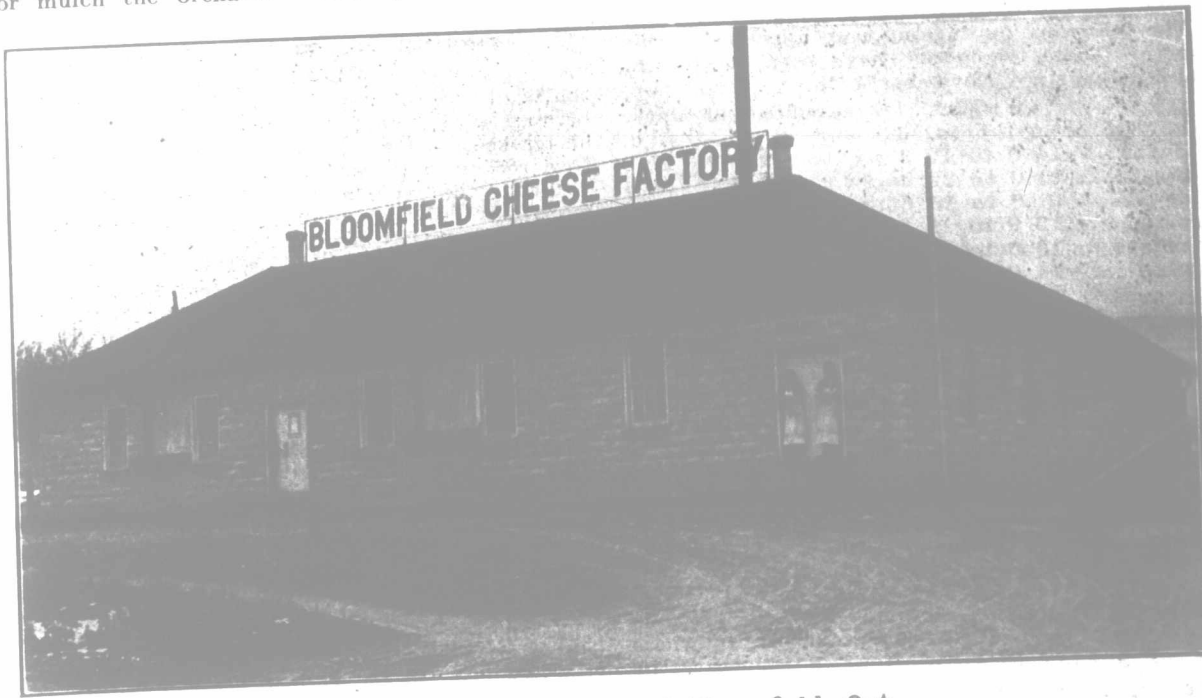
In the absence of the Rev. Dr. Burke, who for so many years has so ably presided over the meetings, John Johnston was called to the chair. The first business was financial matters. The Secretary-Treasurer's report showed a balance on hand of \$108.

The Secretary, A. E. Dewar, read correspondence from nurseries in Ontario, offering to furnish trees for planting at about half the cost orchardists have been paying here.

Prof. Theodore Ross, Secretary of Agriculture, gave a report on the "Model Orchards."

W. T. Macoun, Horticulturist of the Central Experimental Farm, Ottawa, gave a very instructive talk on "Hardy Varieties of Fruits." He thought we need not worry much about hardy, useful varieties from the appearance of such specimens of Gravenstein, King, Alexander, Baxter and Wealthy as he found on the tables.

G. H. Vroom, Dominion Fruit Inspector, spoke, among other things, of the best way to kill the canker worm. His way was to put a soft, sticky substance around the trees in November to catch the female in as she crawled up the tree. Spraying was a tedious way to accomplish the same object. A general discussion followed, as to whether it was best to cultivate or mulch the orchard. The opinion was ad-



A Fine Cheese Factory at Bloomfield, Ont.

orchard?" the following were adopted by vote: Wealthy, Wolfe River, Stark, Duchess, and Inkerman.

The question of co-operative selling was then threshed out, and resulted in the following resolution being adopted unanimously: "Resolved, that, in the opinion of this Association, it is highly desirable that a co-operative association be established to dispose of the rapidly-increasing fruit, and that a committee be appointed to bring the same to a successful issue; and, failing this, to devise some means for the profitable disposal of Island fruit." Prof. Theodore Ross, A. E. Dewar and John Newson are the committee.

A resolution of appreciation of the services of Rev. Dr. Burke to Island horticulture, was placed on record, as was also a resolution asking the Federal Government to provide a thoroughly capable man to instruct farmers how to make a success of horticulture. The thanks of the Association was conveyed to G. H. Vroom and Prof. Macoun for their presence and their instructive addresses.

The following officers were elected for the ensuing year: President, A. E. Dewar; Vice-President, D. J. Stewart; and also a Board of Directors for each county, which, with the officers, will compose the Executive.

Island fruit-growers are waking up to the fact that they can produce as good apples as can be grown in the world, and now, if they succeed in establishing and successfully working co-operation in disposing of their goods, as well as in procuring their stocks and supplies, they will make fruit-growing one of the most profitable industries.

W. S.

Apple Trade in Manchester.

P. B. McNamara, Canadian Trade Commissioner in Manchester, Eng., writing the middle of November, referred approvingly to the greater care which seems to have been exercised this year in packing Canadian fruit according to the requirements of the law. No complaints had reached his office concerning the branding of apples shipped to Manchester, and it must be gratifying to the Department of Agriculture and the public generally to know that greater care is now exercised by the packers. "The buyers on this side," he says, "pay attention only to their side of the question, and do not realize, or fail to credit the efforts of fruit inspectors in this matter, the magnitude of their work, and the desire of the Department to extinguish fraud in branding. It repeatedly has been pointed out that at all apple sales sample barrels are emptied for the inspection of the buyers, and, if improperly branded, the price realized is governed by the quality exhibited.

ARRIVED IN POOR CONDITION.

"Receipts to date are on a much more liberal scale, and so far are the largest this season. The total, however, is almost 29,000 barrels less than last year. The quality in most cases was good, but the condition throughout the week from all ports has been decidedly poor, the last two cargoes from Boston being much out of condition, the appearance of the fruit seeming to point to abnormally hot weather at or before shipment. Marks which last week arrived in perfect condition, this week are full of waste. The demand has been very active, especially for sound, but prices for all grades have been affected by the excessive proportion of damage. Canadian consignments are much in evidence, but there are comparatively few really fine parcels, the bulk consisting of unattractive varieties and No. 2 grade fruit, much of which was damaged."

CANADIAN PRICES.

The following quotations were appended to his report. These, of course, have been subject to modification since November 14th:

	Firsts.		Seconds and Slack.	
	s. d.	s. d.	s. d.	s. d.
Baldwins	14 0	to 19 3	12 0	to 17 0
Snows	16 0	to 22 0	12 0	to 18 3
Davis	13 0	to 15 6	10 6	to 14 0
Tolman	12 9	to 15 3	11 6	to 13 0
Greenings	13 6	to 19 6	7 0	to 16 0
Russets	14 0	to 22 6	10 0	to 17 3
Spy	17 6	to 21 6	13 0	to 18 6

New Names Rolling In.

Recent mails have been bringing in subscriptions at the rate of 30 to 50 per day. Renewals are also very encouraging. All indications point to the fact that "The Farmer's Advocate and Home Magazine" never before stood so high as an all-round journal for the farm and the home. Persuade your neighbor to join the progressive class. Every farmer in Canada needs "The Farmer's Advocate." He will farm better and live better for having it in his home. There is no other in Canada just as good, or anywhere near as good. In circulation, in influence, in value given subscribers, "The Farmer's Advocate" stands easily and unquestionably at the head. This is the paper to take.

Experiments with Vegetables and Fruits.

The reports given by Professor H. L. Hutt at the recent annual meeting of the Ontario Agricultural and Experimental Union are of interest to growers of vegetables and fruits in making a selection of varieties for next season. The lots tested are those found to give highest returns at the College during recent years. Varieties whose worth has been established have been dropped from the test list.

In vegetables, 2,023 experimenters co-operated in testing beets, carrots, lettuce, onions and early and late tomatoes. Three varieties were sent in each case.

The varieties of beets were Detroit Dark Red, Eclipse, and Early Model.

Information was asked, not only as to which grew the biggest and gave the heaviest yield, but which were the earliest and of best quality. Many have learned that the largest are by no means the best beets.

Of reports from nearly a hundred experimenters, the majority place the Detroit Dark Red first when both yield and quality are considered. Eclipse ranked first for earliness, but grows too large and rough for winter use when sowed early in the season. To get good beets for winter use, experimenters were advised to sow the seed the latter part of May or first of June. Some experimenters preferred the Early Model, because it grows smooth and shapely, and not too large for winter use, even when sown early.

The following observations by experimenters indicate wherein this work has been of most value:

"This seed must have been better than what we get in the stores, as the beets did extra well."

"I have learned they must be thinned early to get good early beets."

"We have learned that the smaller beets are better than the larger ones for table use."

"The Detroit Dark Red are the nicest I ever grew."

"I grew eight different varieties of beets this year, and Early Model beat them all. I won first prize with it at the Dryden Fall Fair."

One experimenter, of twenty-three years' experience, remarks upon the advantage of making two or three thinnings, as recommended in the directions; first to two inches apart, and then when the beets are about an inch and a half in diameter thinning out again, for in this way there are so many more beets fit for use.

In carrots, the varieties were Chantenay, Danver's Half-long and Rubicon. As with the beets, experimenters were expected to take into consideration quality as well as quantity. Reports from seventy experimenters concede first place to Chantenay, with Rubicon a close second. The Rubicon is a new variety, of good appearance and excellent quality. Interesting observations include:

"It pays to prepare the ground thoroughly and keep the crop well cultivated. After using all we wanted all summer, we harvested one and a quarter bushels of Rubicon, and one bushel of each of the others."

"I find by thinning and cultivating, as per directions, I have much larger carrots than I had last year on the same ground."

"I have taken much more interest in growing carrots, because now I have learned how to grow them, and will follow this method in the future."

"By this experiment I have become acquainted with three of the very best varieties. For my soil I prefer the Danvers Half-long."

The varieties of onions were Prizetaker, Yellow Globe Danvers and Red Wethersfield. These have long been known as the three leading varieties of onions, and among the one hundred and fifty experimenters who have reported, opinions are well divided as to which is the best of the three. On the whole, the Prizetaker seemed to be a favorite because of its size, but both of the others are better keepers for winter use. Those who object to a red onion prefer the Yellow Danvers.

From the reports it appeared that a great many were of the opinion that onions could not be grown as easily from seed as from sets. Several experimenters said that this experiment had proven to them that they can raise a good crop of onions from seed cheaper than from sets.

Experimenters made the following remarks:

"These are the first onions I have grown from seed. I have learned a little about growing them, and will not be without them again while I have a good spot to sow seed in."

"This experiment has taught me most as to spacing and thinning the crop."

"I have learned that onions form fairly large bulbs even when allowed to grow in clusters."

"Prizetaker turned out more onions, but I don't think they are as good keepers as the others."

"I prefer Yellow Globe Danvers for fall and winter, and Prizetaker for summer use."

Experiments with lettuce included Black-seeded Simpson, Denver Market, and Hanson. These are the best among ninety varieties which have been tested at the College. Experimenters were

about equally divided in their choice between Black-seeded Simpson and Hanson. The seed of the Denver Market, for some reason or other, did not germinate well, consequently did not give as good results as usual this year. The most important point observed by experimenters was the advantage of repeatedly thinning out the plants in the rows, first to three inches, then to six, and finally to twelve inches, to obtain full-grown, tender heads.

EXPERIMENT WITH TOMATOES.

Two lots of seeds were sent out for the tomato tests: one lot of three of the later and better tomatoes, Greater Baltimore, Stone, and Success, which, as a rule, can be successfully grown only in southern sections of the Province, or where there is sufficient summer heat to ripen a full crop; and another lot of three of the earliest varieties, Earliana, June Pink, and Wealthy, which are usually in demand in all parts of the Province, but are particularly valuable for the northern sections, where only the earliest kinds can be depended upon to mature a crop. The great popularity of the early varieties over the later ones by the general growers of the country may be inferred from the fact that, while there were only 151 applications for the later ones, there were 455 for the early varieties.

The records of the experimenters show that Success has been the favorite with those who conducted the test of late varieties. Greater Baltimore ranked second, and Stone third.

Among the experimenters with the early varieties, there was a much greater diversity of opinion as to which is best. A summary of results showed that Earliana is still the favorite, with Wealthy a close second, and June Pink third.

Following are some observations:

"We never got as good seed nor had as strong plants before."

"The most important result observed is that we had ripe tomatoes this year, instead of green ones. Thank you very kindly for the seeds."

"Spreading out the vines as directed in the instructions certainly makes a material difference in the earlier ripening of the fruit."

"June Pink is not profitable enough for the market because of its color. Wealthy is certainly a good cropper, but Earliana still leads with us."

"June Pink is the best for slicing, being solid and meaty. Wealthy would likely lead in the market, being smooth and well ripened about the stem. Earliana is the earliest, but usually remains green around the stem, and is not nearly so solid in texture."

CO-OPERATIVE FRUIT TESTS.

In fruit experiments, bushes and trees were furnished to 876 applicants. The Province was divided into two districts, north and south, for experimental purposes, by a line running from Collingwood to Kingston. The varieties distributed are suited especially to home use, giving as much variety as possible, and covering the season.

Over four hundred varieties of strawberries have been tested during the past fifteen years, and it has been found that no variety retains its supremacy very long; old varieties gradually give way to newer and better ones. The list offered to experimenters has been changed to include the newer and better kinds. The reports of co-operative testing during the past fifteen years include Wilson, Bubach, Williams, Bederwood, Haverland, Woolverton, Van Deman, Clyde, Glen Mary, Saunders, Tennessee, Irene, Splendid, Fountain, Ruby, and Parsons. The varieties sent out for the past two years have been Splendid, Fountain, Ruby, and Parsons. From the reports received, Splendid and Ruby have been the favorite varieties. Both are heavy yielders, of fair size, and good dark-colored fruit. Splendid is a good early, and Ruby a good main crop or later variety.

OBSERVATIONS BY EXPERIMENTERS.

A few observations of experimenters, as to what they have learned from the work, are:

"I find you can scarcely get the ground too rich with well-rotted manure, and that it is not well to let the runners set too thick."

"It does not do to plant strawberries on ground lately broken out of sod, as the white grub is almost sure to destroy them."

"I find no loss of plants when planted from my own stock. Those from a distance are often too dry to live."

"I find, by thinning out plants to five or six inches, I have more and better fruit. I mulch the patch with stable manure, and the result is usually a large crop of fine berries."

"I have learned that it pays to experiment on a small scale, and plant in quantity those that do best on my soil."

EXPERIMENT WITH RASPBERRIES.

Marlboro', Cuthbert, Columbian and Golden Queen always have been considered the best raspberries for home use. The Perbert, a new variety, it was stated, might take the place of Cuth-

bert in time, but as yet the plants are very high-priced.

About two hundred reports show that Marlboro' is the leading early red, and Cuthbert the main-crop red raspberry. Columbian was the best of the purples, and Golden Queen the best of the yellow raspberries.

The varieties of black raspberries distributed were Gregg, Kansas, Palmer, and Older. Other varieties sent out in earlier years, and discarded, were Souhegan, Tyler, and Hilborn. Gregg still leads the list in southern sections, where it stands the winter. Older is the hardiest of the lot, and does well where the others are too tender.

Blackberries distributed for testing were: Agawam, Eldorado, Kittatinny, and Snyder. On the whole, Agawam has given the best results throughout the country, because it is one of the hardiest, but in southern sections the Kittatinny is still the favorite.

EXPERIMENT WITH CURRANTS.

Two experiments have been in progress with currants for a number of years, one with the red and white varieties, and another with the blacks. The varieties sent out for the former have been Fay, Red Cross, Victoria, and White Grape. Red Cross is the heaviest yielder of the red varieties, although Fay is preferred by most of the experimenters because of its extra large fruit. White Grape outyields all the other kinds, and is especially desirable for home use, because of quality. Black currants included Champion, Leese, Naples, and Black Victoria. Champion has given a little the best results, with Naples a close second. With most of the experimenters, however, Black Victoria is a favorite, because of its larger size.

The English, or European, and the American gooseberries, comprising Pearl and Downing, two of the American sorts; Whitesmith, one of the best English varieties, and Red Jacket, a hybrid between one of the American and one of the English varieties. Plants for this test were sent to 648 experimenters. The results ranked them in the following order for production: Pearl first, with Downing a close second; Red Jacket third, and Whitesmith fourth. Whitesmith, however, is a favorite wherever it can be grown free of mildew.

Grapes have been tested, to encourage their more general distribution. Two different lists of varieties were offered, one adapted more to the southern section, which included Concord, Wilder, Niagara, Brighton, Lindley, and Vergennes, and the other included a few of the earliest ripening kinds, most likely to mature in the shorter seasons of northern sections. The varieties in this list were Champion, Worden, Winchell, Delaware, Lindley, and Moyer. Both of these lists include red, white and black varieties. As it takes grapevines about three years to begin bearing, no definite results of comparative yields are yet available.

EXPERIMENT WITH APPLES.

The co-operative test with apple trees has been in progress for three years, 1,219 lots of trees having been distributed. The reports so far deal only with the success or otherwise of the plantings and the rate of growth of the trees. On the whole, these trees have done well, and many experimenters report that all are living.

In making the selection of varieties, the difference in climatic conditions between the northern and southern parts of the Province had to be considered; consequently, two different lists were offered. Those selected for the southern sections were Primale, Gravenstein, McIntosh, Blenheim, Rhode Island Greening and Northern Spy—all apples of excellent quality, and covering the season well, from the earliest to the latest. The northern list included Transparent, Duchess, Wealthy, McIntosh, Scott's Winter and Hyslop Crab, all hardy varieties which will be most likely to succeed where the winters are severe.

Welsh Apple Market.

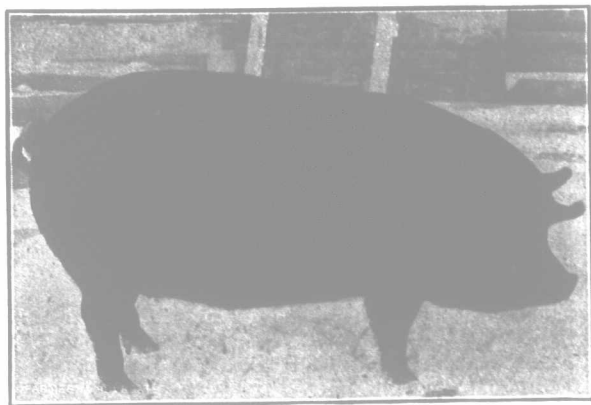
In stating that the Welsh are great apple-eaters, the United States Consul at Cardiff writes in regard to their purchases of this fruit: The market is supplied during the late summer months by English growths, which will have disappeared before Christmas, with the exception of the Russet. Canadian apples then follow on in large quantities, shipped direct from Montreal to Cardiff in barrels of 120 pounds. The Baldwin is diff in barrels of 150 pounds, and these in barrels sell at 15s. to the favorite, and these in barrels sell at 25s. (\$3.65 to \$6.08), according to market and quality, delivered at Cardiff. Sales are by auction on arrival. The price of the barrels is included, and these are subsequently sold at a nominal price, either to English farmers, or to be broken up as firewood.

A limited number of Newton Pippins from the Pacific coast reach this market in the late autumn. They are sold as a dessert apple at advanced prices. They never bring under 8 cents per pound, that being the top price for Baldwins. After Christmas they generally bring from 10 cents to 12 cents. They and the Cana-

dian apples take a clear field until the end of March, when the Australian and Tasmanian appear.

Canadian Fruit in the Antipodes.

"Unusually large supplies of apples, with some pears, have already arrived from California," wrote J. S. Larke, from Australasia, to the Trade and Commerce Department, Ottawa, under date of October 27th, 1908. "Canadian-Australian mail steamers have not only brought the full capacity of their storage, but freight steamers have contributed an unusual share. The Waiwera, which arrived from San Francisco, had 18,000 cases of apples. Some Canadian are expected by the Canadian mail steamer, due to arrive on Monday next, but they will meet with a pretty full market. As a consequence, prices rule below those obtained last year from 2s. to 4s. per case. These prices will still yield a good return to the grower, and it is believed that, though the quantity imported will be at least double that of last year, Australia will readily take the quantity at fair prices."



Oxford Daisy 20389.

Berkshire sow. Winner of first in class over six and under nine months old, at Ontario Provincial Fair, Guelph, 1908. Weight, 361 lbs. Owner, Joshua Lawrence, Oxford Centre, Ont.

POULTRY.

Attentions that Pay.

Did you ever sit down in a bright, dry hen-house on a winter day and pound up bones on a block of wood, watching the busy, red-combed pullets dart hither and thither after the marrowy flattened scraps? If not, there is an explanation why you may have had poor success in getting winter eggs. Laying hens, particularly, are greedy for bone and meat foods. They seem to supply certain elements, probably phosphates and protein, that are especially needed by the poultry constitution. Of course, a bone-grinder is a great economy of labor, where any considerable flock are kept, but many farmers and others who keep small flocks of poultry do not have bone-grinders, and these could spend many a profitable half hour in the poultry house pounding up bones with an axe or heavy hatchet. The writer has been using some sparerib bones of late, and it is simply astonishing to see how eager the birds are for every scrap. Crockery and stone chinaware may also be pounded up in this way to about the size of wheat grains, thus affording the grit which to the chicken takes the place of our teeth. It will be noticed that the pullets which are most eager for these titbits, bone, grit, etc., will be the first to lay. This may probably be explained on a dual hypothesis. The bone, grit, etc., undoubtedly hastens egg production, and, on the other hand, as a pullet begins to engage in the exacting function of egg-production, her system makes new and larger demands.

At any rate, we have repeatedly noticed the above-mentioned fact, and have as often demonstrated to our own satisfaction that these little attentions amply pay. One great advantage of them is that the moments spent among the flock serve to interest the attendant in his birds, and awaken him to the need of regular feeding, watering, fresh litter, clean quarters, exercise, light, and ventilation.

Many a farmer feeds his poultry on valuable grains all winter long, deriving little or no return in eggs, and often having the satisfaction of carrying out dead hens, mayhap suffering a serious outbreak of disease. With just a few extra moments of care and attention, the health of the birds would be preserved, and a liberal return in winter eggs obtained for feed consumed. In the extra lies the profit.

Western Ontario Poultry Ass'n.

The annual meeting of the Western Ontario Poultry Association was held in the City Hall, Guelph, December 10th. President Wm. McNeill, in opening the meeting, thanked the individual members of the Association for the efforts they had put forth in making such a large showing at the Winter Fair. He also referred to the good work done by the committees who had charge of the special prize list, and expressed appreciation of the kindness of specialty clubs in giving special prizes.

A resolution adopted read: "That it having come to the knowledge of this Association that the Canadian National Exhibition have ordered plans for the erection of a new poultry building, that this Association wishes to tender a hearty vote of thanks to the Canadian National Exhibition Association, and would, if given an opportunity, have a committee to confer with them as to details."

A second resolution in this regard was: "That the Chairman appoint a committee of three, to be available to confer with the Canadian National Exhibition Association."

The Chairman named L. H. Baldwin, F. A. Woodward and Prof. W. R. Graham as a committee.

The officers elected for 1909 are: Honorary Presidents, Hon. James Duff, Toronto; Hon. Nelson Monteith, Stratford; President, L. H. Baldwin, Toronto; 1st Vice-President, Richard Oke, London; 2nd Vice-President, W. J. Teale, Guelph. Directors—Jos. Russell, M. P., Toronto; A. W. Tyson, Guelph; G. G. Henderson, Hamilton; T. H. Scott, St. Thomas; P. L. Greer, Owen Sound; T. J. Kiley, London; N. K. Cornwall, Thamesville; C. H. Wilson, Hawkestone. Representatives to Canadian National Exhibition.—Wm. McNeill, London, with Wm. Barber, Toronto, a second representative, if two can be secured. Representatives to Provincial Winter Fair.—Wm. McNeill, London; A. W. Tyson, Guelph; L. H. Baldwin, Toronto; W. Tregwin, Toronto.

DIRECTORS' MEETING.

After the annual meeting, the newly-elected Directors met, and the Secretary read communications from the Secretary of the Canadian Leghorn Club, the Secretary of the Canadian Game and Game Bantam Association, the Secretary of the Turkey and Water-fowl Club, the Secretary of the Canadian Ornamental Bantam Association. That part of the communication from the Turkey and Water-fowl Club, recommending that, in the event of a new building being procured for the next show, an aisle be provided for turkeys and water fowl, with coops raised off the floor, was referred to the Winter Fair Board.

The following recommendations were made regarding changes in the prize list for the classification of the Poultry Department for the next show:

1. That, as there are about twenty Anconas in the present show, a separate class should be given for them (to be classified with the Mediterraneanans).
2. That the class for Poland, Buff Laced, be changed to read Poland, Buff Laced Bearded.
3. That the class for Game Bantams, Duckwing, be divided, making a class each for Game Bantams, Golden Duckwing, and Game Bantams, Silver Duckwing.
4. That the class for Bantams, White Booted, be made into two classes, one for Bantams, White Booted Plain, and one for Bantams, White Booted Whiskered.
5. That the class for Bantams, Brahma, be divided, making classes for Bantams, Brahma Light, and Bantams, Brahma Dark; but if the extra class cannot be added, change the wording of the class to Bantams, Brahma Light, and have the Bantams, Brahma Dark, show in the Bantams, A. O. V. class.
6. That a class be added for Mallard Ducks.
7. That the following classes be added to the Pigeon list for birds bred in 1909: Carrier, any color; Pouter, any color; Jacobin, any color; Magpie, any color; Swallow, any color; Owl, African, any color; Owl, English, any color.
8. That the class for Pouter Pigmy be divided, making a class for Pouter Pigmy, Blue or Black Pied, and a class for Pouter Pigmy, A. O. C.
9. That there be only one class for Trumpeter, to read Trumpeters, any color.
10. That the class for Jacobin, Red or Yellow, be divided, making classes for Jacobin Red and for Jacobin Yellow.
11. That the class for Fantail, Blue or Black, be divided, making classes for Fantail Blue and for Fantail Red or Yellow.
- 12.—That the class for Magpie, Red or Yellow, be divided, making classes for Magpie Red and for Magpie Yellow.
13. That a section be added to the sale class for Pigeon, Any Variety.

The following judges for the Fair of 1909 were recommended to the Provincial Winter Fair Board: Plymouth Rocks—H. P. Schwab, Irondequoit, N. Y. Buff Orpingtons and all Leghorns except R.-C. White—R. Oke, London. Spanish,

Black and White Orpingtons, Dominiques, Partridge Wyandottes, Anconas, Javas, LaFleche, Creve-Coeurs—N. Cosh, Box K, Auburn, N. Y. Games, Game Bantams, Asiatics—S. Butterfield, Windsor. Ornamental Bantams, Silkies and Sultans—Wm. McNeil, London. Rhode Island Reds, and all Wyandottes except Partridge—James Tucker, Concord, Mich. Minorcas, Andalusians and R.-C. White Leghorns—J. H. Minshall, Brantford. Polands, Dorkings, Red Caps, Houdans, A. O. V. Fowls and Water Fowl—L. G. Jarvis, Grimsby. Turkeys—James Anderson, Guelph. Pigeons—C. F. Wagner, Toronto; Chas. Currier, Toronto. Ornamentals—Wm. Barber, Toronto. Utility Pen and Dressed Poultry—Wm. Barber, Toronto; W. R. Graham, Guelph.

In connection with the judging of pigeons, it was suggested that Mr. Currier judge Carriers, Pouters, Barbs, Jacobins, and Owls.

Questions for Poultrymen.

In the Christmas Number of "The Farmer's Advocate," 1908, was a little sketch entitled "A Poultry Genius," describing a revolution in methods of management, and results from an ordinary flock of farm poultry. This little article was based upon an experience from real life. It will be remembered that the incentive which worked the change was reading of articles detailing actual experience of poultry-keepers. We believe there is no other reading so effective or so helpful in bringing about improvement in any line of effort as that which gives details of actual experience and the attendant results. For this reason, we would like to publish in "The Farmer's Advocate" this winter an unusually large number of letters of this kind. Will readers who have been keeping track of their egg receipts and poultry accounts write us, discussing, among others, the following points:

1. Describe in detail your system of housing, feeding and caring for poultry, whether chickens, turkeys, ducks or geese. Helpful wrinkles or valuable new ideas are especially appreciated.
2. Give the results in egg production, contrasting present with former returns.
3. If possible, include an account showing the expense, receipts and profit from the flock for a year or longer. Acceptable contributions will be paid for at regular contribution rates. Early replies are desired.

Experience with Geese.

Editor "The Farmer's Advocate":

Our geese are descendants of the Embden and Toulouse, just a common breeding, as we have found them more profitable, raising more goslings than any fancy or show-bred geese. The geese lay and sit in a goose house where they are not likely to be disturbed, and we find that the nests are better on the ground, as the slight moisture from the soil seems to be beneficial. When the goslings are hatched, we feed on bread and milk or bread and water about five or six times per day, until there is plenty of grass. After that we only feed mornings, as at nights they come home full up to the heads with grass; later on, they run on the stubble, and are fit for market by the last of October. C. W. SIMPSON.
Dufferin Co., Ont.

Chickens Hatched too Late.

At the poultry session, during the week of the Provincial Winter Fair, at Guelph, the time to hatch and the methods to follow were outlined by L. H. Baldwin, of Toronto. Farmers, as a rule, began hatching too late. This was due to having pullets coming late the previous season. If chickens came early in spring, the pullets began laying in the fall, and then commenced to hatch early in the spring. It might be necessary to make use of artificial incubation to hatch the eggs, but clucking hens usually could be secured to raise the chicks.

THE FARM BULLETIN.

Iowa Men for Manitoba.

Two graduates of Ames College, Iowa, have been selected by the Advisory Board of Manitoba Agricultural College, Winnipeg, one for animal husbandry and one for soil physics. Both graduated last summer.

The new Professor of Animal Husbandry, W. H. Peters, stood at the top of the judging team in points made by Iowa College men at the International Show in 1907, and was honored with the appointment of Assistant in Animal Husbandry in Iowa State College last September.

F. G. Churchill, who has been appointed Lecturer in Soil Physics at the Manitoba institution, is considered a strong man in work dealing with physical conditions of the soil.

American Leicester Breeders.

The 20th annual meeting of the American Leicester Breeders' Association was held in Guelph, Ont., on Tuesday evening, December 8th, the president, James Snell, of Clinton, presiding. The report of the Secretary showed a small decrease in the number of registrations and transfers made in the past year, due to the falling off in sales to the United States. This is attributed to the quarantine regulations, which have been in force for some time, making it necessary to quarantine animals at the boundary lines for thirty days.

The report showed, however, that a comfortable balance was in the hands of the treasurer, and, consequently, the secretary was ordered, by a vote of the members, to proceed at once with the publication of Vol. 6 of the Leicester Record.

Grants were made, giving \$10 each to the Brandon and Winnipeg, Manitoba, summer fairs; also \$25 to the Provincial Winter Fair, at Guelph. These grants, in the past, have been the means of bringing out a very strong showing of the Leicester breed at these fairs, as they are made to exhibitors who have never won the specials of the Association.

The names of the following were voted to be recommended to the different Fair Boards as judges at the 1909 shows:

At Chicago.—C. E. Wood, of Freeman, Ont., with J. M. Gardhouse, of Weston, Ont., as reserve.

At Toronto.—J. M. Gardhouse, with R. J. Garbutt, of Belleville, as reserve.

At London.—Wm. Douglas, of Tuscarora, Ont., with J. T. Gibson, of Denfield, as reserve.

It was also voted to request the appointment of a Leicester breeder as judge of Leicesters at the Winter Fair, Guelph, and James Douglas, of Caledonia, was selected for this honor.

The election of officers resulted as follows: President, C. E. Wood, Freeman, Ont.; Vice-Pres., A. Whitelaw, Guelph, Ont. Sec.-Treas., A. J. Temple, Cameron, Ill. Directors—James Douglas, of Caledonia; Oliver Turnbull, of Walton; G. B. Armstrong, of Teeswater; Alex. Hastings, of Cross Hill, and John Marshall, of Cass City, Mich.

Resolutions of condolence were adopted, addressed to the family of John Hastings, of Cross Hill, Ontario.

Guelph was chosen as the next meeting-place, in December, 1909.

The question of the quarantine was discussed, pro and con., but no definite action was taken by the Association.

Immediately following the business session, an anniversary banquet was enjoyed by the members in the Council Chamber of the City Hall. Among the prominent guests were the Hon. J. S. Duff, Provincial Minister of Agriculture; J. C. Snell, of "The Farmer's Advocate"; John Campbell, Woodville; A. W. Smith, M.P., Maple Lodge; J. M. Gardhouse, Weston, Ont.; J. C. Duncan, of Lewiston, N. Y., and others, who responded to toasts. The members and guests all voted it a most enjoyable time, and hoped for many more anniversaries to come. Much credit is due to Secretary Temple for the magnificent and complete arrangements.

To Our Club-raisers.

There are thousands of farmers who do not know what they are losing every year through not being subscribers to "The Farmer's Advocate and Home Magazine." Therefore, we want all readers of "The Farmer's Advocate" to act as club-raisers this year, and send us large lists of NEW SUBSCRIBERS.

If you send us two new names and \$3.00 to cover same (each new subscriber paying \$1.50), we will mark date on your paper forward one year as remuneration to you; or, for each single NEW NAME, accompanied by \$1.50, we will advance the date of your address label six months. Cash commissions or premiums, as preferred, for larger lists of new names.

In clubs of FOUR RENEWALS OR OVER, we will accept \$1.25 each.

Premiums not included in club offers.

Start raising your club immediately. Get "The Farmer's Advocate and Home Magazine" into every household in your locality.

Home Magazine Worth the Price.

I am a reader of your valuable paper for the last four years, and would not be without it. Would be willing to pay \$1.50 for the Home Magazine if I were not a farmer.

King's Co., P. E. I. DOMINICK B. BOWLEN.

The latest benefaction of Sir William Macdonald, of Montreal, is the sending of copies of "The Letters of Queen Victoria," recently published by the King's command, to nearly one thousand public schools in the Province of Quebec.

Trapping Moths by Electric Light.

In order to mitigate the pest of caterpillars, which is wreaking such havoc in defoliating the forests of Germany, a novel experiment has been adopted, according to Chambers' Journal.

The irresistible fascination of the candle-flame to the moth is well known, and entomologists are aware that street electric arc lamps afford a happy hunting ground. The German authorities have turned this point to advantage. An electric light is erected on a suitable tower, beneath which is a deep funnel-like vessel carrying powerful revolving exhaust fans. Those electric lights are fitted with powerful reflectors, which project the light in two well-defined rays upon the dark background of the forest, half a mile away, in much the same way as the beams of a searchlight. The result is described as remarkable. The hordes of brown moths that lay the eggs producing caterpillars in such enormous quantities, dazzled by the light, come fluttering hastily towards its source. As they near the lamps, they are caught in the vortex set up by the revolving fans, are sucked up and swept through the funnel into a suitable receiver, subsequently being destroyed in the furnaces. So eminently successful was the first night's experiment, when some three tons of moths were caught, that another similar installation is being erected.

Though the defoliation of the trees may not be completely arrested, this wholesale destruction of the plague will certainly result in a heavy diminution in the ranks of the caterpillars, and the timber will be saved. The cost of installation would, of course, be considerable, and the destruction of a good many beneficial species, along with the injurious ones, would be unavoidable.

Dairymen's Convention in Prescott.

The elaborate programme to be given at the convention of the Eastern Ontario Dairymen's Association, arranged for January 6th, 7th and 8th next, in the town hall at Prescott, includes addresses by Hon. Sydney Fisher, Hon. J. S. Duff, C. C. James, President G. C. Creelman, J. A. Ruddick, Ex-Governor Hoard, of Fort Atkinson, Wis.; Geo. H. Barr, G. G. Publow, Frank Hems, of London; J. H. Grisdale, and others competent to talk on dairy questions.

Wednesday, January 6th, is farmers' day. "Problems of the Dairyman," "The Work of Cow-testing Associations" and "Winter Dairying" will form the major part of the session, while general discussions and a question drawer are also important features. The making of a modern dairy farmer will be Mr. Hoard's subject on Wednesday evening. Thursday is cheese and butter makers' day.

For German-Canadian Trade.

A Canadian Associated Press despatch, dated Berlin, Germany, December 8th, announced that as the result of the meeting of representatives of influential and commercial bodies, an Industrial Association will be formed for promoting good trade relations between Germany and Canada. An influential executive committee, representing weighty financial and commercial interests, has been elected. Influential manufacturers and merchants recognize that nothing can satisfy them except the creation of conditions of equality, under which Britain and Germany shall compete in trade with Canada. The value of Germany's exports to Canada declined from 35,800,000 marks in 1903 to 21,800,000 marks in 1905, though it increased in the following years to 24,500,000 marks and 29,600,000 marks, respectively. On the other hand, the value of Germany's imports from Canada averaged during the five years, ending 1907, little more than £450,000.

New Cheese Factory and Creamery.

A co-operative cheese factory and creamery company, known as "The Arkona Dairy Co., Ltd.," has been organized at Arkona, Ont., by A. Tinkelpaugh. Stock is being subscribed, and milk from over 1,000 cows is guaranteed. The building will be constructed on modern lines, and the best machinery, including a pasteurizing plant, installed. A copper-lined cream cooler, of 620-gallon capacity per hour will aid greatly in producing gilt-edge butter.

Wheat Traffic via Pacific.

Chas. M. Hays, of the Grand Trunk Pacific Co., is reported in newspaper interviews, as predicting that, with the completion of the Panama Canal and the Grand Trunk Pacific from Winnipeg to Prince Rupert, will come the hauling of grains from the prairie of Western Canada to the Pacific coast, in preference to hauling to Port Arthur, and loading or storing at the lake ports. His claim is that, "In my lifetime we shall haul to the Pacific as much grain as we haul to the Atlantic."

International Institute of Agriculture.

Reports indicate that the sessions of the International Institute of Agriculture in Rome, Italy, have been fraught with a careful consideration of matters which affect the rural population in all parts of the world. As outlined editorially in "The Farmer's Advocate" of April 13th, 1905, the Institute is cooperative in plan and purpose—an international institution, absolutely non-political in its aims, having before it the conditions of agriculture in every country, and publishing periodical announcements of the quantity and quality of the crops in hand, facilitating the production of needed crops, and helping to attain better prices. Other objects include the preparation of reliable information as to the demand and supply of agricultural labor, promotion of agreements necessary for collective reference against diseases of plants and domestic animals, and the exercise of a timely influence on the development of societies for rural co-operation, for agricultural insurance, and for agrarian credit.

As was pointed out at that time, this looks like a big project. The leading nations have been represented by specialists, but, it would seem, by too few experienced agriculturists. Forty-eight nations have been represented by one to six delegates. Hon. Sydney Fisher, who was elected first Vice-President, has had the honor of presiding at several sessions, while Dr. J. G. Rutherford is Canada's representative on the permanent committee.

The official statement of the United States Government was presented by David Lubin, who began by quoting the opinion of Secretary James Wilson, as follows: "The need of all interests requires that there be published at frequent intervals during the crop season, by a disinterested agency, reliable information of the acreage, condition, production and value of the principal crops. A knowledge which covers only parts of the area of a given crop may be misleading, because, to judge for the entire area from conditions in some localities may give wrong results; hence, the producer and others interested need a knowledge of the crop of the entire area expressed as a total."

Mr. Lubin pointed out that such total summary of the world's crop conditions, when disseminated among those nations that adhered to the International Institute, should materially lessen price fluctuations. What was considered to be a satisfactory means of securing the desired information was outlined in detail.

"The ultimate success of the Institute," said Mr. Lubin, "depends largely upon the adoption of a uniform standard of crop-reporting by the various adhering nations. To that end, it is recommended that the Institute confer with the representatives of adhering nations for the purpose of suggesting and instructing representatives of those nations in methods which are accepted by the officials of the Institute as most satisfactory and effective in producing accurate results. If any of the methods followed by the United States are found to be especially efficacious, the Government of the United States will be pleased to extend every courtesy to representatives of foreign powers in obtaining full information as to methods of procedure."

"The current statistics required of the adhering Governments by the International Institute should be furnished promptly by each Government, and all requests for explanation or information emanating from the Institute should receive immediate attention. The success of the Institute can be assured only by constant and efficient work in this respect. In some Governments the information is compiled from various reports, and obtained from several offices or departments. Therefore, no separate department can logically be charged with the compilation; and the requests from the Institute will be subdivided and referred to several departments. The compilation of the matter in this way will lead to serious delays; therefore, the United States recommends that each adhering nation appoint a statistician of practical experience for the purpose of compiling or supervising the compilation of all information desired by the Institute, and that all letters and requests for information from the Institute be referred directly to such employee, who will prepare the matter to be transmitted to the Institute."

Short Course at Essex.

An announcement from A. McKenney, B.S.A., of the Agricultural Branch of Essex High School, states that a six weeks' course in agriculture has been arranged to open on January 4th, 1909. The object is to assist farmers' sons and others who have been out of school for a time and cannot find it convenient to improve their education by a course at college. Stock judging, seed judging, cultivation and drainage, weeds and insects, fruit and vegetable growing, and arithmetic and book-keeping are to be handled by competent teachers, the aim being to suit conclusions to conditions as they exist in Essex County.



Entrance and Central Facade.
International Institute of Agriculture, Rome, Italy.

Owners of Prize Grain.

Following is a list of winners with grain and roots in the general collection, at the Provincial Winter Fair:

- Fall Wheat, any White Variety—1, T. Baker & Son, Solina (variety, Gold Coin); 2, Andrew Schmidt, Mildmay (Genesee Giant); 3, Geo. N. Harris, Lynden (Abundance); 4, Walter Hartman, Clarksburg.
- Fall Wheat, any Red or Amber Variety—1, Jas. Snetsinger, Eamer's Corners; 2, Andrew Schmidt, Mildmay (Baltic Red); 3, Isaac T. Knight & Co., Arkell (Michigan Amber); 4, D. H. Taylor, Corwhin (Nagar).
- Spring Wheat, any Variety—1, A. R. Wood, Fergus (Red Fife); 2, Walter Hartman, Clarksburg (Red Fife); 3, Thos. B. Lush, Barrie Hill (Red Fife); 4, S. A. Northcott, Taunton (S. W. Goose).

Goose Wheat—1, Thos. B. Lush, Barrie Hill (Goose); 2, A. R. Wood, Fergus (Goose); 3, S. A. Northcott, Taunton (Goose); 4, Andrew Harmer, Plattsville (Goose).

Oats, any White Variety—1, James Snetsinger, Eamer's Corners; 2, Andrew Schmidt, Mildmay (Sensation); 3, Wm. Lewis, Dunsford; 4, T. Baker & Son, Solina (Prince Royal).

Oats, any Black Variety—1, Thos. B. Lush, Barrie Hill (Joanette); 2, Andrew Schmidt, Mildmay (Fifty Pounder); 3, N. P. Schmidt, Mildmay; 4, G. B. Hood, Guelph (Fifty Pounder).

Barley, any Six-rowed Variety—1, Walter Hartman, Clarksburg; 2, Jas. Snetsinger, Eamer's Corners; 3, N. P. Schmidt, Mildmay (Mandscheuri); 4, Geo. N. Harris, Lynden (Mandscheuri).

Field Peas, any Large Variety—1, Wm. W. Ramage, Thistle (Canadian Beauty); 2, S. A. Northcott, Taunton (Canadian Beauty).

Field Peas, any Small Variety—1, Robert Talbot, Everton (Golden Multipliers); 2, Edward Buckland, Fergus; 3, S. A. Northcott, Taunton (Prussian Blue); 4, Jas. Snetsinger, Eamer's Corners.

Red Clover—1, S. A. Northcott, Taunton; 2, Andrew Schmidt, Mildmay; 3, Geo. Baker, Simcoe; 4, J. A. Fletcher, Valetta.

Alsike—1, Geo. Baker, Simcoe; 2, S. A. Northcott, Taunton.

Timothy—1, Walter Hartman, Clarksburg; 2, S. A. Northcott, Taunton.

Potatoes, Long White Type—1, Richard Houston, Dixie (American Wonder); 2, A. R. Wood, Fergus (Empire State); 3, A. R. Wood, Fergus (Improved Mammoth); 4, E. Buckland, Fergus.

Potatoes, Round White Type—1, F. W. Krouse, Guelph (First Choice); 2, Jas. Snetsinger, Eamer's Corners; 3, H. E. Alton, Jr., Everton (Delaware); 4, Geo. N. Harris, Lynden (Green Mountain).

Potatoes, Other than White—1, Scanlon Bros., Ennotville (Pearl of Savoy); 2, Isaac T. Knight & Co., Arkell; 3, D. H. Taylor, Corwhin; 4, Jas. Snetsinger, Eamer's Corners.

Corn, 10 Ears, any 8-rowed Variety Flint—1, Geo. Baker, Simcoe; 2, L. D. Hankinson, Grovesend (Longfellow); 3, W. J. Fuller, Leamington (North Dakota); 4, D. W. Campbell, Snelgrove.

Corn, 10 Ears, any 12-rowed Variety Flint—1, Edward Smith, Ridgetown; 2, D. W. Campbell; 3, Arch. Maccoll, Aldboro (Imp. Compton's Early); 4, W. J. Campbell, Snelgrove.

Corn, 10 Ears, any Dent Variety, White—1, G. W. Coatsworth & Son, Kingsville (White-cap Yellow Dent); 2, B. A. Smith, Ruthven (W. C. Y. Dent); 3, L. C. Palmer, Kingsville (W. C. Y. Dent); 4, J. O. Duke, Olinda (Silver Wine).

Corn, 10 Ears, any Dent Variety, Yellow—1, A. H. Woodbridge, Kingsville (Reid's Yellow Dent); 2, G. W. Coatsworth & Son (Reid's Yellow Dent); 3, John P. Pearce, Staples (Imp. Leaming); 4, J. A. Fletcher, Valetta.

CANADIAN SEED-GROWERS' ASSOCIATION SPECIALS.

Fall Wheat, any Variety, Group Exhibit—1, C. R. Gies, Heidelberg; 2, Herbert Davidson, Mount Nemo; 3, Wm. Lewis, Dunsford.

Spring Wheat, any Variety, Group Exhibits—1, Robert McKay, Maxville.



Grande Salle des Fêtes.
Interior International Institute of Agriculture at Rome, in which the organization was perfected.

Oats, any White Variety, Exhibits of Hand-selected Plants—1, John Hunter, Wyoming; 2, C. R. Gies; 3, Arch. Maccoll, Aldboro; 4, Wm. Lewis.

Oats, any White Variety, Group Exhibits—1, Duncan Carmichael, Jr., West Lorne; 2, Wm. W. Ramage, Thistle.

Barley, any Six-rowed Variety, Exhibits of Hand-selected Plants—1, C. R. Gies; 2, Arch. Maccoll.

Barley, any Six-rowed Variety, Group Exhibits—1 and 2, Duncan Carmichael, Jr.; 3, Chas. L. Mackey, Kinsale.

Corn, 10 Ears, any 8-rowed Variety Flint—1, L. D. Hankinson, Grovesend.

Corn, 10 Ears, any 12-rowed Variety Flint—1, Ed. Smith, Ridgetown.

Corn, 10 Ears, any Variety, White Dent—1, Jos. C. Thomas, Blytheswood; 2, John Hunter.

Corn, 10 Ears, any Variety, Yellow Dent—1, G. W. Coatsworth & Son; 2, A. H. Woodbridge, Kingsville; 3, John P. Pearce; 4, Duncan Carmichael, Jr.

Corn, 10 Ears, any Variety, Sweet (Late)—1, H. & J. McKee, Norwich; 2, J. O. Duke.

Corn, any Variety, 10 Ears, White Dent—B. A. Smith, Ruthven.

Corn, 10 Ears, any Variety, Sweet (Early)—1, Chas. Pearce, Wellington.

Wheat, any Spring Variety, Shown by a Beginner—Walter Hartman, Clarksburg.

Barley, any Six-rowed Variety, Shown by a Beginner—Walter Hartman, Clarksburg.

Corn, 10 Ears, any 8-rowed Variety Flint, Shown by a Beginner—1, Robert Thompson, St. Catharines; 2, J. O. Duke; 3, W. J. Fuller.

Corn, 10 Ears, any Variety Yellow Dent, Shown by a Beginner—Arch. Maccoll, Aldboro.

Potatoes, Round White Type, Shown by a Beginner—Geo. N. Harris, Lynden.

The handsome Klinck trophy, a sterling-silver cup, donated by Professor L. S. Klinck for the best 25 ears of Dent corn grown in Ontario in 1908, on a special plot, from hand-selected seed, was won by G. W. Coatsworth & Son, of Kingsville. The Bate cup, donated by Thos. C. Bate, of Ottawa, for 25 ears of Flint corn, grown under similar conditions, went to Ed. Smith, of Ridgetown, for the second time.

United States Bulletin on Alfalfa.

Farmers' Bulletin No. 339, entitled "Alfalfa," has just been issued by the United States Department of Agriculture. This bulletin contains a brief resume of the history and spread of alfalfa, which is followed with a rather detailed discussion of the best means of securing and maintaining a stand of alfalfa. The special features under this head are the necessity for inoculation and liming, especially in the East, and the importance of midsummer or late summer seeding to avoid the weeds of summer on one hand, and the danger of winter-killing, which attends fall-seeded plants, on the other.

This bulletin will be furnished free to citizens of the United States upon application to the United States Department of Agriculture, or to Senators, Representatives, and Delegates in Congress. Presumably, a reasonable number would be available to Canadians sufficiently interested to apply, though, as to this, we cannot say positively.

Fair Dates Fixed.

January 13th to 15th.—Ontario Horse-breeders' Exhibition, West Toronto Stock-yards.

January 18th to 22nd.—Eastern Ontario Live-stock and Poultry Show, at Ottawa.

Programme for Brantford Convention.

Educational features abound in the programme arranged for the annual meeting of the Western Ontario Dairymen's Association, to be held in the new Opera House, Brantford, January 13th and 14th of next year. The fact that every citizen of Canada is a consumer of dairy products, and that nearly 250,000 are producers of the raw product, should draw a large attendance.

Dairying in all its branches will be discussed. The production of the milk, cleanliness all along the line, proper sanitation in the production and manufacturing of dairy products, marketing and transportation, will be discussed by the best experts on the American Continent, thus making the Convention an educational feature for the best interests of the whole country. Each day some special feature of note will be taken up, for the purpose of giving distinct emphasis to the subject discussed.

In conjunction with the Convention will be a Dairy Exhibition, consisting of the finest cheese and butter manufactured in Western Ontario. This is an educational feature of great value to the industry, \$360 in cash prizes, besides numerous special prizes, being presented to the cheese and butter makers who put on exhibition the highest-scoring products. The cheese and butter is scored by experts. In addition, a challenge cup, presented by the cheese-buyers of Western Ontario, valued at \$150, will be presented to the cheesemaker securing the highest score.

A dairy-herd competition is also a part of the programme, \$100 in cash prizes being presented to the patrons who have sent through the past six months (May to October) the greatest amount of milk per cow, or butter-fat per cow, to the cheese factories and creameries of Western Ontario. In addition to cash prizes, two Diamond Hall medals will be presented.

On Wednesday afternoon, January 13th, an address will be delivered by ex-Governor W. D. Hoard, of Wisconsin, Editor of Hoard's Dairyman, on a subject of vital interest to farmers, patrons of cheese factories and creameries. Among other speakers who will address the convention are: Hon. Sydney Fisher, Hon. J. S. Duff, J. A. Ruddick, Prof. H. H. Dean, G. C. Creelman, Geo. H. Barr, C. C. James, Prof. R. Harcourt, Prof. F. S. Edwards, Miss Laura Rose, Nelson Monteith, C. F. Whitley, Geo. A. Putnam, and many others of national repute. Everything is free; every person is made welcome. Farmers and patrons from all parts of Western Ontario are specially requested to attend on the afternoon of Wednesday, January 13th, as this session is given over entirely to discussion of interest to them. Single fair can be obtained on all railroads during the week of convention. For programmes, prize lists and further information, write the Secretary, Frank Hens, London, Ont.

Reports from Winnipeg indicate that Swift & Co. are to have strong opposition in the meat-packing business of Western Canada. In one case, it is said, British Capital is backing a company, while another despatch says that Americans are supplying capital and laying plans to merge several packing-houses now doing extensive trade.

Land for Show Purposes.

Can an agricultural society expropriate a field for show and speeding purposes? In other words, can the society force a sale? J. B.

Clause 15, section 1, of the Agricultural Societies Act of Ontario reads:

"All societies, now or hereafter organized, shall be bodies corporate, with power to acquire and hold land as a site for fairs and exhibitions, and, subject to the approval of a meeting of the society called for the purpose, to sell, mortgage, lease or otherwise dispose of the same or any other property held by such societies."

Regarding acquiring a site, section 3 of the same clause reads:

"If the owner of the land selected as a site for fairs and exhibitions approved of at a meeting of the society called for that purpose, refuses to sell the same or demands therefor a price deemed unreasonable by the board of directors, then such owner and such board of directors shall each forthwith appoint an arbitrator, and the arbitrators so chosen shall appoint a third arbitrator, and such arbitrators, or a majority of them, shall appraise the damages for such land."

Ventilation for Dwellings, Rural Schools, and Stables.

A new, compact, 128-page book on ventilation, by Prof. F. H. King, of Madison, Wisconsin, price 75 cents by mail.—To anyone who knows Prof. King, or has read any of his clear and instructive writings, notably the Physics of Agriculture, the above announcement should be sufficient incentive to possess at once a copy of the work under review. The subject is of the greatest importance from both economic and hygienic standpoints, the treatment concise, illustrative, and lucid to a rare degree; the illustrations original and graphic, while the reputation of the author is sufficient guarantee of its reliability and practical value. Prof. King has searched out the most important facts and principles bearing on ventilation, and worked them into this book with a wealth of illustration, and all is told in a plain simplicity of language that a child could not misunderstand. It explains the why and how of ventilation in a most interesting, readable style. And the price brings it within the reach of every householder, every builder, and every stockman.

It should be sold by the million copies. We would like to see one in the home of every subscriber.

We are able to supply this book at the regular retail price of 75 cents per copy, postpaid, while a specially favorable rate from the publisher, Prof. King himself, enables us to offer it as a premium for obtaining one new subscriber to "The Farmer's Advocate and Home Magazine." This is, without question, the best single-name premium on our list. Procure it without delay.

According to a despatch from New York, Professor Wm. Griffiths, a mining expert from Scranton, estimates that the supply in Pennsylvania coal fields will be exhausted in 84 years. He placed the anthracite available for shipment in 1905 at 2,229,201,650 tons.

GOSSIP.

On February 4th, the day following the sale of Shorthorns from the herds of W. G. Pettit & Sons and J. A. Watt, W. C. Edwards & Co., the Millers, John Davidson and Arthur Johnston will sell 50 head of Shorthorns, also at Union Stock-yards, West Toronto, particulars of which may be looked for in these columns later.

At a dispersion sale last month of the herd of grade Jerseys belonging to Mr. W. J. Arnott, of Peel County, Ont., 16 cows sold for an average of \$83, the highest price being \$116. Mr. Arnott states that these cows last year gave a return of a fraction over \$100 each for cream shipped to Toronto. They had been bred for performance, and liberally fed.

Mrs. Bibbs—See here! Why are you unloading all those shingles in front of my door? We haven't ordered any.

Driver—No, mum. They comes wid the compliments of the neighbors. You see, folks thinks from the way your boy acts that we can't afford to buy any.

QUESTIONS AND ANSWERS.

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

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

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

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

Miscellaneous.

BREEDING A SOW.

As there are so many different opinions with reference to this question, I should like to know the correct answer.

How soon after farrowing is a sow ready for service? H. N. B.

Ans.—In some cases a sow will receive service within five days after farrowing, but it is very rarely that conception takes place from such service, and if it does, it is at the expense of the milk supply for the nursing litter. Generally the sow is ready for service within a week after her litter is weaned.

BUILDING CEMENT SILO.

I want to build a silo 35 feet high and 14 feet in diameter, inside measurement. The thickness of wall is ten inches at the bottom and seven inches at the top. How many yards of sand and how many barrels of Portland cement will it take if the cement and sand are mixed to a proportion of eight parts of sand to one part of cement?

1. Is this proportion strong enough? What would be the difference in the number of barrels, one part of cement to eight parts sand, and one part of cement and six parts of sand?

2. Which is the best, to plaster the walls or put it on with a brush?

3. Is it necessary to get a stone mason to build a stone foundation up to the level of the ground? T. E.

Ans.—1. In giving figures for cement construction, only approximate estimates are possible. One hundred and twenty-eight cubic feet of coarse sand or gravel are considered necessary for the construction of 100 cubic feet of wall. This would be increased or lessened, depending on the quality of the sand or gravel, on the proportion of cement used and on the care exercised by the man in building. Your silo would require, approxi-

mately, 1,536 cubic feet or 57 cubic yards of sand. If you use eight of sand or gravel to one of cement, 170 cubic feet or 43 barrels of the latter would be required. If you decided to make the proportion six of sand to one of cement, the quantity of the latter would be about 220 cubic feet, or 55 barrels. The strengths used vary from one to six up to one to twelve, depending on the nature of the sand or gravel and on the object for which it is used. One of cement to seven of sand for the first few feet near the ground, and one to nine for the upper part is considered good proportions for silo construction. This holds good for sharp, coarse sand, or fine gravel. By working in small field stone, taking care not to have them exposed at either inner or outer face of the wall, the proportion of both cement and sand or gravel may be reduced.

2. Two or three liberal coatings with a brush give satisfaction.

3. While it may not be necessary to secure the services of a trained stone mason, it is wise to have it done by someone who understands the work, as the foundation is a very important feature. It is well to dig down sufficiently deep to provide a solid bottom.



Life, Literature and Education.

Every year, some of the daily newspapers, in commenting upon the people who attend the Winter Fair, and the accompanying Women's Institute Convention, at Guelph, refer, with what appears some surprise, to the fact that these crowds differ so little in appearance from those ordinarily seen on city streets. The reporters who record this marvel evidently overlook the fact that the towns and cities throng every day with country people who pass as townfolk, and that it is only the exceptional man or woman from the rural district who may be marked by outretness (if one may coin a word) of raiment or demeanor, as the proverbial "hayseed." Time was, perhaps, when the strenuousness of farm life precluded the attention which the farmer might otherwise have paid to dress, of necessity a very minor consideration in his life; and there are those who still remember the thunderings which the last President of the O. A. C. used to hurl at the heads of visiting farmers' "excursions": "Dress to do credit to your business! If you don't, people will take you at exactly what you look to be!" But the need for such admonishments has largely passed. Farmers, while by no means recognizing any need of concealing their identity as farmers; while feeling, on the contrary, proud of their business, have come to understand the advantages of a "respectable" appearance, and the comparative ease of modern farm operations has left more time for attention to such details. Within five years, we predict, the marvelings of the city reporters will also have passed.

An old man was found dead from starvation in Montreal, and another in London, Ont., during the past fortnight—sad object-lessons as to the wisdom of laying up the little store for the rainy day. Sometimes, it is true, fortune is bitter, and things go continually wrong, yet there are few who need fail to put aside enough, at least, to keep the wolf from the door when old age comes and work is not to be had. Industry, foresight and economy will do much. Upon the other hand, what screw is loose that any man need starve to death in a country of plenty, even of luxury?

Within the past fortnight, two more accounts of the sacrifice of human life to early morning fires have been placed on record, in one case four little children perishing miserably while the parents were in the stables milking. Once more may we repeat—the morning fire, built up with cedar and wood dry as bone from overnight toasting in the oven or close to the stove, is not to be trusted. You may leave it to itself nine hundred and ninety-nine times; the thousandth may do the mischief. Human life is too precious to be risked. Better that the chores should wait.

A recent despatch from Montreal reads as follows: "Seventy-five moving-picture shows do a thriving business here every Sunday, in addition to Sohmer Park, which puts on a straight vaudeville show." Leaving out of the question the wrong or right of such Sunday amusements, a question with which the Lord's Day Alliance will deal, the fact that seventy-five of such places do a "thriving business" in one Canadian city every Sunday shows again the craving of a great mass of humanity for amusement. A percentage of the people—by no means a small one—will have it, good or ill, therefore it behooves those who look to the welfare of the public to see to the class of entertainment provided.

The cinematograph is one of the "shows" most likely to reach the rural districts, being easily manipulated, requiring no cast and no impedimenta in the way of scenery; but it should not be permitted to enter unquestioned. Like many other good things, it has been turned to low and trivial ends, and too often it is given up to absurd and foolish, if not utterly vulgar and indecently suggestive, representations which may provoke a more or less forced laugh from the audience, but which neither interest nor edify. As intended by the inventor, the cinematograph may be an educator, is bound to be when it depicts panoramas of foreign cities or peoples, national events, etc. Can we, as a people, not demand that the representations which enter our village halls and country schoolhouses shall be of this class? What we imperatively demand we shall be given. The moving-picture man has no wish to displease his audience.

A popular conundrum asks the question, "Were Euclid alive to-day, what would he be doing?" to which, ostensibly, the answer is, "Teaching the asses bridge" (pons asinorum). Judging by recent accounts of the lengths to which bridge-playing is being carried, the connection upon which the play of words in the response rests is not any too far-fetched. In one of the recent dailies appeared an arraignment of certain fashionably smart sets in Winnipeg, whose days, it would appear, are largely given up to bridge-playing and champagne-drinking. The next day appeared an article by a Torontonians, asserting that gambling and drinking are by no means absent from the afternoon parties given by ladies of similar social position in Toronto. In both places, it appears, women are the chief offenders. Such conduct among the wives of working men would be stigmatized as disgraceful. In the smart set it simply passes as smart. And yet, the discerning are not fooled.

People, Books and Doings

The London Times refers to retiring President Roosevelt as "The greatest American President" who has appeared since the days of Abraham Lincoln.

On December 10th, Professor Ernest Rutherford, of Manchester University, was awarded the Nobel prize for research in chemistry. The prize

amounting to £8,000, was presented, among other Nobel prizes, by King Gustave, of Sweden. Professor Rutherford, although a New Zealander, is well known in Canada, having spent some years as Professor at McGill University, Montreal. He is only thirty-seven years of age.

Among the more notable items in Lady Blessington's collection of valuable autograph letters, sold in London recently, are some of the most interesting of Thackeray's letters, one describing his efforts, just before "Vanity Fair" brought him prosperity, to get a place in the post office ("What a place," he says, "for a man of letters"), and another showing how he felt toward Dickens: "I have been for the last month the glummiest and most melancholy author who ever cracked a joke with a sad heart; my work shows my dullness, I think, but, on the other hand, there is a fellow by the name of Dickens, who is bringing out a rival publication, and who has written beautifully. Bravo, Dickens! David Copperfield has beautiful things in it, those sweet little inimitable bits which make one so fond of him. And let me tell your ladyship that I think he has been reading a certain yellow-covered book, 'Vanity Fair,' and with advantage, too, for he has simplified his style, kept out the fine words, and, in fact, is doing his best. I am glad of it. I hope it will put somebody on his mettle, somebody who has been careless of everything of late; but I won't go into the details. Ah, my lady, who hasn't his share?"

Homes, and Fireside Universities.

These are the days when lovers of the hearthside university will be planning their winter's curriculum.

It is more than a quarter of a century since Ruskin wrote that inimitable plea of his, "Sesame and Lilies," beseeching, as no one ever did before, and as no one ever has since, that those who feed their intellects should feed wisely, and that those who would draw wealth from literary King's Treasures should draw well. Surveying the field of present-day literature, one cannot help wishing that some second Ruskin would rise in the land to give us order out of chaos, and discretion out of indifference. Yet, since no such pleader is now amongst us, it, perforce, behooves each to become his own censor, and to apply whatever degree of "literary conscience" the gods have given him.

For we believe that there is a "literary conscience" in the most insouciant of us, even; that it is a crime against the mother-tongue and our personal culture to stifle it by wanton lack of selection in the things we read.

"Tell me what you read, and I will tell you what you are." Indeed, you may thereby be told just how great a power you are capable of becoming in the land; you may thereby be ranked with the truly poor or the truly wealthy; you may thereby be attributed the dignity, almost, of royalty, or the obscurity of the unlettered bourgeois. You are the chooser. You alone are responsible.

There is but one requirement for absolute independence in such a nobility, and that is the mere—no, the ineffable—power to read.

Perhaps you long for the halls and libraries of universities. There are universities, almost equally potent with their concrete fellows, on every hand. They consist of collections of true books, to be found in any modern library, albeit not unlike treasures of gold in desert places, that must carefully be sought for.

For, certainly, we must seek substance, not shadow; food, and not foam. Both are there. Both are everywhere.

Perhaps you find enchantment in the foam, provided that it is sparkling. Then, you will fall ravenously upon "The Prisoner of Zenda," Cable's "Cavalier," "Graustark," "Vera the Medium," "The Wire-tappers," and innumerable kindred popular volumes—not books—which teach absolutely nothing, which are lacking in purest English, and which inevitably lower your standard of taste for true literature.

We say "not books," and are reminded of a certain popular poet, who sang thus in a little poem entitled "Taboo":

"Don't call them books!
There's a taboo round that name
Where stands the Avon bard, and
looks
From classic heights,
A galaxy whose fame
No vulgar dabbling brooks.
—Old Cicero and epic Homer
—Julius number one, besides a few
Of later day, for instance Cromer
And Hugo of the realistic cue.
But as for you—Dieu de Dieu!
Don't think that stuff of yours
Is 'Book,' for true as true,
There stands in every nook
Of Fame's old hall, a spook
That grins at you."

And there is more than humor in the skit. It is a wail of regret, and full of wholesome counsel besides.

True, it seems that the commercial, high-paced spurt of the times cannot well be kept out of literary production. Indeed, it is reflected on every hand. As Marion Crawford has expressed it, "The novel is only the pocket-theatre," and pretty much the same end in view—that of present and fitting pleasure—is discernible in prose production everywhere. Yet, while this is so, there can be no "books," and we have yet to discover a single work since Hugo's "Les Miserables," that is fully worthy of the name.

Easy it is to wander on this infinite theme. Yet, there are specific things in plenty for those of us who purpose to consecrate a goodly portion of the long, inviting winter evenings, when domesticity thrives so abundantly, to true study and reading that is to become part of us.

If then, you are a reader of history, you will surely seek out Redpath's work on "Mankind and Nations." You will not avoid the four volumes on mankind, for ethnology is a mighty builder of philosophy, and it is a poor reader who is not in some measure a philosopher. Neither will you pass by Gibbon's "Rise and Fall of the Roman Empire," nor Macaulay's unequalled historical writing, the English in which

is of the purest and most beautiful in all English prose. The manner is Carlyle; and if you look for a more masterful comprehensiveness in style, certainly you will make his acquaintance.

If you are a lover of the descriptive and the sketch, there will be Washington Irving quite within your reach, and forthwith to be numbered among your friends of the fireside.

We will not reflect long here upon Shakespeare. But it ought to be remembered that Shakespeare is more than the playwright. He is first of all the philosopher, and supreme as such. Seek, then, philosophy in his pages.

Of course, you want some fiction. It is the spice of literature, the desert of intellectual feasts. Let not the things said ancient modern fiction be misconstrued into condemnation of fiction generally. Nothing could be further from the desire of any reviewer. But seek real fiction—fiction that contains truths and philosophy, fiction that grasps the broader phases of human life truly. The novel which only reflects modern, fashionable life can do you little good. You already know enough, and perhaps too much of it. Study, rather, the novels of the European masters of prose, translated from the originals. The better class of French works are brilliant; those of the Polish writers full of masterly pen-pictures and native fire; while those of German authors are often masterpieces of power and fidelity to life.

Above all, read novels that make you reflect, and digest thought as you go. If they do not do this from the first chapter, they are in no sense "books," and have no place in any hearthside university, surely. See to it, too, that the English is pure. You have no right to debase your vocabulary, and, consequently, your speech.

With Charlotte Bronte, Dickens, Bulwer-Lytton, and Scott, you will never be exposed to this danger. You will have engraved upon your memory, moreover, pictures that will never fade, but linger always to inspire you by their strength and their heart-truths.

Theirs are of the works that have withstood the infallible test of time. Amidst their pages you cannot but enrich your mind and your culture. Leave the modern productions to the same test, and to those who must be omnivorous in their word-food. In later years, some will have survived for your entertainment and instruction. You are better off without the others.

But, above all, read, and keep faith with the spirit of reflection and study that emanates from every winter fireside; for "the truth will make you free," and it is yours for the seeking.

THE SPARTAN.

[Spartan's talk on books reminds us of a rather unique question raised in a popular British periodical, which is arousing much interest on the other side of the Atlantic. It is this: "If you were marooned for a year on an island, and permitted to have your choice of one book, which one would you choose?" We should like to hear the opinion of our readers on this subject, accompanied by reasons, of course. Simply address "Life, Literature and Education Dept.," "Farmer's Advocate."]]

Carol's Christmas Party.

How the Little Ruggleses were Prepared for It, and How They Enjoyed It.

"Before the earliest Ruggles could wake and toot his five-cent tin horn, Mrs. Ruggles was up and stirring about the house, for it was a gala day in the family. Gala day! I should think so! Were not her nine children invited to a dinner-party at the great house, and weren't they going to sit down free and equal with the mightiest in the land? She had been preparing for this grand occasion ever since she had received dear little Carol's invitation, which had included all her children. Every one of them, please, from Sarah Maud to Baby Larry." Another is the way in which Mrs. Ruggles set about her preparations

for the great event. As soon as the sun had set, she announced the order of the evening. "Now, Susan, you and Kitty wash up the dishes; an' Peter, don't yer spread the beds, so 't I can get ter cuttin' out Larry's new suit? I ain't satisfied with his clo'se, an' I thought in the night of a way to make 'em a dress out o' my old red plaid shawl-kind o' Scotch style, yer know, with the fringes 't the bottom. Eily, you go find the comb and take the snarls out o' the fringe. You little boys clear out from under foot! Clem, you and Con hop into bed with Larry while I wash your underflannels; 't won't take long to dry 'em. Yes, I know it's bothersome, but yer can't go into society 'thout takin' some trouble." Sarah Maud was told to rip off the brass buttons from her uncle's policeman's coat and sew them in a row up the front of her green skirt; Susan to iron out her own and Kitty's aprons, and then came confusion over the stockings, "no nine pairs mates, nohow, and I ain't goin' ter have my children wear odd stockin's to a dinner-comp'ny, fetched up as I was. — Eily, can't you run out and ask Mis' Cullen to lend me a pair o' stockins for Peory, 'n' tell her, if she will, Peory 'll give Jim half her candy when she gets home. Won't yer, Peory?" But Peory being young and greedy, and thinking the remedy so out of all proportion to the disease, set up a dismal howl at the projected bargain. Finally being called upon to choose whether she would give half her candy or go bare-legged to the party, Peory dried her tears and chose the lesser evil, her decision being hastened by an affectionate wink from Clem, which signified that he would go halves with her on his candy.

The next instructions from the proud mother were for all to be ready, after they had got through eatin' at 12 o'clock, for "sech a washin' 'n' combin' 'n' dressin' as yer never had before 'n' never will again, likely, 'n' then I'm goin' to set yer down 'n' give yer two solid hours trainin' in manners; and t'won't be no foolin' neither." . . . The big Ruggleses worked so well, and the little Ruggleses kept "from underfoot" so successfully, that by 1 o'clock nine complete toilets were laid out in solemn grandeur upon the beds. . . . The law of compensation had been so well applied that he that had necktie, had no cuffs; she that had sash, had no handkerchief, and vice versa; but they all had shoes and a certain amount of clothing, such as it was, the outer layer being in every case quite above criticism.

"Now, Sarah Maud," said Mrs. Ruggles,

her face shining with excitement, "everything's red up and we can begin. I've got a boiler 'n' a kettle 'n' a pot o' hot water. Let's take 'em one at a time. You can scrub 'em 'n' rinse 'em, or 't any rate git's fur's yer can with 'em, and I'll finish 'em off while you do yerself." Sarah Maud couldn't have scrubbed with any more decision and force if she had been doing floors, and the little Ruggleses bore it bravely, not from natural heroism, but for the sake of the joys which awaited them. . . . Kitty's red hair was curled in thirty-four ringlets, Sarah Maud's was braided in one pig-tail, Susan's and Eily's in two braids apiece, while Peory's resisted all advances in the shape of hair oils and stuck out straight like that of the Circassian girl at the circus—so Clem said—and then followed the lesson in manners. Seated in a row, partly on chairs, with the wood-box and coal-hod to finish out the line nicely, their mother surveyed them proudly as she wiped from her brow the sweat of honest toil, "Well," she exclaimed, "If I do say so as shouldn't, I never see a cleaner, more stylish mess o' children in my life! . . . Sara Ruggles, how many times have I to tell yer not to keep pulling at yer sash? Haven't I told yer if it comes out, yer waist 'n' skirt will part comp'ny in the middle, 'n' then wher'll yer be?" and so the lesson went on—punctuated by giggles from the children, as one or another made their comical mistakes.

Cornelius is thus put through his facings as to what he should say "to make himself good company." "Ask Mis' Bird how she's feelin' this evenin', or if Mr. Bird's hevin' a busy season, or how the weather agrees with him, or somethin' like that." Then came the make-believe dinner and its test of good behavior. "Don't eat with your fingers—don't grab no vittles off one 'nother's plates; don't reach out for nothin', but wait till yer asked, 'n' if you never git asked, don't git up and grab it. . . . Susan, keep your handkerchief in your lap, where Peory can borrow it if she needs it, 'n' I hope she'll know when she does need it." Sarah Maud thought she had learnt her lesson till she could say it standing on her head backwards. Peter's remark was ominous of defeat, "If yer tell me one more thing, I can't set up and eat—I'm so cram full of manners now I'm ready to bust, 'thout no dinner at all." "Oh! don't fret," counselled Mrs. Ruggles, "I guess you'll all get along. I wouldn't mind if folks would only say, 'Oh, children will be children,' but they won't. They'll say, 'Land o' Goodness, who fetched them children up!' It's

quarter past five, 'n' yer can go now. Remember about the hats; don't talk all at once, Peter, don't keep screwin' yer scarf pin; Cornelius, hold yer head up straight; Sarah Maud, don't take your eyes off o' Larry, 'n' Larry, you keep holt o' Sarah Maud 'n' do just what she says, 'n' whatever you do, all of yer, never forget for one second that yer mother was a McGrill."

It might well be forgiven the little Ruggleses that all these instructions should go clean out of their minds when what to them appeared to be the portals of fairyland were raised to admit them. It was a wonderful sight which met the astonished eyes of the poor children, accustomed to but scanty meals in their own but too often untidy kitchen. The table blazed with tall colored candles, gleamed with glass, blushed with flowers, and groaned with good things to eat, so it was not strange that the Ruggleses, forgetting that their mother was a McGrill, should shriek with delight at the fairy spectacle, or that little Larry should not stand upon the order of his going, but spying a high chair which pointed unmistakably to him, climbed into it like a squirrel, clapping his hands in ecstasy, shouting, "I beat the hull lot o' you!"

That wonderful dinner was followed by a Christmas tree, laden with gifts, too many to be described, but chiefly provided by the forethought of the dear little maiden whose story you read in our Christmas Number, and who was the happy hostess upon this festive occasion.

The children told their mother that she looked "beautiful as an angel in the picture-books," for her couch had been moved into a corner of the room and she lay upon it dressed in a soft white wrapper, her golden curls draping her white forehead and neck, her cheeks flushing with emotion and her eyes beaming with joy. And it was thus, as an angel, a ministering angel, our dear Carol will always live in the memories of the nine little Ruggleses to whose happiness she had been permitted to contribute so lavishly upon the last Christmas Day of her suffering, but yet most happy day, upon earth.

As Carol's Uncle Jack went down the little porch, he looked back into the window for a last glimpse of the family, as the children gathered about their mother, showing their beautiful presents again and again, and then upward to a window in the great house yonder, the thought uppermost in his mind was that recorded in the prophetic words of Holy Writ, "A little child shall lead them."

H. A. B.



A Highland Ewe Flock, the Shepherd and His Dog.

The Quiet Hour.

Nameless Saints.

"The healing of the world is in its nameless saints. Each separate star seems nothing, but a myriad scattered stars break up the night, and make it beautiful."

"Ye are the light of the world," says Christ, who is Himself the Sun of Righteousness and the Bright and Morning Star; and He goes on to declare the business of those whom He has set to be lights in a dark world. They are forbidden to hide their light, but are set like candles in a candlestick to give light to all within reach. They are failing entirely, unless they let their light so shine before men that God may be glorified in and through them.

God's nameless saints are lighting the world in every generation, though the world may fail to appreciate their unassuming radiance. Elijah was a great light in Israel long ago. He fully realized the fact that God had set him in a conspicuous position, and that it was his business to see that the glory of the true religion was not entirely darkened by Baal-worship. But he did not stand alone for God, as he imagined. In the corrupt nation of Israel there were seven thousand nameless saints, unknown to the world, but known to God; and their quite influence could do more, probably, in the healing of the world than Elijah's great miracle of calling down fire from heaven.

There is inspiration in the thought of the power and value of common things. The flowers may be more showy than the tiny blades of green grass, and yet without grass this world would be uninhabitable, and we should soon die of starvation. We can live very comfortably without grand luxuries, but the common air and light and water, bread, potatoes, etc., are things of which we seldom tire. If, then, you are rather disappointed because your life is being lived out in obscurity, remember that God has lighted you to give light to all in your house and neighborhood. If you are unknown to the world, it is a glorious thing to know that God has called you by name and that He expects you to do great things just where you are.

Everywhere God has set His stamp on the things which we call "little." The plant, the animal, the man grows slowly to maturity. The result is great and wonderful, but it is made up of little things—the rain, the sunbeams, food and exercise in small quantities. Let a man try to break this rule and eat enough in one day to last a year, or take exercise enough for a year in one day, and he will fail utterly in his object. God sent the manna for one day at a time, and both our bodies and souls can only thrive on regular food and not too much of it.

As in a battle, so it is in life, "the man behind the gun" has his own important work to do. God gives to each his special work, places him at his post, and if he neglect that in order to shine in a more conspicuous position he may well feel that his life has been a failure. I once read an allegory about the soldiers in the Great Army of Christ. One eager young warrior, longing to do great things for his Captain, was stationed in a lonely pass in the mountains. He could see hard fighting going on beneath him, and longed to be in it. He chafed at inaction, for no foe appeared to test the power of his arm. It really seemed as if the Captain must have made a mistake in placing such a well-armed, enthusiastic servant in that out-of-the-way spot where he could not do anything. At last he left his post, tempted away by his very enthusiasm and courage, and won high approval from his comrades as he forced his way into the thick of the fight. But it was the soldier, not the Captain, who had made a mistake. As soon as the coast was clear, dark figures glided swiftly through the unguarded pass. More and more slipped through, unchallenged by the unfaithful sentry, and at last the young enthusiast discovered his mistake—too late. His company was attacked in the rear. I heard once of a woman who had for years taken a very prominent part in missionary meetings. She was looked up to as a shining light—but she had failed terribly. Her sons had grown up feeling that their mother was too busy looking after the heathens to have time

to spare for their affairs. Home was a lonesome place and nobody seemed to care if they drifted away from it. The result was what might have been expected. That mother might have done great things if she had been satisfied to be a nameless saint. She might have stirred up her children to be zealous for their Lord. They were put in her hands to be trained and inspired, but she had been in too great a hurry to see results for her work.

Let us be very sure that we know what God wants us to do, and then let us do that special work with glad enthusiasm. To do really good work, we must enjoy it, and it is possible to enjoy most things if we are not wasting energy by looking over the fence into the future.

"The battle of life extends over a vast area, and it is vain for us to inquire about the other wings of the army; it is enough that we have received our orders, and that we have held the few feet of ground committed to our charge. There let us fight, and there let us die, and so fighting and so dying in the place of duty, we cannot be condemned, we must be justified."

God does not need our help (though He allows us to help Him) in the extension of His kingdom, but He does need our help in the building up of our own character. And character is apt to grow best without too great a blaze of public approval.

Let us keep our eyes open to recognize God's saints under any disguise. We shall find them if we look for them, otherwise we might easily pass them by, like violets in the grass. God loves to watch them, and we should delight in them, too. There is the quiet, patient woman, who meets vexation with a smile and goes cheerily on her way, doing her daily work for God's eye to see, and caring little whether her clothes are in the latest fashion. There is the brave and faithful man, whistling as he does his monotonous chores day by day, always ready to do odd jobs to help his women-folks, or to go out of his way to oblige a neighbor. These, if they walk each day brightly and righteously, caring to please God rather than to be popular with men, are saints worth discovering and praising. They are lighting with love's pure ray countless homes in this land—and love has always been the greatest thing in the world. In the parable of the Prodigal Son, the beauty which has made that story a pearl among parables, is the unfeeling love of the father. The dark background is not so much the wild career of the younger son as the unloving churlishness of the elder. One person of that type in a household can make things pretty dark for the rest of the family. You don't need to be rich to brighten a little circle about you, and cleverness does little to enlighten the world. The great thing is to shine. A bright face, a cheery word, a pure and holy spirit are invaluable.

"Of all the weapons we wield against wrong, there is none more effective than pure and burning joy." HOPE.

The Ingle Nook.

The Women's Institute Convention.

The Women's Institute Convention at Guelph has again come and gone. As "The Farmer's Advocate" reporter, I have attended the conventions regularly for the past three or four years, but I can say honestly that I do not think I ever felt as much like getting right down to work and booming the Women's Institute through the pages of our paper as I did this time. The Institute had always appeared a useful and commendable institution, and as such I had always commended it; but I am quite sure that at the recent convention I obtained, for the first time, a clear glimpse, not of what the Institute means, but of what it may mean in the not-far-away future—a glimpse of the tremendous possibilities which are opening before it, awaiting only the initiatory touch and the power of co-operative movement which shall bring them to fruition.

I arrived too late to attend the morning session of the first day, so can tell you nothing about President Creelman's address, Mrs. Hunter's reply, or the dis-

cussion on the finances of the institution. Of Mr. Putnam's address, however, I can tell you something, for I begged a copy of it, which I have on the desk before me as I write.

In reading over this speech I have found, as you probably found, a distinctly new note, or at least a note sounded for the first time with an emphasis sufficient to designate it as practically new. Mr. Putnam has probably had many plans in mind for the Women's Institute, but he has recognized the wisdom of moving slowly. He has seen that the organization which he so ably superintends must walk before it can run, but it seems to me that at this convention he has given the signal which means that new departures are about to be made, and that a few things are going to happen before long.

He first enumerates the subjects dealt with by the Women's Institute—the enumeration so necessary from year to year in order that people's minds may be freed from the idea that the W. I. concerns itself solely with what we eat. "This gathering," he says, "proclaims that the mothers and daughters of the Province have, in large numbers, bound themselves together into one great force which says . . . that they will do their part to maintain the high moral standard of Ontario homes, to broaden the opportunities for intellectual improvement, to furnish a means for helpful and rational sociability among the women of the land, to disseminate information as to food values and methods of preparation, to provide opportunities for the study and discussion of ways and means in planning for and accomplishing the many routine duties which devolve upon the housekeeper at the least expenditure of time and labor, to make less burdensome the duties which come to the mother as teacher, councillor, nurse, business-manager—the one to whom we go in time of trouble or need, to do our part to enable our boys and girls, our husbands and brothers, to get the most out of this life, and to inspire them to accept the responsibilities which are theirs as citizens of this fair country. In short, to make home and community life more attractive and elevating."

He touches upon the value of the W. I. as a social factor in the lives of farm women; points out the increased attention paid to flowers, shrubs, vegetables and small fruits, through its influence, then—and now mark this—he says:

"While we believe it well to allow the greatest latitude to the Institutes in their work, we are convinced THAT THE TIME IS COMING WHEN THEY SHOULD AS ONE BODY UNDERTAKE SOME MORE DEFINITE LINES OF WORK IN ADDITION TO THE PARTICULAR WORK WHICH THE LOCAL OFFICERS CONSIDER BEST SUITED TO THE CAPABILITIES AND DESIRES OF THE PEOPLE PARTICULARLY CONCERNED. There are certain LARGE QUESTIONS in which the majority of the Institutes can render assistance to their sister organizations, both by way of collecting information and disseminating the same."

Proceeding, he suggests, among these "larger questions," methods of simplifying and lightening labor (he was probably thinking of such things as co-operative laundries, house-cleaning machines, etc., there); such assistance as women can give to co-operative movements concerning the profitable production and export of fruit, dairy products, poultry, canned fruits, jellies, etc.; the installation of water-supply systems, which will lighten the labor of the housewife and bring the country residence to a level with that of the town as regards comfort and convenience; the formation of libraries; the milk problem; the tuberculosis problem;—these he designates but a "few" of the larger questions which the W. I. can well take up, in addition to the work with which it is already concerned.

I do not know whether these suggestions impress you as they do me, but to me they suggest glorious possibilities, possibilities, too, for doing things that are essentially womanly, and in an essentially womanly way. . . . Think it all out for yourselves, will you not?

AFTERNOON SESSION.

The programme for the afternoon session consisted of reports from various districts; an address by Mr. C. C. James, Deputy Minister of Agriculture; and an address on "The Value of Farm Life,"

by Miss Martha Van Rensselaer, of Cornell University, N. Y. A vocal solo was also rendered by Miss Gardner, of Kemble, the introduction of music being a pleasing feature which, it is to be hoped, will be repeated at future conventions.

In the reports from various branches, many good suggestions were embodied, only a few of which, however, can be touched upon here. The delegate for West Bruce stated that a popular feature of that branch had been a special W. I. exhibit at the Fall Fair, special prizes being given for combinations of things not already on the Fair list. . . . The delegate for East Elgin dwelt on the necessity of personality in the officers. The East Elgin Institute had also, she said, had an exhibit at the local Fair, and one prize had been given for the best luncheon for a working man. . . . In South Grey, a competition for darning had proved an attractive as well as useful feature of one of the meetings, and a bright idea for adding to the funds had been found in taxing each member 12 cents a year, the money to be expended in any way the members thought fit. . . . Haldimand, with 420 members, was in a good position to give suggestions. The delegate from that county dwelt especially on the social aspect of the Institute.

Luncheon was always provided at the meetings, she said, the hostess, in case of house-to-house meetings, providing only the tea. . . . East Northumberland advocated the "simple life," while the South Oxford delegate dwelt especially on character-building as a pivotal center for the work. She thought the W. I. should institute a campaign against objectionable advertisements and bill-boards. . . . In West Victoria an intersprinkling of literary evenings had proved both pleasant and profitable; in South Waterloo union meetings with the Farmer's Institute had been found stimulating; and in West York it had been found that the branches equipped with printed programmes had done better work than those without them.

(To be continued.)

[I am very sorry I cannot finish the report in this week's issue, but as I cannot do so without sacrificing valuable portions of the addresses for the sake of brevity, I trust you will be willing to wait another week. D. D.]

Re Macdonald Institute.

Dear Dame Durden,—Kindly inform me the address I would send to in writing for a catalogue of Macdonald Institute. Does it give full particulars regarding each separate study? Hoping to see a reply as soon as possible.

ENQUIRER.

Elgin Co., Ont.

Write to Mr. G. C. Creelman, or to Miss M. U. Watson, Macdonald Institute, Guelph, for all particulars.

A Letter from Lankshire Lass.

Dear Dame Durden and All,—As I have not written for a long time, if I may, I'll come again and join the merry circle. It is the only gathering I can be in, for I am still at home, and as the seasons come and go, others can enjoy it. I hear rumors of the events of Xmas time, but I'll be at home, and I hope all can enjoy the best Xmas they ever had, and when you sit down to enjoy a cup of tea or a happy meal with your friends, you ought to be thankful to be able to have such a pleasure, for everyone cannot. I have always to take my meals alone, no matter how many are here. I cannot sit and eat like others.

As so many have asked me my trouble, I'll tell you just one of them. I've been vomiting every bite or drop I take, no matter how little or what kind, or what time it is taken, for many years. As soon as it is down, it comes up at once, and I can hardly take food as others every day. It is not my stomach trouble alone that causes the vomiting; it is a complication of troubles of other natures that is the cause of it all, all doctors say. I suffer terribly from thirst, and more so in the coldest weather, and as I dare not drink between meals, I find such a comfort in putting two or three drops of clear glycerine on my tongue and lips as soon as awake in the morning. My mouth and throat are so dry I cannot at times speak till glycerine is put on my swollen lips and tongue. I only tell this so if others see it this simple remedy may help others who dare not

touch a drink of water. Give it a trial if ever you are in need of such, for it has been such a comfort to me, and I saw it in a paper, too. Now dears, I do not wish to complain; I just tell you because I have been asked to so often, and as I am alone very much and lonely, I thought I would write again, just to thank the writers for so much kindness in so many ways. They have cheered me, and I am so grateful to all who so kindly write to me. I appreciate it more than ever, since I am alone so much. The post office is one of my many blessings, so many rays of sunshine come my way, and so much to be thankful for at times. It is wonderful how many we find when we count them all up.

And Jesus still is my helper, and I feel Him nearer and dearer every day, and I can talk with Him. He does tarry still with me, and in those lonesome times I feel Jesus more near and dear to me. I trust that all who read this will have a very happy time at the Christmas season and much cheer to all.

I am so glad we have taken "The Farmer's Advocate" for the coming year, so I can enjoy the Nook and help dear Dame give, and the Quiet Hour. Dear Hope, you help us so.

Now is the time when apples are so scarce to try the maple syrup I gave the recipe for last January. It is splendid, and easy made. Try it again, and can you kindly give me a recipe for mince-meat without meat? I thank all so much. You gave the last recipes I asked for. Wishing you all a very merry Christmas and prosperous New Year. Your shut-in friend,

A LANKSHIRE LASS.

Wellington Co., Ont.

Can anyone give Lankshire Lass the recipe she asks for? I am sure, also, that she would be glad to have a holiday party of letters. Any letters sent to me for her in sealed stamped envelopes will be forwarded at once.

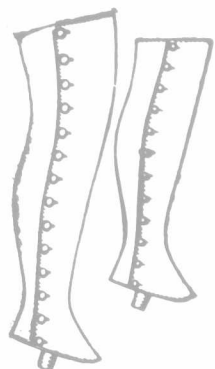
Man's Affinity with Nature.

Water-drop, water-drop,
Tell thy story, pray!
Tell me what thou art, and why
Thou and I
Always have so much to say
Each to each.
Teacher stern, I would learn
What thou fain would teach.

Blade of grass, blade of grass,
Somehow thou art mine!
See, I hold thee in my hand,
Understand
Something of the plan divine,—
Nature's store
Held in fee
All for me,
Can I but adore?

E. N. MINKLER.

"THE FARMER'S ADVOCATE" FASHIONS.



6184 Pattern for Leggings, 4, 8 and 12 years.

Pattern for Leggings 6184.

These leggings are simple, yet shapely and smart, and can be made from cloth, velvet, velveteen, or any similar material, and can be cut off at the knees or extended above them as liked. In the illustration they are held by means of stitched straps of the material at the lower edge, but those of elastic can be substituted if preferred.

The quantity of material required for the medium size (8 years) is 1 yard any width.

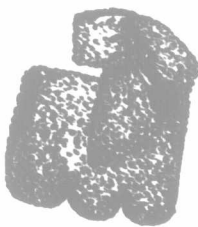


6182 Girl's Coat, 6 to 12 years.

Girl's Coat 6182.

The long loose coat is the one that little girls like best and which is most becoming. Here is a model that can be made either with or without the single revers, and which is adapted to all cloaking materials. In the illustration dark red cloth is trimmed with black Astrakhan cloth, and the combination is a handsome and effective one, but genuine fur could be substituted for the fur cloth or braid could be used as trimming, or the coat could be made with velvet collar and cuffs and either with or without the revers. Again, it allows a choice of inserted or patch pockets, and, consequently, the same model can be made adapted to the plain coat of school wear and to the dressy one. For the school coat dark-colored cloth or one of the Scotch mixtures with collar and cuffs of plain broadcloth would be smart as well as durable.

The quantity of material required for the medium size (10 years) is 4 yards 27, 2 1/2 yards 44 or 2 yards 52 inches wide, with 3 1/2 yards of banding 2 inches wide.



6177 Rug Muff and Neck Scarf, Women's, Misses' and Children's.

Rug Muff and Neck Scarf 6177.

Scarfs that fit closely up about the throat are among the latest features of fashionable dress, and such a one as this combined with the muff illustrated makes an exceedingly handsome as well as smart set. They can be made from fur or from fur cloth or from velvet, or almost any fancy material. Velvet, with ruchings of ribbon, is pretty and fashionable, and for fancy sets heavy silk and velvet are combined with full ruchings of chiffon, while the fur illustrated is warm and comfortable for cold days.

The quantity of material required to make the rug and the muff for either the women's or misses' size is 1 1/2 yards 21, 1 yard 44 or 50 inches wide with 2 1/2 yards for the lining for rug muff and scarf, and making the foundation muff.

The above patterns will be sent to any subscriber at the very low price of ten cents per pattern. Be careful to give Correct Number and Size of Patterns Wanted. When Misses' or Child's pattern, write only the figure representing the age.

Address: "Fashion Department," "The Farmer's Advocate," London, Ont.

She (sentimentally)—How like life are the waves of the sea! He—You bet. Come to the shore in great style, and go away broke.

Current Events.

The Canadian Parliament will probably meet on January 13th.

Barbadoes desires to enter into closer commercial relations with the Dominion.

The Chinese Government is preparing to send 2,000 students to the United States.

A colony of six hundred Germans is to be located in the Peace River district next spring.

Mr. W. L. M. King has gone to China, to take part in the International Congress on the opium traffic.

Mr. Fielding, Canadian Minister of Finance, is in Paris on business connected with the Franco-Canadian treaty.

An eminent French engineer predicts that the Panama Canal can only meet with disaster, unless the site of Gatun Dam is changed.

A German company at Frankfort-on-the-Main purposes building seven airships, which are to maintain regular sailings between twenty-four German cities.

The Sultan of Turkey opened the newly-elected National Assembly at Constantinople on December 17th, thus giving Turkey a standing among the constitutional monarchies of the world.

The collapse of the two chief issues of the Liberal Party in Great Britain, the Education Bill and the Licensing Bill, has given rise to a widely-spread belief that there will be a general election within the next six months.

The first Grand Trunk Pacific train crossed Battle River, between Edmonton and Saskatoon, on Dec. 17th. The bridge is nearly 3,000 feet long. There are yet 125 miles of track to be laid before Edmonton is reached.

Teja Singh, the Hindu leader in British Columbia, has apparently blocked the Government's scheme to send the Hindus in the Province to Honduras by buying up large tracts of land upon which the unemployed Hindus shall be given work. The value of the land secured totals about \$120,000.

The strained relations between the Netherlands have led to the seizure of the Venezuela coast-guard ship Alix by the Dutch, as a reprisal against the Castro Government, which refuses to give satisfaction for his unfriendly acts towards Holland. In the meantime, President Castro has fled to Europe, and General Gomez is acting as President, pro tem., in his stead.

The situation consequent upon the annexation of Bosnia and Herzegovina by Austria, brought about by the exertions of Baron von Aerenthal, is still dangerous. All the Powers, save Germany, disapprove of the step. In the meantime, Austrian troops are being poured into Bosnia to forestall possible uprisings of Servia and Montenegro; and, instead of being dismissed, as desired by the Hungarian Diet, Baron von Aerenthal has been distinguished by the highest order the Emperor can confer, that of the Grand Cross of St. Stephen.

The Golden Dog

(Le Chien D'Or.)

A Canadian Historical Romance.

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CHAPTER III.

A Chatelaine of New France.

The Governor was surprised and delighted to encounter Lady de Tilly and her fair niece, both of whom were well known to and highly esteemed by him. He and the gentlemen of his suite saluted them with profound respect, not unmingled with chivalrous admiration for noble, high-spirited women.

"My honored Lady de Tilly and Mademoiselle de Repentigny," said the Governor, hat in hand, "welcome to Quebec. It does not surprise, but it does delight me beyond measure to meet you here at the head of your loyal censitaires. But it is not the first time that the ladies of the House of Tilly have turned out to defend the King's forts against his enemies."

This he said in allusion to the gallant defence of a fort on the wild Iroquois frontier by a former lady of her house.

"My Lord Count," replied the lady with quiet dignity, "'tis no special merit of the House of Tilly to be true to its ancient fame—it could not be otherwise. But your thanks are at this time more due to these loyal habitants, who have so promptly obeyed your proclamation. It is the King's corvée to restore the walls of Quebec, and no Canadian may withhold his hand from it without disgrace."

"The Chevalier La Corne St. Luc will think us two poor women a weak accession to the garrison," added she, turning to the Chevalier and cordially offering her hand to the brave old officer, who had been the comrade-in-arms of her husband, and the dearest friend of her family.

"Good blood never fails, my Lady," returned the Chevalier, warmly grasping her hand. "You out of place here? No! no! you are at home on the ramparts of Quebec, quite as much as in your own drawing-room at Tilly. The walls of Quebec without a Tilly and a Repentigny would be a bad omen, indeed, worse than a year without a spring or a summer without roses. But where is my dear goddaughter, Amelie."

As he spoke, the old soldier embraced Amelie and kissed her cheek with a fatherly effusion. She was a prodigious favorite. "Welcome, Amelie!" said he, "the sight of you is like flowers in June. What a glorious time you have had, growing taller and prettier every day all the time I have been sleeping by camp-fires in the forests of Acadia! But you girls are all alike; why, I hardly knew my own pretty Agathe when I came home. The saucy mix almost kissed my eyes out—to dry the tears of joy in them, she said!"

Amelie blushed deeply at the praises bestowed upon her, yet felt glad to know that her godfather retained all his old affection. "Where is Le Gardeur?" asked he, as she took his arm and walked a few paces apart from the throng.

Amelie colored deeply, and hesitated a moment. "I do not know, godfather! We have not seen Le Gardeur since our arrival." Then, after a nervous silence, she added, "I have been told that he is at Beaumanoir, hunting with His Excellency the Intendant."

La Corne, seeing her embarrassment, understood the reluctance of her avowal, and sympathized with it. An angry light flashed beneath his shaggy eyelashes, but he suppressed his thoughts. He could not help remarking, however, "With the Intendant at Beaumanoir! I could have wished Le Gardeur in better company! No good can come of his

intimacy with Bigot; Amelie, you must wean him from it. He should have been in the city to receive you and the Lady de Tilly."

"So he doubtless would have been, had he known of our coming. We sent word, but he was away when our messenger reached the city."

Amelie felt half-ashamed, for she was conscious that she was offering something unreal to extenuate the fault of her brother—her hopes, rather than her convictions.

"Well, well! goddaughter! we shall, at any rate, soon have the pleasure of seeing Le Gardeur. The Intendant himself has been summoned to attend a council of war to-day. Colonel Philibert left an hour ago for Beaumanoir."

Amelie gave a slight start at the name; she looked inquiringly, but did not yet ask the question that trembled on her lips.

"Thanks, godfather, for the good news of Le Gardeur's speedy return." Amelie talked on, her thoughts but little accompanying her words as she repeated to herself the name of Philibert. "Have you heard that the Intendant wishes to bestow an important and honorable post in the Palace upon Le Gardeur—my brother wrote to that effect?"

"An important and honorable post in the Palace?" the old soldier emphasized the word "honorable."

"No, I had not heard of it—never expect to hear of an honorable post in the company of Bigot, Cadet, Varin, De Pean, and the rest of the scoundrels of the Friponne! Pardon me, dear, I do not class Le Gardeur among them, far from it, dear, deluded boy! My best hope is that Colonel Philibert will find him and bring him clean and clear out of their clutches."

The question that had trembled on her lips came out now. For her life she could not have retained it longer.

"Who is Colonel Philibert, godfather?" asked she, surprise, curiosity, and a still deeper interest marking her voice, in spite of all she could do to appear indifferent.

"Colonel Philibert?" repeated La Corne. "Why, do not you know? Who but our young Pierre Philibert; you have not forgotten him, surely, Amelie? At any rate, he has not forgotten you; in many a long night by our watch-fires in the forest has Colonel Philibert passed the hours talking of Tilly and the dear friends he left there. Your brother, at any rate, will gratefully remember Philibert when he sees him."

Amelie blushed a little as she replied somewhat shyly, "Yes, godfather, I remember Pierre Philibert very well—with gratitude I remember him—but I never heard him called Colonel Philibert before."

"Oh, true! He has been so long absent. He left a simple ensign en second and returns a colonel, and has the stuff in him to make a field-marshal! He gained his rank where he won his glory—in Acadia. A noble fellow, Amelie! loving as a woman to his friends, but to his foes stern as the old Bourgeois, his father, who placed that tablet of the golden dog upon the front of his house to spite the Cardinal, they say—the act of a bold man, let what will be the true interpretation of it."

"I hear everyone speak well of the Bourgeois Philibert," remarked Amelie. "Aunt de Tilly is ever enthusiastic in his commendation. She says he is a true gentleman, although a trader."

"Why, he is noble by birth, if that be needed, and has got the King's license to trade in the Colony like some other gentlemen I wot of. He was Count Philibert in Normandy, although he is plain Bourgeois Philibert in Quebec; and a wise man he is, too, for with his ships and his comptoirs and his ledgers he has traded himself into being the richest man in New France; while we, with our nobility and our swords, have fought ourselves poor, and receive nothing but contempt from the ungrateful courtiers of Versailles."

Their conversation was interrupted by a sudden rush of people, making

room for the passage of the Regiment of Bearn, which composed part of the garrison of Quebec, on their march to their morning drill and guard-mounting—bold, dashing Gascons in blue and white uniforms, tall caps, and long queues rollicking down their supple backs, seldom seen by an enemy.

Mounted officers, laced and ruffled, gaily rode in front. Subalterns with spontoons and sergeants with halbers dressed the long line of glistening bayonets. The drums and fifes made the streets ring again, while the men in full chorus, a gorge deployee, chanted the gay refrain of La Belle Canadienne in honor of the lasses of Quebec.

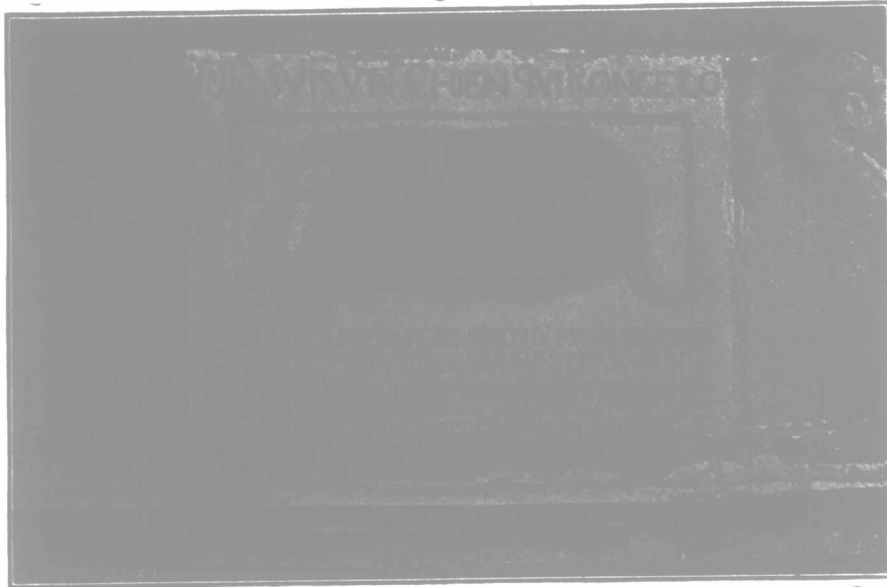
The Governor and his suite had already mounted their horses, and cantered off to the Esplanade to witness the review.

"Come and dine with us to-day," said the Lady de Tilly to La Corne St. Luc, as he too bade the ladies a courteous adieu, and got on horseback to ride after the Governor.

"Many thanks! but I fear it will be impossible, my Lady; the council of war meets at the Castle this afternoon. The hour may be deferred, however, should Colonel Philibert not chance to find the Intendant at Beaumanoir, and then I might come; but best not expect me."

A slight, conscious flush just touched the cheek of Amelie at the mention of Colonel Philibert.

"But come if possible, godfather," added she; "we hope to have Le Gardeur home this afternoon. He



The "Golden Dog" over the entrance to Philibert's house. Now inserted in the walls of the Post Office.

loves you so much, and I know you have countless things to say to him."

Amelie's trembling anxiety about her brother made her most desirous to bring the powerful influence of La Corne St. Luc to bear upon him.

Their kind old godfather was regarded with filial reverence by both. Amelie's father, dying on the battlefield, had, with his latest breath, commended the care of his children to the love and friendship of La Corne St. Luc.

"Well, Amelie, blessed are they who do not promise and still perform. I must try and meet my dear boy, so do not quite place me among the impossibles. Good-bye, my Lady. Good-bye Amelie." The old soldier gaily kissed his hand and rode away.

Amelie was thoroughly surprised and agitated out of all composure by the news of the return of Pierre Philibert. She turned aside from the busy throng that surrounded her, leaving her aunt engaged in eager conversation with the Bishop and Father de Beray. She sat down in a quiet embrasure of the wall, and with one hand resting her drooping cheek, a train of reminiscences flew across her mind like a flight of pure doves suddenly started out of a thicket.

(To be continued.)

The Roundabout Club

Some Points on Etiquette.

(Continued.)

[By request of "A Black Knight."]

Occasionally there is some doubt as to how even so simple a thing as introducing people who have never met before should be conducted. Always introduce a gentleman to a lady, never a lady to a gentleman, unless the gentleman be old and the lady young, when the order may be reversed; it would be eminently ridiculous, for instance, to introduce a man of sixty to a girl of seventeen, etc.—common sense must always rule in this as in other things. Thus, a young woman should always be introduced to one considerably older, a young man to an old man, etc. . . . The usual form in making introductions is: "Miss Smith, may I present Mr. Jones?" In introducing people of equal age, rank, etc., it is sufficient to say, simply: "Mrs. Brown, this is Mrs. Black." If the names are enunciated distinctly there will be no need of repeating them as is sometimes done.

A man always stands during an introduction, whether the one to whom he is made known is man or woman.

When it is desired to have two people meet who are at a little distance from each other, say at opposite sides of the room, the man should always be taken to the lady. Nor should the mistake ever be made of leading a lady about a room full of guests and introducing her to each one; it is sufficient to have her meet those nearest, or someone whom one is especially desirous to have her meet. Other introductions will follow naturally, and

a gentleman must, of course, lift his hat, but he must really lift it, not merely point at it as some ill-bred people do. He should also lift it if accompanying a friend, Mr. B, who meets a lady whom he (Mr. B) knows. In this case, naturally, Mr. A will not look directly at the lady; he merely raises his hat as a tribute to his friend's acquaintance. A man should also raise his hat when rendering any service to a lady whom he does not know. For instance, a lady drops some parcels; he restores them to her and raises his hat as he turns away. He asks for information from a lady, and raises his hat as he does so. If she asks information from him, he also raises it. These may seem trivial things to those not accustomed to them, yet they are a few of the things which distinguish, with unflinching accuracy, the true gentleman, so far as manners are concerned, from the mere boor in the same respect.

A man never precedes a lady except when necessary to do so for her convenience or protection. When entering a church or theater, the usher goes first, the lady follows, and the gentleman comes last. Talking should never be indulged in in church, or during any lecture or play, nor should applause be signified by stamping the feet; to clap the hands is quite sufficient.

Everywhere (except in the privacy of the home, or in small parties of intimate friends, where a little hilarity—never boisterousness—is permitted), people should conduct themselves quietly, considerably, unobtrusively, and with the self-possessed dignity that bespeaks good training. To chew gum, talk loudly, or act in such a way as to draw attention, is to proclaim at once commonness and vulgarity.

Now, we trust we have given a full answer to "Black Knight's" enquiries. . . . If any further information is required, kindly write us. Sincerely yours,
NEMO.

Our Literary Society.

Upon the whole, the work submitted in the last competition was excellent, a thorough appreciation of picturesque, melodious and apt words being shown by almost every competitor. A few, we thought, even improved here and there upon the words of the translator, who has rendered in English for us the story of the love-sick Persian, Majnun.

Mrs. W. H. Shore, Glanworth, Ont., and Justus Miller, Mt. Elgin, Ont., came nearest to the translator in their choice of words. We are sending them souvenirs of the competition, as also to Mrs. Geo. Earle and Miss Mary Earle, Winchester, Ont.; Mrs. John Banks, Laurel, Ont.; "Evangeline," Hickson, Ont.; M. R. Roswell, Victoria, P. E. I.; Miss J. McLean, Elm Grove, Ont., and Miss A. B., Upper Maugeville, N. B.

Others who came very close indeed to the standard reached by the above were: "Thalo"; "Mac E"; Olive Burnett; Olive Kidd; Agnes McKim; Agnes Gordon; Daisy; Margaret Veale; "Dranna"; "Nichola"; L. A. C.; Mrs. D. Whelpley; Jane McFaden; J. N. S.; Hilda Smith; "Eonone"; Ursula Shipley; "Elaine."

The Selection.

The selection was chosen from Mr. James Atkinson's translation of the famous Bedouin love story of Laili and Majnun, written by Nizami, the first great romantic poet of Persia.

As translated, it stands thus:
The gloomy veil of night withdrawn,
How sweetly looks the silvery dawn;
Rich blossoms laugh on every tree,
Like men of fortunate destiny,
Or the shining face of revelry.
The crimson tulip and golden rose,
Their sweets to all the world disclose,
I mark the glittering pearly wave,
The fountain's banks of emerald lave;
The birds in every arbor sing,
The very raven hails the spring;
The partridge and the ringdove raise
Their joyous notes in songs of praise;
But bulbous, through the mountain-vale,
Like Majnun, chant a mournful tale."

We have space for only two renderings, as follows:

"The ink veil of night withdrawn,
How sweetly looks the rosy dawn,
Rich blossoms laugh on every tree,
Like hopes of fortunate destiny,
Or the smiling face of revelry.
The crimson tulip and golden rose
Their sweets to all the world expose,
I mark the glittering pearly wave
The fountain's banks of emerald lave,
The birds in every tree-top sing,
The very raven hails the spring.
The partridge and the ringdove raise
Their liquid notes in songs of praise,
But bulbuls through the verdant vale
Like Majnun chant a mournful tale."

MRS. W. H. SHORE.

"The dusky veil of night withdrawn,
How sweetly looks the rosy dawn,
Rich blossoms laugh on every tree,
Like smiles of fortunate destiny,
Or the shining face of revelry.
The gaudy tulip and golden rose
Their sweets to all the world disclose,
I mark the glittering pearly wave
The fountain's banks of emerald lave,
The birds in every tree top sing,
The very raven hails the spring.
The partridge and the ringdove raise
Their dulcet notes in songs of praise,
But bulbuls through the waking vale
Like Majnun, moan a mournful tale."

JUSTUS MILLER, JR.

Mount Elgin, Oxford Co., Ont.

We should be glad if it were possible to give detailed criticism of each of the answers submitted, referring to each competitor by name. Our members will, however, understand the limitation, and so will not object, we trust, to searching out the references to their own work from a mass of collective criticism.

Among words noted as particularly felicitous were:

- Line 1.—For "gloomy"—dusky, mystic, purple.
- Line 2.—For "silvery"—rosy, glimmering.
- Line 4.—For "men"—"smiles."
- Line 6.—For "crimson"—stately, queenly, haughty, flaming.

Several competitors murdered the rhythm here and there; e. g., "scintillating" was substituted for "silvery," line 2; "bright" for "crimson," line 6; "precursors" for "men," line 4; and "proclaims" for "chant," in the last line.

Several others made equal havoc with the rhyme, as when a frantic effort was made to induce "scene" to rhyme with "sing,"—and even "dispense" with "rose," and "sun" with "have"!!!

Among words noted as only fairly apt, were "gaudy," line 6; and "dulcet," a rather hackneyed word, line 13. "Drawls" and "drones" for "chants," line 16, were both badly chosen.

We are glad to welcome several new members, among whom are some from British Columbia, some from Nova Scotia, and one each from New Brunswick and Prince Edward Island.

In next issue a new competition will be announced.

Dress for Men.

Editor Roundabout Club:
Since beginning to read your column a few weeks ago, I have become very interested by the letters of members. May I join, too, and express a few ideas and ask a few questions?

Many of the girls—there are hardly any boys—have been telling some of the qualities they admire in young men. Many of these can be turned on the girls, too. Some girls think they can dress any old way, but that the boys must always act and dress just so. I agree with "Snow-drop" that many girls are very careless of the company they keep.

- May I, like "A Black Knight," ask you some questions on etiquette?
- When attending an "At Home," such as a "Collegiate At Home":
1. Would it be proper to wear a white or light vest with black coat and trousers, or should one wear a suit of the same material?
 2. What color of tie should be worn?
- Hoping to hear from you in your valued column.
A WANDERER.
Oxford Co.

In fashionable city circles, the dress worn to any formal evening function is strictly evening costume, a swallow-tailed coat of black and trousers to match, a white single or double-breasted dress-waistcoat, white linen bow tie, patent leather pumps. At afternoon "At Homes," or receptions, the regulation dress for men is a frock coat of black or very dark gray, double- or single-breasted waistcoat to match, trousers of gray, a broad folding tie of light silk, top hat, gray gloves, and patent leather shoes.

One must, however, follow the customs of a place, or of the people with whom one associates. At a Collegiate "At Home," almost anything is likely to be worn, except, of course, a morning or outing costume, so the matter need give you little trouble. Wear a black or very dark suit, preferably of light weight, smoothly finished material, and a light, delicately colored silk tie. The white vest is optional. Wear it if you choose, or wear one that matches your coat.

Rather Awkward.

A little while ago the newly-elected Provost of a Scotch provincial town was about to make his first journey in that capacity through the place. The townspeople had arranged that from an arch of flowers under which he was to pass by the words, "He well deserves it." But the wind blew away the crown, and when the Provost passed under the arch, to the great joy of those who had voted against him, only a rope with a noose at the end of it dangled there, with "He well deserves it" standing outside in bold relief.



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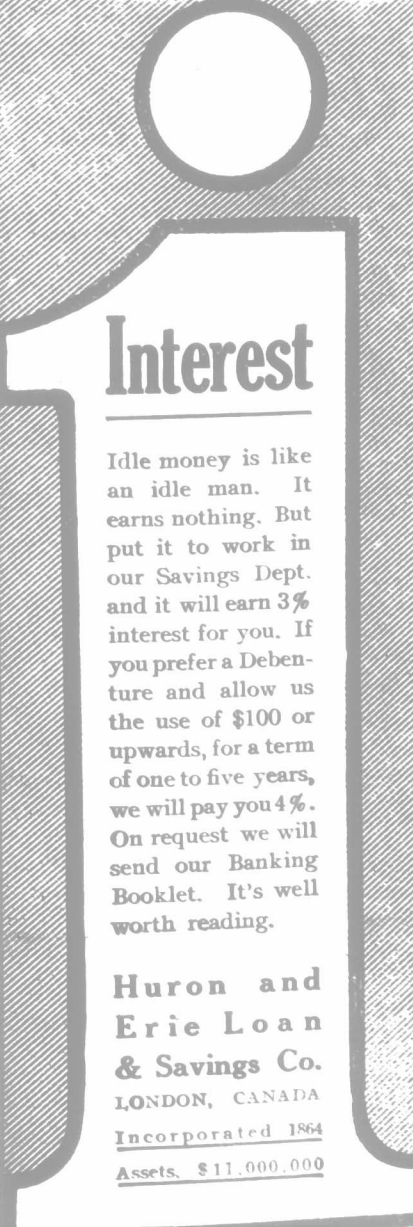


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By Phillips Brooks.

Everywhere, everywhere, Christmas to-night!
Christmas in lands of fir tree and pine;
Christmas in lands of palm tree and vine;
Christmas where snow peaks stand solemn and white;
Christmas where cornfields lie sunny and bright;
Everywhere, everywhere, Christmas to-night!

For the Christ-child who comes is the Master of all;
No palace too great, no cottage too small;
The angels who welcomed Him sing from the height,
"In the City of David, a King in his might";
Everywhere, everywhere, Christmas to-night!

Then let every heart keep its Christmas within,
Christ's pity for sorrow, Christ's hatred for sin,
Christ's care for the weakest, Christ's courage for right,
Christ's dread for the darkness, Christ's love of the light;
Everywhere, everywhere, Christmas to-night!

Christmas where children are hopeful and gay;
Christmas where old men are patient and gray;
Christmas, where peace, like a dove in its flight,
Broods o'er brave men in the thick of the fight;
Everywhere, everywhere, Christmas to-night!

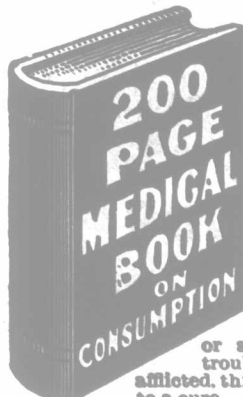
So the stars of the midnight which compass us round
Shall see a strange glory, and hear a sweet sound,
And cry, "Look! the earth is aflame with delight!"
O sons of the morning, rejoice at the sight!"
Everywhere, everywhere, Christmas to-night!

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...and she had a little faintly to her eyes, and she was looking now upon the young man, but her hand was held up and placed in mine.

"You are very sure, Jim? You believe those words you said?"
"Aye, I believe them with all my soul."

"No, but hold my hand a little, Jim," she said, almost irreflexively. "I am so tired."
Rob did not begrudge me that. She closed her poor, fear-tortured eyes, and sank at last into a blessed sleep. Slowly, then, not to waken her, though I knew that never on earth should I look into the depths of her eyes again—I unloosed the thin, sweet hand, the dear, dear hand that clung to mine.

"I am making away to-morrow, Rob," I said. "It is clear sailing for you now. You will delay your going a day or two, but not longer. It is all arranged about the boat that will take you over. Let Belcher know for what day and tide you will need it, that is all. So—good-by, old man."

"But, Jim," he said, following me to the door; "Jim." Except for my name, which he could speak, his mouth made soundless motions, like a stutterer's.

I laughed as I grasped his hand. "Someone must stand firm. Wish me joy, old fellow. I'm off to sea before you."

"But—Jim—" He put his arm around my neck. I caught the sound of a sob that seemed to tear the strong fellow's heart, and I tore myself from him, and dashed away to the River.

CHAPTER XXXI.

Power Lot, God Help Us.

Cuby had not made too sanguine a promise; she was a good sailor, indeed. So we cruised far, making a strange port now and then, until at last we anchored by the little fishing hamlet which we have known for home ever since, and which we knew for home as soon as ever we had entered it.

In certain storms, in certain great winds, the surf knocks even at our door. If we are content with our nest by the cliffs—still, we know the way of the voyager that reckons on no long abiding. It is his calling, never forgotten of his soul—the calling of the voyager. Though he was content in his dwelling by the shore, and cruised not far any more—as once he did—but watched the tides and hauled his nets, and dwelt at peace with children and wife, and all the souls about him; still, ever the calling of the sea is upon him, and them.

It is but nature, and nature is but God; and none shall lose his way in the wildest night, clinging by wreck or spar—none shall lose his way. This is the knowledge of the voyager.

It was five years after Cuby and I had sailed away from Power Lot, God Help Us, and the River. It happened strangely. Two miles farther down the shore there is a little colony of "summer cottages" and a fine inn for travellers, whose life is as remote from ours as though we and they inhabited different continents.

It happened one day when I had delivered some fish, by order, at the inn, and a waiter of finer manners and clothes than any I have ever dreamed of wearing had brought the money to me in the kitchen. I heard, thrashing and slewing 'round to the porch, one of those fiend carriages that fly over country without horses. It was a very large and splendid contraption of its kind, and in it sat—Rob Hilton.

"Who is that?" I said sharply to the waiter in broadcloth, not knowing what I said.

"Swell by the name of Hilton," he replied. "Him and his wife came last night with their shofer. Big swells. Engaged the most desirable rooms in the house for three days. Touring the country. Fine people. Grand style."

I made my way home. I said nothing to Cuby, who slept as soundly as our boys even before the darkness had well settled down. But when I thought that Rob would have finished his dinner, and might possibly go strolling about the shore near the inn with his cigar, I made my way over there again. I stood out of sight in the lee of an old black hulk that had been wrecked and thrown up there long ago, watching.

There were many people on the piazzas of the inn. Rob was not among those people, nor Mary. I waited, moistening my parched lips, and with straining eyes as the shadows grew heavier, and, in spite of hope, could hardly believe my senses when at last a big figure, emerging from the door, loomed up and sauntered slowly down along the shore toward the old vessel's hulk. I saw the glowing spark of his cigar drawing nearer and nearer.

"Rob," I said softly and gladly; "hello, Rob!"

The cigar fell from his lips, scattering its sparks upon the beach. "Jim!" he cried, and rushed toward me. If he had thrown his arm around me condescendingly, if he had reeled off glibly any words of astonishment and delight at the meeting, I should have hated him. But he was always Rob.

"Jim," said he of the child-heart, standing pale and trembling with a visible joy before me; and this was the way he spoke to me, the fisherman, putting me above him, as it were, and not beneath, for the greatness of his heart; "Jim," he said, smiling the old smile in my face, "I've never touched a drop."

I laughed. The breezes of the corn fields at Power Lot, God Help Us, seemed to blow again in my face, and there again Rob leaned on his hoe, in faded flannel shirt, responding eagerly if any poor denizen of the place paused to talk with him as a brother. I drew him to one of the benches where the idle summer people sat by day. The hour I was to have with him seemed like an eternity of joy.

"Jim—is it really you? We have tried and tried to find trace of you, Mary and I. We wanted to make you rich. We are going to do it now. Why, it just belongs to you, that's all!"

"Ah no! No! I prefer to stand where I do, lad, by the work of my own hands; friendly, on the same level, and as well off in the world as you; for it is all well with you; you were born to it, and know how to carry it. But for me, I think a man may have too much to carry, so that he cannot sail free, or fears to sail at all. I was never one that wished to be much hampered."

Rob's blue eyes caught fire in the night as he looked into mine.

"Well, we are sailing free, too—Mary and I. You thought the money would swallow us!" he went on. "We are not keeping it, Jim—not using it for ourselves. We've started colonies—we're starting one in this territory—homes for people to work the land and live as God meant people to live. We make their homes easy to earn. And in the city—he plucked me by the arm—his words come fast—" in the city, Jim, we work there, too, for people. We work all the time. You ought to see our tenements. Jim, we work—we work."

"Glory be to God!" I said, my arm on his shoulder. The soul of the voyager was his. He had not settled down in a prison of gold on a bed of down.

"Hurrah!" I said, "we are voyagers still together."

"Did you think," he said, "I would go back to any sty, after my view off Power Lot? It would be but a sty, though with a dozen servants to order it. It would be but a selfish sty!" His eyes shone—oh, but he was a lusty voyager, ready for the storm, ready for the next call—he! I thought we stood on the mountains again together and it was he that had lifted me.

"But come," he said. "Mary will be wild to see you."

ROOFS THAT NEVER WEAR OUT

Sea Green or Purple Slate

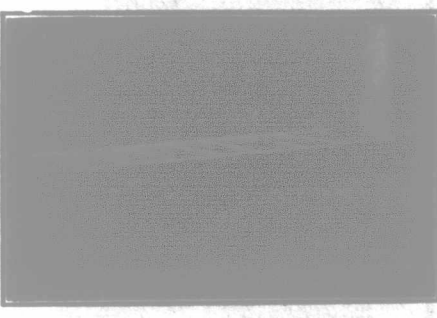
is nature's own product—not man made. Quarried from solid rock—split into convenient form for laying, and then in its natural state ready for the roof.

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It can't burn, rust, warp, crack, tear or decay. That's why Sea Green or Purple Slate Roofs never wear out and never require painting and re-painting like all other roofing. Sea Green or Purple Slate Roofs are suitable for any building, new or old. Give perfect protection. Reduce insurance rates because spark and fire-proof. Afford clean easterly water. Not affected by heat or cold. First cost—only a trifle more than short lived roofing. Kettle your roof question for all times. Don't spend more money for poor roofing. Write to us for our free book "ROOFS"—it will save you money. Give name of your local roofer. Write today.

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This evaporator is made to fill a big demand for one at a low price that will make first-class maple syrup. If you want an evaporator at a big price, don't apply to us, we don't make them; but if you want one at a low price, that will give you splendid satisfaction, we have it. We sell direct to you, and save you the middleman's profit. If not as represented when it reaches your station, send it back at our expense. Write for our illustrated pamphlet of evaporators, buckets, tanks, spouts, etc. Order early.

The Steel Trough & Machine Co. Limited,
TWEED, ONTARIO.

AUCTION SALE!

Will sell by auction at
Summerside, P. E. I., on Dec. 29, '08
15 imported Mares,
and at
Charlottetown, P. E. I., on Dec. 31, '08,
15 also.

These are a choice lot, and will be sold to the highest bidder. Sales commence at 1 o'clock.

Wm. Meharey, Russell, Ont.

FREE FOR SELLING PICTURE POST CARDS

Guaranteed Silver Nickel Man's Watch, stem wind and stem set. For selling only \$2 worth of the grandest post cards ever seen—views of places all over the world; six cards for only 10c. They go very fast. Send to your name and address plainly written today. A post card will do. **The Reliable Timepiece Co., Waterloo, Ont.**

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116 Humorous Recitations, 15c.; 20 Humorous Dialogues, 15c.; 150 Songs with Music, 15c.; Famous Dramatic Recitations, 15c.; by mail, postpaid, two books for 25c.; four for 50c.

USEFUL NOVELTIES CO.,
Dept. E. Toronto, Canada. 1908

SEND Receive 5 Wool Remnants suitable \$1.00 for BOYS' KNEE PANTS up to 11 years. Give age, and we will cut out pants free. Add 25c. for postage.
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8 COOTE BLOCK, LONDON, CANADA.

QUESTIONS AND ANSWERS. Miscellaneous.

SEED-BED WITHOUT PLOWING.

If land is clean of foul seeds, or weeds, and in a good state of cultivation, can as good crop be raised by working the stubble with some sort of cultivator to get a seed-bed instead of plowing. How do you think it would result on land that had been in hoed crops if one were to prepare it for wheat in this way?

YOUNG FARMER.

Ans.—Experiments have shown that maximum yields are derived when certain bacteria in the soil are given a chance to act on as great portion of the soil as possible. Plowing the land at least once a year gives these bacteria this desired opportunity. In addition, the question of soil-moisture must be considered. Thorough surface cultivation on soils that have not become too compact during the summer might retain sufficient moisture, but plowing, as a rule, increases the moisture-holding capacity. On your soil, provided it had not become compact, and again provided next season is a favorable one, you might obtain as good crop by surface working as by plowing, though this practice cannot be generally advised. It is wise always to prepare for a bad season, if maximum returns are to be expected. This means the use of the plow at least once a year. The root ground, if on light soil, and if it is impossible to find time to plow in the fall, might be sown without plowing with reasonable chances for a fair crop. Particularly is this the case where potatoes were grown.

CEMENT AND COLORING FOR CEMENT-BLOCK HOUSE.

How many pounds of cement would it take to build a block house 30 x 30 feet, with walls 20 feet high? What would I get to color the cement blocks a dark brown, something similar to the Cataract stone? Is painting them a success; will it stand? Does it injure the blocks to make them and leave them lying over a winter?

D. H. T.

Ans.—A dwelling-house of this description would be built with a wall 10 inches thick on first story and 8 inches thick on the second story. We presume that the height given, 20 feet, is the height of wall above basement, and we have figured accordingly. If part of this 20-foot wall is included in the foundation of the dwelling, we should know that, as our figures would be somewhat differently arranged.

We desire to advocate a safe thickness of wall. A building 30 feet square, with walls 10 feet high and 10 inches thick, built from concrete blocks at a proportion 1 to 5, will take thirty-four barrels of cement. One 30 feet square, with walls 10 feet high and 8 inches thick, will take 30 barrels of cement. In this case, if the walls are to be 8 inches thick from top to bottom, and 20 feet high, it will take 60 barrels of cement, and if 10 inches thick, from top to bottom, it will take 68 barrels of cement.

In order to color cement blocks dark brown, use 50 pounds oxide of iron to 1 barrel of cement and 2 pounds peroxide of manganese, or about the same quantity of black powder mortar stain. We cannot specify the exact amount required of black or red, as different sands will require different quantities of coloring materials. The best method will be to use the amount here specified, making up a few blocks, and allow them to dry, then if they are a little too dark use less black, and if not dark enough use a little more black; if not dense enough use a little more red. The powders should be thoroughly mixed with the cement while in a dry state.

Painting the blocks is not a success. Exposure to the weather during winter will not hurt the blocks, providing they have been kept watered, and at a temperature of 60 to 70 degrees for the first twenty-four hours, and then for a couple of days at about the same temperature without watering. During the period of exposure to the cold, crystallization will not proceed, but as soon as warm weather comes, the blocks should be watered so that the process of crystallization may go on in a normal way.

H. POCKOCK.

BARRED ROCK COCKEREL MARKINGS—ROUND EGGS FOR PULLETS—CHANGING MILKERS—TWIN RAM VS. SINGLE RAM.

1. What are the markings of a Barred Rock cockerel, single comb? 2. Is there anything in the belief that round eggs hatch out pullets? 3. Does changing milkers make a cow fail in her milk? 4. Is a single ram as likely to get twins as a twin ram?

D. H. T.

Ans.—1. A Barred Rock cockerel has grayish-white plumage, each feather being crossed by regular narrow, parallel, sharply-defined, dark bars, not a positive black, free from brownish tinge or metallic sheen; the light and dark bars are of nearly equal width, and extend throughout the length of the feathers on all parts of the bird, the combination of overlapping feathers giving the plumage a bluish appearance. Shanks and toes are yellow; beak yellow; face, comb, wattles, and ear-lobes, bright red; eyes bright red, or bay.

2. Yes, round eggs, when hatched, may give pullets—but the chicks are just as likely to be male birds. To prove it, select three or four settings of round eggs next spring. If the rule were pullets from round eggs, poultrymen would be able to raise whichever sex best suited their needs.

3. A great deal depends on the milker. Any condition that excites a cow or makes her nervous results in smaller quantities of milk. A stranger milking may have that effect, but one who is well known to the cow, and also is a good milker, may perform the operation without any reduction of flow. It is possible that a change of milkers may even increase the flow. The best plan, however, is to have a competent milker milk the same cows each time. Other conditions being equal, this plan gives the best results.

4. The occurrence of singles, twins or triplets, depends largely on the mother. A strong ram, a single, may be depended on to give as many twins from the same flock as a twin ram of similar type. It is possible that a twin ram from a twin-producing strain may, however, transmit twin-producing capacities to future generations, though this is problematical.

GOSSIP.

The Iowa State College authorities. Ames, Iowa, have secured 20 head of prizewinning Shorthorn breeding and fat cattle from Ohio's champion herd, the property of Carpenter & Ross, Mansfield, Ohio. This collection includes the International prize calf herd, the famous Canadian International champion yearling steer, Roan Jim, one of the greatest steers ever shown in America. This will furnish those who attend the short course in stock-judging, January 4th to 16th, an excellent opportunity to study the best types of Shorthorns obtainable on the continent.

The first sheep imported into Australia came from Cape Colony, and were very inferior. Three years after the first importation another batch of fifty ewes and one ram were sent from the Cape, and these also failed so completely that the official report to the effect that Australia was unsuitable for sheep seemed to be fully confirmed. The real pioneer of the sheep-raising industry was Mr. Macarthur, a young officer who arrived in New South Wales in 1790. He obtained grants of land and proceeded to stock them from sources other than the Cape, procuring ewes from India, and rams of Anglo-Spanish descent. His enterprise succeeded, but he owed the great stimulus his sheep-farming received to the result of some misconduct of his own. The Colonial authorities had him arrested for some offence, and he was sent to England to be tried. The home authorities refused to try him, as no witnesses had been sent, and Mr. Macarthur was set free. He bought some Merino rams and returned to Australia. Sixteen years later he sold wool from their descendants at 10s. 4d. per lb., and his fortune was made.



THE UNION STOCK-YARDS Horse Exchange

WEST TORONTO, CANADA.

Auction sales of Horses, Carriages and Harness every Monday and Wednesday. Private sales every day. Come and see this new Horse Exchange. It will interest you. Also the quarter-mile track for showing and exercising.

HERBERT SMITH, Manager. (Late Grand's Repository.)

Clydesdale Stallions and Mares!



A fresh lot has just arrived, including many prizewinners. Some extra big ones. Prices right. Inspection invited.

DALGETY BROS., LONDON, ONTARIO. Stables Fraser House. Address correspondence to Dalgety Bros., Glencoe, Ont.

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At present we are offering a very choice consignment of imported stallions, mares and fillies received from the great Shire stud of R. Moore & Sons, Beeston Fields, Nottingham, England. They are a grand lot, and will be sold at right prices. In Shorthorns we have a number of choice young bulls, three of them show animals; also an excellent lot of females—all ages.

JOHN GARDHOUSE & SONS, Highfield, Ontario. Toronto, 14 miles; Weston, 3 1/2 miles. Long-distance phone.



Imp. Clydesdales and Hackneys

To my many friends and patrons: I am starting for Scotland for a new importation about Nov. 1st, and shall select the best available. In future my stables and address will be Markham Village, 20 miles north of Toronto.

T. H. HASSARD, MARKHAM, ONT.

CLYDESDALES AND SHORTHORNS.—Both imported and bred, at Columbus, Ont., the Home of the Winners. Our last importations landed in August. They include the pick of Scotland, from such renowned sires as Baron's Pride, Everlasting, Baron o' Bucklyvie, Hiawatha, Marsella, Sir Everest, and Prince Thomas. We have on hand over 30 head to choose from, from the above noted sires, from 1 to 4 years old, and including stallions and mares. Correspondence solicited. Call and see them at our barns, Columbus, Ont., before purchasing elsewhere. Our prices are right. Long-distance phone in houses. Phone office, Myrtle station, Myrtle station, C.P.R.; Brooklin station, G.T.R.; Smith & Richardson & Sons, Columbus, Ont., Oshawa station, G.T.R.

IMPORTED CLYDESDALES, SHORTHORNS AND SHROPSHIRE!

I have on hand several Clydesdale stallions, as choice a lot as ever crossed the ocean. Missie, Stamford, Claret and Gem of Balcchin Shorthorns; up-to-date in type and quality. 50 imported Shropshires, 30 ewe and 30 ram lambs from imported stock. Look me up at Toronto Exhibition horse barns. THOS. L. MERCER, MARKDALE, ONT., P. O. AND STA.

IMPORTED CLYDESDALES

My new importation for 1908 has now arrived—stallions and fillies—personally selected. Richest in breeding; highest in quality; with abundance of size and character. Sold on terms to suit. GEO. G. STEWART, HOWICK, QUE.

IMPORTED CLYDESDALES

ed a short time ago, are an exceptionally choice lot, full of flashy quality, style and character, and right royally bred. I will sell them at very close prices, and on terms to suit. C. W. BARBER, Gatineau Point, Quebec. "Close to Ottawa."

Clydesdales

Imported and Canadian-bred. Our mares all are bred to Acme (imp.), the 8th best breeding horse in Scotland in 1907. Four male foals and one filly, all from high-class (imp.) mares, for sale right.

R. M. HOLTBY, Sta. & P.O. Manchester, Ont., G.T.R.; Myrtle, Ont., C.P.R.

Clydesdales and Hackneys

Canadian-bred; also some Canadian-bred Clydesdale stallions. Hackney stallions and Canadian-bred always. HODGKINSON & TISDALE, BEAVERTON, ONTARIO. G. T. R. and C. N. R. Long-distance phone.

We have for sale a few choice Clydesdale mares, imported and Canadian-bred. Hackney stallions and Canadian-bred always. HODGKINSON & TISDALE, BEAVERTON, ONTARIO. G. T. R. and C. N. R. Long-distance phone.

Imported Clydesdales the price and terms are right.

I have still on hand 1 stallion, black, rising 4 yrs., by Carthusian, a Toronto winner; 1 rising 2 yrs., by Baron's Pride, 1 rising 2 yrs., by Danure Castle; 4 fillies, a Toronto first and second prizewinner among them. Every one of these is an extra good animal, and the price and terms are right. T. D. ELLIOTT, Bolton, Ont.

Imported Clydesdales

All have great size, smoothness, quality, on the best of bottoms, and royally bred.

In my new importation I have the best lot I ever imported. 7 stallions, including the great sire, Baron Hood. WM. COLQUHOUN, MITCHELL, ONT.

Oak Park Stock Farm Co., Ltd.,

have at present for sale a choice selection of young HACKNEYS broken to harness, well worth moderate prices. Also 70 choice SHROPSHIRE RAM and EWE LAMBS, all bred from imported ewes, and sired by the best imported rams. Will be sold at times prices. JAS. J. BROWN, Manager, BRANTFORD

At their St. Thomas stables, the John Chambers & Sons Co., of England have for sale stallions and fillies from their noted Shire stud, high-class representatives of the breed. Correspondence solicited. Address: DR. C. K. GEARY, St. Thomas, Ont.

IMPORTED SHIRES

stallions and fillies from their noted Shire stud, high-class representatives of the breed. Correspondence solicited. Address: DR. C. K. GEARY, St. Thomas, Ont.

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IMP. CLYDESDALE STALLIONS AND FILLIES.—Our new importation of stallions and fillies are the best we could select in Scotland, particularly well bred, with the size, smoothness and quality that Canadians admire. Show-ring stuff. Come and see them. Will sell on terms to suit. JOHN A. BOAG & SON, Queensville P. O. Ont.; Newmarket Sta., G. T. R. Telegraph and telephone one-half mile from farm. Metropolitan Street Ry. from Toronto crosses the farm.

QUESTIONS AND ANSWERS. Miscellaneous.

ENTERITIS IN POULTRY.

Two hens took sick within the past week at different times. When first noticed were lying on the ground sideways. I placed them on their feet, but they immediately fell down. They would not eat. When I killed the first one she seemed to have little blood. The second bled freely. When opened, food was found in the crop and gizzard. Noticed yellow, slimy excreta. Internal organs seem all right. I feed oats, principally, with scraps from house. Good, dry and well-ventilated quarters. What is the trouble?

Ans.—The trouble is enteritis, or inflammation of the intestines, brought on by too long continued feeding of an unvaried ration, mayhap without sufficient green food, grit, etc. The bird lies on its side, has fever, with a distressed look and bearing. Sometimes there is spasmodic action of wings or legs, perhaps both. These symptoms are more or less acute, according to severity of attack. Diarrhea is usually a result. The remedy is at once to change diet and feed a varied one, with green food predominating, for some little time. If the attack is unusually severe, a teaspoonful of castor oil is likely to be beneficial. But in this, as in many other diseases, it is easier to prevent—by proper feeding and management—than to effect a cure. Variety in rations is not only conducive to good health, but will undoubtedly prevent egg-eating and feather-picking, two vicious habits that improperly-fed hens are liable to acquire.

FENCING MATERIALS.

A bought a farm alongside of B. The line fence that belonged to A had about 30 panels of fence, with posts, more than B's.

1. A and B measured the fence. A put a Frost wire fence on the half. Then there were 30 panels which still belonged, or were put there by A's place, and had been kept in repair by same, A. When A took away the old fence he asked B if he would take away the 30 panels that was over the half. He said no; what would he do for a fence! Now B has this fall taken away the 30 panels, with posts, without saying a word to A.

1. Has B any right to the piece of fence? 2. Could A get anything for the rails and posts that B has taken? 3. What is the law on it?

Ontario. E. A. S.

Ans.—1. No. 2. We think so. 3. It seems to us that A simply allowed B the use of the panels and posts in question, while they formed part of the line fence, and that as soon as they ceased to do so they again became the exclusive property of A, and, moreover, that B, in converting such fencing materials to his own use, became legally liable to A for their value, and to an action at suit of A for its recovery.

STEAMING AN ENGINE—IN-FOAL MARE ON TREAD POWER.

1. About how long, on the average, does it take to get steam pressure of 100 pounds on ordinary threshing engines of about 17 or 18 horse power, with good wood? 2. What is the average quantity used in ten hours?

3. Have you any book that gives estimates of the quantities consumed of the different kinds of fuel, i. e., per horse-power? 4. Would you consider it injurious to work a mare on a tread power that is due to foal about the first of the year? How about one due in May?

YOUNG FARMER.

Ans.—If the boiler is filled with cold water to show about 2 inches in the water glass, steam should be raised to 100 pounds with good wood, if properly fired, in from three-quarters of an hour to one hour. 2. This depends so much on the work

done on it and on the fireman that it is impossible to make any near estimate without knowing the conditions. If the engine is developing 17 or 18 horse power and the wood being used is good hard maple and beech, and the fireman knows his business, he should not use more than from three-quarters to one cord in ten hours.

3. We do not know of any book that will give you this information. The quantity of fuel used per horse power is usually computed from the calorific value of the fuel. A fair estimate for a traction engine would be from 7 to 12 pounds of steam lump coal, or its equivalent, per horse power per hour, according to the conditions of the engine and boiler and the experience of the fireman.

4. The use of an in-foal mare on a tread power is attended with a degree of risk, and if the mare is advanced in pregnancy would certainly be cruel. Do not think of using the mare due to foal the first of the year, and it would be better not to use the one due in May, at any rate not after January.

GOSSIP.

OCTOBER WOOL MARKET IN AUSTRALIA.

"The closing markets of the month show a more active demand for wool, especially amongst the French and German buyers," writes J. S. Larke, from Australia, under date October 27th. "Prices have not changed much, but the better demand leads to the belief that prices will slightly improve. The closing London sales showed a carry-over of only 38,000 bales, which is indicative of an improvement in the market at the opening of the next sales. The Australian sales up to Saturday last (October, 1908) were 224,509 bales, as against 289,092 bales at the same time of the previous year. There was a very considerable decrease in the Melbourne sales, partly due to the strike of the buyers against the terms offered by the selling firms. This has been arranged, and the sales will continue. The receipts to date (October 27th), in Sydney, are 329,210 bales, as against 336,850 bales of last year, a decrease of 7,640 bales. There is some improvement in the character of the wool arriving, but there is a less proportion of first-class wools than last year, hence the strong demand is for the better class."

MAPLE LEAF BERKSHIRES.

The reliable and popular breed of Berkshire hogs, so noted for their strong constitutions and the fine, tender grain of meat, and which have been so vastly improved in type along the bacon-type line of late years, are slowly, but surely, forging to the front as the ideal hog for the ordinary farmer. Among the many high-class herds of Ontario, none excel the Maple Leaf herd, the property of Mr. Joshua Lawrence, Oxford Centre P. O., a short distance from Woodstock, Ont. Mr. Lawrence is one of the very enthusiastic admirers of Berkshires, and his herd is one of the best, kept up to a high standard of excellence by judicious selection of breeding stock. The main stock boar in use just now is Imp. British Duke, bred by A. Hiscock, England, and imported by Mr. Lawrence. He has never been shown, but his superior type, conformation and quality would surely make a name for him in any company. Prominent among the several big quality brood sows is Imp. Durham's Don, bred by the Duchess of Devonshire. Nothing seems to be lacking in her make-up of the ideal, and as a producer her remarkable success is told by explaining that at the late Guelph show one of her daughters, Oxford Daisy, won first in a very strong class, making five consecutive first-prize winnings for her, and another daughter, Oxford Nell, has won four second prizes in as many times shown. These sows are for sale, as well as another litter, about 2 1/2 months old, out of the same dam, Imp. Durham's Don, and got by the stock boar. For choice buying, this lot should go quick. Another sow of superior merit is Willow Lodge Gem, a sow that was never beaten in any company at any show. Out of her for sale are a number of young sows ready to breed. The Pairs can be supplied not akin. The early buyers get the pick. Address Joshua Lawrence, Oxford Centre, Ont. Long-distance 'phone connection at Burgessville.

High-class Imported SCOTCH

SHORTHORNS

BY AUCTION

AT THE

Village of Enterprise,

CO. ADDINGTON,

ON

THURSDAY,

Jan'y 14, 1909

Sale will commence 12 o'clock sharp. Terms cash, or 9 months at 5%.

CAPT. T. E. ROBSON, Auctioneer.

Trains arrive: C. P. R., 8.30 a. m.; G. T. R., 9.30 a. m.



Mr. C. D. Wagar will sell positively without reserve

28 HEAD

of imported and home-bred Scotch Shorthorns of the Orange Blossom, Belona, Wimple, Village Maid, Broadhooks, Rosebud, Mayflower and Lady Eden tribes. Six of them are imported; high-class show stuff in heifers and young bulls will be sold.

Catalogues on application to:

C. D. Wagar ENTERPRISE, ONT.

Farm only 40 rods from depot.

Shorthorn Cattle AND LINCOLN SHEEP.

Females of all ages for sale of the thick-fleshed, low-down kind that have been raised naturally, neither stuffed nor starved. Twenty-five Lincoln ewes, bred to our best imported stud ram, also a few choice yearling rams. Prices very reasonable for quick sale.

J. T. GIBSON, DENFIELD, ONT.

A. Edward Meyer,

P. O. Box 378, Guelph, Ontario,

Breeds SCOTCH SHORTHORNS Exclusively

Twelve of the most noted Scotch tribes have representatives in my herd. Herd bulls: Scottish Hero (imp.) = 55042 = (90065) 295765 A. H. B.; Gloster King = 65703 = 283804 A. H. B. Young stock for sale. Long-distance 'phone in house.

Scotch Shorthorns

BULLS: 4 choice yearlings, IMPORTED; 8 yearlings and a number of choice calves of our own breeding. FEMALES: A number of cows and heifers forward in calf, including showyard material. Tempting prices. W. G. PETTIT & SONS, FREEMAN, ONT. Bell telephone at each farm. Farms only 1/2 and 1 1/2 miles from Burlington Jct., G. T. R.

SHORTHORNS

Nine bulls from 8 to 20 months old, reds and roans; 10 yearling heifers and a few cows. Will sell very cheap to make room in stables.

CLYDESDALES

One pair of bay mares and one dark brown, heavy draft and two spring colts.

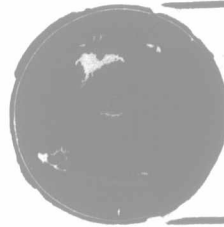
JAMES McARTHUR, Gables, Ontario.

1854 MAPLE LODGE 1908

A few extra good young SHORTHORN bulls and heifers for sale.

LEICESTER ram lambs by the grand champion ram, "Sanford." Right good ones, and a few choice ewes.

A. W. SMITH, MAPLE LODGE P. O., ONT. Lucan Crossing Station, G. T. Ry.



Shorthorn Home-bred Bulls

of the best breeding and quality at attractive prices for the buyer. To see them is all that is necessary. Try to do so if you are in the market. It will pay you.

JNO. CLANCY, H. Cargill & Son, Cargill, Ont. Manager.

Scotch Shorthorns Canada's greatest living sire, Milled's Royal, heads my herd. For sale are young bulls and heifers, show stuff and Toronto winners, out of Stamford, Lady Ythan, Claret, Emeline, Matchless and Belona dams. A visit will be appreciated. GEO. GIER, Grand Valley P. O., Ont. Waldemar Sta., C. P. R.

TWO IMP. BULLS of excellent quality, color and breeding. One 7 months old, sired by imp. Joy of Morning = 3270 = 1 dam Blossom 2nd, imp. Also heifer calves and young cows, and heifers in calf. And choicely-bred Yorkshires of either sex. Prices very moderate. GEO. D. FLETCHER, BINKHAM P. O., ONT. Erin Station, C. P. R.

Shorthorns! BELMAR PARC

John Douglas, Peter White, Manager. Pembroke, Ont.

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

Nonpareil Archer, Imp. Proud Gift, Imp. Marigold Sailor. Nonpareil Eclipse.

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

An unsurpassed lot of yearling heifers.

Shorthorns for Sale—Broadhooks Prince 55002 (imp.), Scottish Hero = 65793 =; also eight grand bulls, 6 to 15 months; also cows and heifers of the best dairy sort and of excellent breeding. Prices right, and on terms to suit purchaser. DAVID MILNE, Ethel, Ontario.

PLEASE MENTION THIS PAPER.

J. A. WATT, SALEM, ONTARIO.

Greengill Shorthorns!

We offer for sale our herd bull, imp. Lord Roseberry, also young bulls and females all ages, either imp. or from imp. stock. Prices right. Long-distance 'phone.

R. Mitchell & Sons, Nelson P. O., Ont. Burlington Jct. Sta.

I can sell twelve young bulls, two of them leading winners at the big Western show and Toronto. Look up the records of the leading fairs, and note the breeding of many of the winners. Elora Station, G. T. R. and C. P. R.

NEWCASTLE Tamworths, Shorthorns and Cotswolds. I can furnish right now a large number of extra choice boars fit for service, some sows in pig, and any quantity about two months old, of such noted sires as imported Cholderton Golden Secret, Colwill's Choice, and Newcastle Warrior—champion boars at Toronto National several years in succession, and out of great big show sows. A few choice heifers; some safe in calf. Bulls ready for service. Will be sold very reasonable for the next 30 days. Also ten ram lambs and two shearing rams. **A. A. Colwill, Newcastle, Ont.**

Hilton Stock Farm Holsteins and Tamworths. Present offering: 6 yearling heifers and several younger ones. All very choice. Of Tamworths, pigs of all ages and both sexes, pairs not akin. **R. O. MURROW & SON, Hilton, Ont.** Brighton Tel. and Sta.

Maple Leaf Berkshires For sale: Sows bred and ready to breed. Guelph winners among them. Boars all ages. The highest types of the breed. Imp. sires and dams. Pairs not akin.

Joshua Lawrence, Oxford Centre, Ont.
ELMFIELD YORKSHIRES 50 young pigs for sale, both sexes. Young sows bred to imported boar, also sows to Canadian-bred boar due to farrow about 1st October. **S. B. Muma, Ayr, Ont. C.P.R.; Paris, G.T.R.**



Pine Grove Yorkshires At the late Guelph Winter Show we won decidedly the best of it in the bacon classes. Our Yorkshires are noted for superior excellence. Both sexes and all ages for sale. **J. Featherstone & Son, Streetsville, Ont.**

Willowdale Berkshires!

Won the leading honors at Toronto this fall. For sale are both sexes and all ages, from imp. stock on both sides. Show things a specialty. Everything guaranteed as represented. **J. J. WILSON, MILTON, ONT., P. O. AND STATION. C. P. R. AND G. T. R.**



SUNNYMOUNT BERKSHIRES

Highest standard of type and quality. For sale: Sows of all ages, and 4 yearling boars. A grand, good lot. Also younger ones. Pairs not akin. **JOHN McLEOD, C.P.R. & G.T.R. Milton P.O., Ont.**



OHIO IMPROVED CHESTER WHITES.—Largest strains. Oldest-established registered herd in Canada. Young sows in farrow. Choice pigs 6 weeks to 6 months old. Pairs furnished not akin. Express charges prepaid. Pedigrees and safe delivery guaranteed. **E. D. GEORGE Putnam, Ont.**

Duroc-Jersey Swine and Leicester sheep-ewes, 3 shearing rams, and this year's crop of ram lambs. Also sows in pig, and sows ready to breed; boars fit for service, and pigs ready to wean. **Mac Campbell & Sons, Harwich, Ont.**



MONKLAND YORKSHIRES

are the easily-fed, quick-maturing kind. The sort the farmers want. All ages for sale. 100 sows bred now.

JAMES WILSON & SONS, FERGUS, ONTARIO

SUBSCRIBE FOR "THE FARMER'S ADVOCATE AND HOME MAGAZINE."

GOSSIP. AGRICULTURAL OUTPUT OF NEW ZEALAND.

The number of holdings of cultivated land in New Zealand over one acre in extent has increased by 1,029 during the past year, and by 10,581 during the last eight years. This is due, not only to the subdivision of large estates, but also to the settlement of considerable areas of Crown lands. The area in cultivation during the past year increased by 515,514 acres. The Minister of Agriculture estimates the value of the production during the year, including agricultural, pastoral, and dairy products, as well as flax, at £25,000,000. The exports of these products amounted in value to £17,000,475.

PINE GROVE YORKSHIRES.

J. Featherstone & Son, Streetsville, Ont., importers and breeders of large English Yorkshire and Essex swine, whose experience along these lines extends over a quarter of a century, and whose herd has a far-reaching fame of excellence, honestly winners in competition with the best of the breed at leading Canadian exhibitions, are just now in an exceptionally favorable condition to supply the increasing demand for breeding stock. With 25 big, choice sows in breeding, many of them prizewinners, and bred from imported stock, farrowing to their noted prizewinning sires, Imp. Dalmeny Joe and Pine Grove Chester, also a Toronto winner, and a son of that great hog, Imp. Broomhouse Beau, customers are assured of getting something to please and true to representation. Either sex can be supplied of any age, from sows bred and boars ready for service, down to youngsters a few weeks old. A perusal of the prize list, both alive and in the dressed carcasses of the bacon classes, as well as the breeding classes of the late Provincial Winter Show at Guelph, will convince intending purchasers that the Yorkshires bred at the Pine Grove farm by this firm are the right sort to breed from.

SCOTCH SHORTHORNS BY AUCTION.

Following are some notes relative to the breeding and individual excellence of a few of the Shorthorns to be sold by Mr. C. D. Wagar, of Enterprise, Ont., at his sale on January 14th, in the village of Enterprise, Addington County, Ont. All told, there will be 28 head sold, 6 of which are imported, as follows: Winnifred 3rd, (imp.), a Wimple, by Spicy King. Belladonna 2nd, (imp.), a Belona. Airy Duchess 3rd (imp.), a Broadhooks, by Pride of All. Silver Belle (imp.), a Village Maid, by Caledon Chief. Byres Orange Blossom (imp.), an Orange Blossom, by Fitzallan. Robina 2nd (imp.), a Rosebud, by Lovat Champion. All these, together with their progeny, including several heifers and four young bulls, the get of Lord Banff's Conqueror, =41194=, a son of Imp. Lord Banff, and out of Daisy Lee, by Ivanhoe. Also the present stock bull, Star of Morning, a Cruickshank Secret, by Rosy Morning, by Merry Morning. Royally bred, he is a grand good kind, low down, very thick, a mellow, good-doing bull, a herd-header of a high order; will be sold at the sale. Among the heifers out of the imported cows is a two-year-old by Lord Banff's Conqueror, and out of Imp. Orange Girl. Another is a two-year-old by Imp. Lucerne, and out of Imp. Airy Duchess. Then there are two yearlings, by Lord Banff's Conqueror, one out of Imp. Orange Girl, the other out of Enterprise Daisy; also a heifer calf by Star of Morning, out of Orange Girl. In young bulls to be sold are six, from 9 to 15 months of age, got by L. B. C., and five bull calves, from 5 to 8 months of age, got by Star of Morning. Eight of these are out of imported cows, and among them are some high-class show stuff. The Canadian-bred end of the herd belong to the Mayflower and Lady Eden tribes, the latter the tribe that has done so much good and produced so many prizewinners in the herd of Hon. John Dryden & Son, of Brooklin, Ont., the whole making an offering that for high character of breeding and individuality have seldom before been offered by auction in Canada.



"Come, Brace Up! It Cured Me and It Will Cure You."

Why do you sit there depressed by gloomy thoughts, with that sad, discouraged, haggard face, when there is within your grasp the means by which you can regain your strength, energy, ambition and happiness? It is time for you to brace up, be a man, take an interest in the good things of life. Look at me! Wasn't I in the same condition as you? Now I am happy, full of strength, and ready to tackle any obstacle. Yes, I too tried drugs, but they failed. Electricity will not fail. Dr. McLaughlin's Electric Belt cured me, and it will cure you. No weak man will ever regret a fair trial of this grand Belt—it has brought health and strength to thousands in the past year. Here is one of the many men cured:

Thos. Bridges, Ashdod, Ont., says: "I have been greatly benefited by the Belt I purchased from you some time ago. My heart is much better and the rheumatism in my arm has all left. I feel improved in every respect. It has done all you claim for it. Thanking you for the interest you have taken in my case."

Isn't this alone evidence enough to convince any man that we tell the truth. Here is another:

James Hatt, Beech Hill, N. S., writes:

"I am glad to tell you that your Belt has proven good. I have never felt as strong and well in my life as I do now. The pains in my chest and back are gone, and I have gained fifteen pounds in weight. I can work every day, and do not feel the first symptoms of pain in my body. It is a pleasure to say that I have at last found a remedy that would cure me of my aches and pains."

Dr. McLaughlin's Electric Belt will make you strong. It will send the warm life blood circulating through your veins. You will feel the cheerful

spark warm your frame; a bright flash will come to your eye, and a firm grip to your hand, and you will be able to grasp your friends and neighbors and feel that what others are capable of doing is not impossible to you.

I want to talk with those who have tried every other known remedy—those who have about given up trying and think that there is no cure for them. Do you think you do justice to yourself to fill your stomach with drugs day after day, when you can't see anything but temporary stimulation to them? (If you want stimulation take whiskey; it is alcohol, like the drugs, and does less harm taken in the same way.) I want to explain how vital power is restored by electricity, and I can prove to you that vital power is nothing but electricity. Then you can see that your trouble can be cured by electricity, and can understand why drugs don't cure you. Come and let us show you the only road to health, strength and happiness. No healthy person was ever unhappy, because a heart full of vitality is light and joyous and quickly shakes off the gloom and depression which is called grief. Some people are unhappy without cause. This is depression due to weakness.

I have a Special Electric Attachment which I give free to those who wear our Belt. This attachment carries the current direct to the weak parts and fills them with its warm, vitalizing power; bringing about a sure and lasting cure. Weakness, Rheumatism, Sciatica, Weak Back, Lumbago, Kidney, Liver and Stomach Trouble, Indigestion and Constipation are all quickly cured by this New Method of our applying "Electricity." Don't put off any longer. Act to-day. To-morrow may be too late. Here is one more proof: **Mr. Gardner Wilcox, Dartmouth, N. S.,** has this to say:

"I received your letter of inquiry some days since, and I believe, beyond a doubt, that my cure is permanent, as I have not felt rheumatism or catarrh, my principal ailments, since I got your Belt, nearly three years ago. I recommend it at every opportunity, and will continue to do so as long as I live, for I believe it has saved me a world of suffering. I am now 73 years of age, and hale and hearty, thanks to your Electric Belt."

It's easy to be cured my way. You put on my Belt when you go to bed; you feel a glowing warmth passing through your body, and the electric power gives you new life. When you wake up in the morning you feel bright, lively and vigorous, and you wonder where your pains and aches have gone. Our Belt has removed them, and they will never return. That's a better way than making a drug store of your stomach. And who ever saw anybody actually cured by drugs? I tell you, drugs don't cure—and if you have tried them, you know it. Nearly all my patients tried drugs first. If you haven't got confidence in my remedy, all I ask is reasonable security, and you can pay me after you are cured.

I have a book which every man should read. It tells facts that are of interest to every man who wants to remain young in vitality at any age. Call if you can; if you can't, send coupon for beautifully illustrated 81-page Free Book.

Office hours: 9 a. m. to 6 p. m. Wednesdays and Saturdays to 9 p. m.

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