

Issued Each Week—Only One Dollar A Year

VOL. XXXI.

NUMBER 4

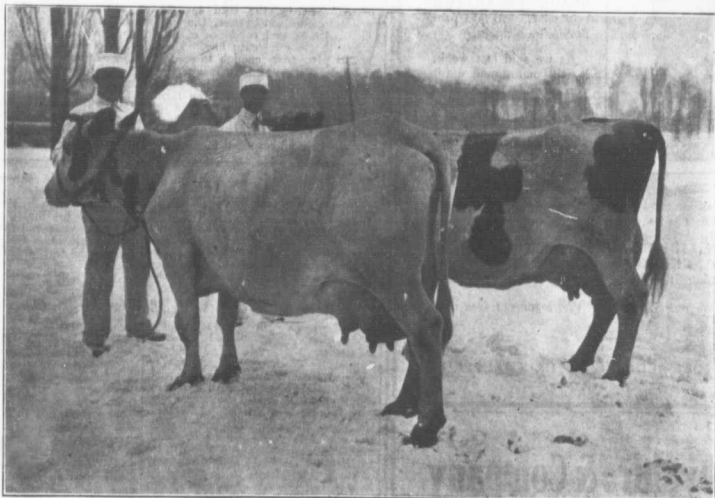
FARM AND DAIRY

RURAL HOME

PETERBORO, ONT.

JANUARY 25

1912.



TWO COWS THAT SMASHED ALL RECORDS FOR PRODUCTION AT A PUBLIC DAIRY TEST interest at the Eastern Ontario Live Stock and Poultry Show held at Ottawa last week, was centred in the great records made by two Holstein cows entered in the dairy test: Maud De Kol, owned by T. A. Spratt, Billings Bridge, Ont., produced 276.3 lbs. of milk testing 3.6 per cent. butter fat in the three days of the test. This cow may be seen in the foreground in the illustration. The other cow, Rhodes Queen, owned by Neil Sangster, Ormstown, Que., produced 302.8 lbs. of milk testing 3 per cent. fat. As far as can be ascertained both of these cows have broken any record previously made at a public dairy test. The cows are full sisters. The victory of these Canadian bred Holstein cows will be a source of pride to all Canadian dairy cattle breeders.

DEVOTED TO
BETTER FARMING AND
CANADIAN COUNTRY LIFE

A SAFE AND PROFITABLE INVESTMENT



When investing your money you desire to put it where it will bring the largest returns and at the same time be safe.

A Cream Separator is sometimes an item of expense, but it should be an investment.

A SIMPLEX LINK-BLADE SEPARATOR is a wise, safe and profitable investment.

As we said last week, it will make money for you by saving Butter Fat.

It requires little or nothing in repairs and therefore the net returns are all the larger.

The bowl runs at a low rate of speed, but each machine will separate 50 to 100 lbs. more than its rated capacity.

A SIMPLEX LINK-BLADE SEPARATOR which has the SELF-BALANCING BOWL is one of the best investments you can make this year, 1911.

Let us tell you more about it. Write for our free illustrated booklet.

WE ALSO HANDLE ALL LINES OF DAIRY SUPPLIES

D. Derbyshire & Company

Head Office and Works: BROCKVILLE, ONT.

Branches: PETERSBOROUGH, ONT. MONTREAL AND QUEBEC, P. Q.

WE WANT AGENTS IN A FEW UNREPRESENTED DISTRICTS

Now

You Must Move Quick!

You'll not want to miss having your proposition come before our people next week. They have been looking for and now for weeks to getting our

Poultry Annual—Out Feb. 1st

98 per cent. of our people actually keep hens. Poultry is a big issue with farmers. Last year \$50,000,000 was the value of Poultry produced in Canada. Then you know the women folks, along with the men, have a special interest in the Poultry, and women, you know, do 98 per cent. of the buying. (Would you care to go on record as to how much they influence the other 20 per cent.?)

Don't Miss It Send your copy right along to-day. Forms close Saturday, Jan. 27th. A few late comers can be accommodated as late as 10 o'clock Monday morning. Phone or wire if you have not time to write.

Advt. Dept. **FARM AND DAIRY** Petersboro, Ont. **Page \$47.04 ; Half Page \$23.52 ; Quarter Page \$11.76**
No Extra Charge for Extra Service you will get Feb. 1st



RUNNING THE GAUNTLET OF THE BIG INTERESTS

The main reason why our farmers have not more to show at the end of the year as a result of our year's work, is because the big interests, as represented by the land speculators, who run up the land values in our cities to enormous prices, the protected manufacturers, railway corporations, trusts and combines of all kinds, advance the prices of the necessities that we have to buy. They do this whenever they think the country is prosperous enough to stand another advance in prices. Thus, no matter how much more money we may make from our farms, we are never able—as a class—to keep it. It is taken from us practically as fast as we make it. Thus, while our farmers never make more than a fair living at the best, those behind these other institutions acquire enormous fortunes at our expense. Read the articles now running in Farm and Dairy and find how this is done. They are the most important series of articles that have ever appeared in a farm paper in Canada.

Ottawa Winter Fair

The success of the Eastern Ontario Live Stock and Poultry Show, held at Ottawa last week, following on the marked success of this show in the year previous, fully justifies the claim of the management that this winter fair must now be ranked as one of the best of its kind in Canada. Those who claim that a show cannot be run on strictly educational lines but must have "special features" to attract the crowd should have visited the fair at Ottawa last week. The galleries around the stock judging arena were crowded from morning to night with spectators eager to learn all that they could about improved live stock.

In quality and number of exhibits the show this year was considerably ahead of last year. Up to Thursday night the attendance was about equal to that of last year, and on account of the special classes to be judged on Friday and the sale of pure bred live stock that had been reserved for the last day the management expect that the attendance will show on the whole, a satisfactory increase.

Lack of room for the accommodation of exhibits is a general criticism to be able to make of any fair. It shows that the fair is growing in popularity with exhibitors. This criticism applies to the Eastern Ontario Show. Every stall was full. Dairy cattle men in particular could not find suitable accommodation for the cows entered in the dairy test, and the overflow had to be accommodated in the dressed carcass room. The sheep and pig men were also crowded. In these two latter departments the great need is for more room for the judging. To accommodate the exhibits all of the space had to be given over to pens, and the judging was conducted in the narrow aisles, where it was almost impossible for interested spectators to see what was going on.

The Ottawa Fair has now taken an established place among our educational institutions and the management can well afford to make adequate provision for accommodating an ever-increasing number of entries in almost all classes.

Much interest centered in the dairy cattle at this fair. And no wonder. Two of the cows in the dairy test exceeded the previous world's record for amount of milk and fat produced in a public three-day test. One of the cows in the test, a Holstein owned by Mr. Neil Sangster, Ormstown, Que., produced milk at the rate of over 100 lbs. a day. Another cow, owned by Mr. Spratt at Billings Bridge, also a Holstein, came almost up to the 100-pound mark and on account of her high test established the world's record for butter fat production. Ayrshires also were strongly represented and made many splendid records. Shorthorns, Jerseys and grades were there in larger numbers than at any other winter fair in Canada.

HORSES

Cyclodolades had everything their own way in the heavy horse classes. There was not a horse of another breed there. All classes were well filled and competition was keen from first to last. Such leading exhibitors as Graham, Renfrew Co., Bedford Park, Ont.; Smith and Richardson, Columbus, R. Ness & Son, Howick, Que., and many others were there with their best to compete for the awards.

Competition was particularly keen in the aged stallion class. Baron Kelvin, owned by Graham, Renfrew Co., was placed first, his strong point being quality of feet and legs and stylish action. He was certainly the most stylish horse in the ring. This horse is also possessed of lots of substance and is a horse of which any Scotchman would be proud. Euclyptus, a horse of great substance exhibited by Smith and Richardson, was placed second. Sir Spencer, in the third placing, owned by R. Ness & Son, is a right good horse, and there was the two that were placed first; but with three such splendid horses in the same class, awards had to be made on fine points.

THE CHAMPIONSHIP AWARDED

The same three exhibitors were the strongest competitors in the three-

(Continued on page 6)

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Issued
Each Week

FARM AND DAIRY & RURAL HOME

Only \$1.00
A Year

Vol. XXXI.

FOR WEEK ENDING JANUARY, 25, 1912.

No. 4

Do Commercial Fertilizers Pay?

G. E. Cottingham, Chateauguy Co., Que.

In Farm and Dairy Jan. 4 there appears an article by T. W. Shipley, York Co., Ont., advocating the use of commercial fertilizers on corn. Mr. Shipley gives a case where their use was attended with satisfactory results. I do not wish to make any comments on this article nor to insinuate that there are any statements in it that are not strictly true, but just to state that such marked success does not always follow the use of commercial fertilizer. Will you kindly allow me space to relate my own experience with the stuff?

Last season I purchased two tons of fertilizer specially recommended for wheat and corn for use on three arpents of hood corn, viz: Fodder corn, roots, potatoes and Indian corn. I was advised by the agent to use about 250 lbs. to the arpent. As a matter of fact, I used from 300 to 350 lbs., and by way of experiment I decided to use it on part of the crop and have a portion without it. The field had an even dressing of larnyard manure all over it. In the case of the fodder corn and roots the fertilizer was applied with a drill having fertilizer attachment sowing all the fertilizer the machine would put on. In each case on one ridge (or land) I threw the fertilizer attachment out of gear, so none was there now.

CHECK PLOTS PLANTED

In the case of the potatoes and Indian corn I followed the advice of the agent implicitly, planting in squares, or checks, and using a handful of the fertilizer in each hill. This plot was checked out 50x72 hills, and in planting I worked across the plot by the shorter way, planting six rows with fertilizer and leaving every seventh without any. As I did the work myself I know just how it was done, and no mistakes were made.

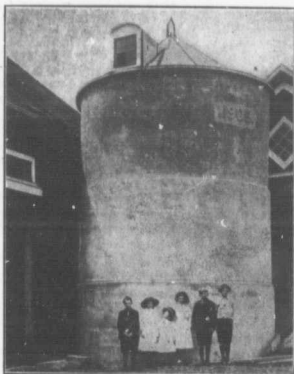
I had abundant opportunity to note the results of the fertilizer applications during the hoeing, all through the period of growth and at harvesting. I must say candidly that there was no advantage whatever to be seen for the fertilizer either by myself or any one of the several neighbors I had to see the crop, each of whom I asked to point out the unfertilized portions of the field and they could not. The potatoes were all dug by hand and the yield measured, and here again the fertilized rows failed to show any larger yield either in quantity or quality.

A friend of mine also was a "victim," having buried \$36 in fertilizer, which he drilled in with oats at or a little over 200 lbs. per arpent, leaving some sedges or lands without it, and watched for results. His experience was the same as my own—no benefit whatever, either during the period of growth or in the yield of grain when threshed.

MORE ACTUAL EXPERIENCE

Two years ago another neighbor used fertilizer both on his grain crop and ensilage corn with no benefit whatever in the former and only a seeming benefit in the case of the corn. The fertilized portion of the corn was a foot taller than that alongside (which only had manure) at the end of the third week of July, but by the first week of September the whole field of corn was of equal height.

I have tried the commercial fertilizer game three times now in an experimental way. I have been fooled each time, and the last time worst of all, having spent, besides the extra labor involved, \$15. And I did not receive 15c worth of benefit. I have decided that three times is about enough to be fooled by the same trick. It remains to be seen what great benefits may be stored up in the soil to be taken up by the two succeeding crops. "There is never a bad but there might be a worse" is an old saying, so perhaps I should feel thankful that the use of the



A Silo Outside the "Corn Belt" '98

It is not generally known that corn will reach that stage of maturity where it will make good ensilage in Nova Scotia. So far the farmers of Nova Scotia have been depending on roots to provide succulents for winter feeding. At the Nova Scotia Agricultural College Farm at Truro, however, the silo has been used for many years with good success. Two are now in use on that farm, one of which may be seen in the illustration.

—Photo furnished by F. L. Fuller, fertilizer (?) did not prove to be positively detrimental.

Note.—No definite rule can be laid down as to the amount or kind of fertilizer that can profitably be applied to any crop. Each farmer must experiment for himself on his own land and determine his own needs. Mr. Cottingham and Belyoa Bros. (mentioned in Mr. Shipley's letter) have had widely differing results. The quality of the land, the applications of barnyard manure, and the varying amount of rainfall might all explain the difference in results. Farm and Dairy welcomes further discussion of this important subject by those of our readers who have had experience in the use of commercial fertilizers with corn or other commonly grown farm crops.

Editor.

One-third of the buds on an apple tree may be sacrificed without doing the tree any damage, and the pruning will improve the tree and quality of the fruit. The pruning should be done any time after February and before the buds have started in the spring.—A. McNeil, Fruit Division, Ottawa, Ont.

Conclusions from the Use of Legume Bacteria*

Prof. S. F. Edwards, O.A.C., Guelph

The work of distribution of artificial cultures of nitrogen-accumulating bacteria for inoculating the seed of legumes, such as clover and alfalfa, was started at the Ontario Agricultural College by Dr. Harrison, now of Macdonald College, and Mr. B. Barlow in 1905. The method of preparing the cultures, as devised by Mr. Barlow, and which has been used ever since with some slight modifications, consists in isolating the appropriate bacteria from the "tubercles" on the roots of the different legumes, growing them on artificially prepared culture material in glass bottles, and distributing to the farmer in such condition that he has only to mix the culture with the seed to be treated, and sow it in the usual way.

These cultures are sent in the spring. During the early autumn, blank reports are sent out to recipients of the cultures asking them to state the results of the experiment. — These reports are carefully reviewed, and those are discarded in which no uninoculated seed was sown, or where any other condition militated against fair judgment as to the success of the experiment. The tabulated results of this work for the seven years since its inception are as follows:

Year	T. cul. inocul. sent	Total reports received	Inoculation beneficial	Inoculation not beneficial	Per cent favor-able
1906	546	134	91	43	67.3
1906	375	144	72	48	54.0
1907	372	137	57	37	54.0
1908	2115	699	397	237	65.5
1909	2817	894	231	141	56.7
1910	3375	771	343	179	54.8
1911	4941	1507	655	371	65.0

*In this column are included reports from farmers who sowed no uninoculated seed, or in which some condition injured or destroyed the seeding.

During the last three years, the demand for cultures has been mostly for inoculation of alfalfa and red clover. Of the 4,941 cultures sent out last season, 3,944, or 79.8 per cent, were for alfalfa, and 796, or 15.3 per cent, were for red clover, leaving only 4.9 per cent of the total number to cover alsike clover, white clover, peas, leas, vetches, sweet peas and lathyrus, the other cultures sent out.

For alfalfa and red clover, the percentage of favorable results from the inoculation was 50.4 for alfalfa and 56.6 for red clover. In view of this percentage, we feel that the work is well worth while, and are planning for its continuation.

We may doubt the profitability of putting money into fine buildings for the storage of hay, straw or grain. The experience of our best dairymen everywhere, however, is that the investment in a good dairy stable is not only profitable but necessary to the greatest success.

Cleanliness and haste are two of the most important points in sugar m'king.—F. H. Mizeren, Brome Co., Que.

*This report before the Ontario Agricultural and Experimental Union, giving the results of seven years' work, will be of particular interest to all who are thinking of seeding alfalfa for the first time in 1912. Study the results of inoculation carefully. Note that inoculation has been successful in 50.4 per cent of the trials.

The Present Value of Cow Testing

C. F. Whitley, In Charge of Records, Ottawa

As the proof of the pudding is in the eating, so fortunately the value of cow testing is quickly tasted in every district where dairymen have been bright enough to adopt it. Results are not insignificant, they are striking; not measured in ounces, but tons; not counted by fractions of cents, but by hundreds of dollars; and that just as quickly as cow testing is appraised not as a general privilege, but as a valuable personal opportunity and possession.

Cow testing results are not fiction, though they sometimes approach the semblance of miracles. They are sober, hardpan facts. No multiplication of words is necessary to prove this: a few figures will convince any skeptic. The tree is known by its fruits. In testing we have no gambling or speculative proposition, we have certainty; no long odds against us, but the ball set rolling lands between the goal posts every time.

KNOWLEDGE VS. GUESSEWORK

In testing we have the substitution of definite knowledge for mere guesswork as to a cow's dairy capacity. Guessing is not farming. We have the elimination of shiftlessness, disappointment and mortgaged farms. We have the development of thrift and general prosperity, a happier and better home for the wife, more interested and contented boys and girls on the farm.

Some increases that assist in this glorious reality are tabulated in the following chart:

TABLE 2

Trial Balance		COW TESTING		Present Yield Per Cow Lb. Milk
In account with		THE AVERAGE FARMER		
DEBITS		CREDITS		
		INCREASES IN MILK YIELDS		
		Provi. Inc	Percentage	
		100	200	
No	Ont.	128	128	8000
	Que.	91	91	7270
Losses	N. S.	278	278	5220
at all	N. B.	70	70	7835
	P. E. I.	300	300	5900
	B. C.	100	100	6180

"GO THOU AND DO LIKEWISE"

There is everything to gain in taking up cow testing. While those men have been increasing their yields so splendidly, what have you been doing? Irrespective of provincial boundaries or breed distinctions, these six substantial increases are tabulated as samples of the revolution that cow testing accomplishes. These men have succeeded beyond any dream of four years ago, and now have herds in which each cow is worth keeping. An increase of from 70 per cent. up to 300 per cent. is here shown in each of the six herds. Cow testing pays.

YEARLY RECORDS MOST VALUABLE

Cow testing is of increasing value each year. The dairymen building the best herds on the solid foundation of individual records could never be content with seven or thirty-day tests. Seventy pounds of milk a day may cause wonder, but the week's total may be much heralded abroad, but the factory patron wants the business cow, the profitable "old reliable" that month after month rolls up a good record; while more valuable still is the cow that has the greatest number of yearly records to scan.

You may possibly to-day point proudly to Spot or Buttercup in your stable with a total of 1,400 lbs. of fat in the last five years; or have you some museum specimens that gave scarcely 800 lbs. in that time? They are simply placeholders on the preserves of better cows' attainments. Would you not far rather keep six cows than 16 to make one ton of butter? In many herds, we find one good cow making more profit than accrues from the combined efforts of five or six poor ones which are as idle as a painted ship upon a painted sea. Why potter with them?

Probably no work on the farm pays greater

MILLIONAIRES AND THEIR EFFECT ON DISTRIBUTION OF WEALTH

ARTICLE 8.

THE 19th century will be noted in the history of this continent for the tremendous increase in the production of wealth and for the accumulation of this wealth in the hands of the few. The century upon which we have now entered is already becoming noted for the increased attention that is being given to the more equitable distribution of wealth.

Until within the past few years the public looked with admiration and awe upon men of great wealth. The daily papers and magazines, more particularly in the United States, catered to the demand of the public and filled columns and other space with detailed descriptions of the palatial homes, brilliant balls, sumptuous dinners and other extravagant expenditures of this distinct class of human beings. As the name of each new favorite of fortune was mentioned, the question that hung upon every lip was, "How much money has he?" Of late years there has been a change. The methods of the beef trust and of the packing combine have been revealed. The Standard Oil monopoly has been unmasked. Great railroad corporations, the Tobacco Trust, life insurance companies and other aggregations of wealth, have had their secrets dragged into the light and published abroad. The facts that have thus been revealed have revolutionized the public point of view. We have discovered that most of these great fortunes have been made by plundering the public; that as fast as we produce wealth others take it from us; that the conditions that create millionaires and multi-millionaires also create our city slums and the depopulation of our rural districts. Hitherto we have been educated solely along lines that have enabled us to increase the production of our farms and of our factories. Now we are beginning to realize that there is another problem equally as important: That is, "How are we going to retain this wealth for our own use after we have made it?" The two problems, the production of wealth, and its just distribution, should go hand-in-hand.

THE DISTRIBUTION OF WEALTH

The main reason why so many thousand farmers in the east are abandoning their farms, the main reason why we have thousands upon thousands of other farmers who after a life time of hard work and careful economy, have but a few hundred or at the most a few thousand dollars to show for their work, is because we have not been getting our share of the wealth we have produced. Each year only a certain amount of wealth is produced. The more of this wealth a few people get the less there is for the many. Each year we raise just so many bushels of wheat and oats, so many head of live stock, so many bushels of potatoes and barrels of apples. Each year also just so many tons of coal are dug and manufactured articles made. This wealth is always produced in limited quantities. If therefore some classes in the community are getting more than their fair share, it simply means that the rest of us are getting just that much less than our fair share. If the cake is to be divided between us and the other fellow and he takes the larger slice, it is the smaller slice that is left for us. For many years we have been getting the smaller slice. We are yet.

MILLIONAIRES AND WHAT THEY MEAN

When the population of the United States was 65,000,000, the wealth of the United States was estimated at \$65,000,000,000. Had this wealth been converted into money and divided equally among all the people, there would have been a thousand dollar bill for each man, woman and child in the nation: And in every crowd of 1,000 people there would have been an aggregate of \$1,000,000 in the pockets of the people of that one crowd. Suppose, however, that one man in that crowd succeeded in inducing the rest to pass laws which enabled him—without their realizing it—to transfer, by round about means, the money from their pockets into his. In the course of a few years if it was found that he had \$901,000, how much would the other 999 have? Just \$99,000, or an average of \$100 each.

That is what the word millionaire means: That for one man to have \$1,000,000, possibly a thousand and people have less than they otherwise would; for one man to accumulate \$10,000,000, possibly 10,000 people have had a portion of the wealth they create drawn from them. During the past few years millionaires and multi-millionaires have been springing up all over Canada. Deputy Minister of Agriculture, C. C. James, in a public address, stated that there were reported to be over 100 in the city of Montreal. An Ottawa paper has published a list of 30 individuals and estates in that city worth \$1,000,000 or more each. No one knows how many millionaires there are in Toronto, Winnipeg and in other industrial centers. There are individuals in Canada whose wealth is already estimated at fifteen to forty million dollars each. With the advent of these great fortunes, slums have appeared in our cities, and farming on thousands of our farms, has become so unprofitable rural depopulation has increased enormously. To talk of removing the slums by building cheap sanitary houses in their midst, and to propose to prevent rural depopulation by building better country roads and improving our country schools, is puerile. We must first remove the causes which create poverty and rural depopulation. Then we will do these other things for ourselves.

Farm and Dairy has no fault to find with our Canadian millionaires and multi-millionaires. For the most part they are men of ability who have made their wealth legally. Most of them have made their wealth honestly, according to our laws. A few of them have made their wealth in ways that are absolutely honest, and to which no exception can legitimately be taken. They should therefore be protected in the enjoyment of the wealth that they have acquired. It is not so much the millionaires and multi-millionaires who are at fault as the laws and conditions which make possible the acquisition of enormous fortunes by the few at the expense of the many. Most of these enormous fortunes have been made by monopolies in one form or another. It is to explain the nature of these laws, how they operate, and how they can be remedied, that these articles are being written. These laws are really simple when once we understand them. Farming will never be as profitable as it should be until we do understand them.

profits. It is no uncommon thing to find the press telling of dairymen making twice as much from their cows since they began to weigh and sample. There are cows on our records in British Columbia, Quebec and Prince Edward Island that are making 140 lbs. butter in two months, earning \$1.60 every second day of cold January and February. Some with better breeding are giving 2,600 lbs. milk and 80 lbs. of fat a month.

These shining lights in the dairy world have been discovered through cow testing, and there are plenty more. The simple fact is that there is a sum of over \$20,000,000 a year lying dormant in undeveloped cow quality. A good slice of that is yours if you acknowledge the present value of cow testing, and thereby get each one in your herd geared up to the notch of large, profitable production.

Cooperati

Dr.

There is great benefit in a profitable clover grower such as associated with the growing of other crops.

It is by the production of good crops possible. However, an average farmer too expensive the production of the utilization of associations in

The seedings of many in Sweden based on the equal share work for to seed production of the members to find as good possible for organization growing as by this:

Seed special distribution, which are economy, separately in the value of by each man's affairs of the handled by the directors who had only to the association, the seed grow following regarding information to the seed.

The board grow by each wants to directors wish. The board of an association as the C as far as its part of

The member what they house of the of December ed by means board of directors cleaned and according to seed cleaned. ing their seed the variety. pays to each ally two-third seed delivered allow it, ther of directors p prospects for favorable. T

Cooperation for Growers of Clover Seed

Dr. M. O. Malte, C.E.F., Ottawa

There is one thing that should prove to be of great benefit in Ontario for the successful and profitable growing of clover seed—the so-called clover growing associations. To the activity of such associations is attributed to a considerable extent the high standing taken by Denmark in the growing of the seed of forage plants as well as of other farm crops.

It is by no means enough to produce seed. If the production of seed is to pay, the seed must be of good quality and as free from weeds as possible. The proper cleaning of the seed is, however, a thing that cannot be afforded by the average farmer. The necessary implements are too expensive; but they are necessary to make the production of seed really profitable. The realization of this fact led to the formation of associations in Denmark.

The seed growing associations, of which there exist many in Denmark as well as in Sweden, are as a rule based on the principle of equal shares. Their aim is to work for the promotion of seed production by controlling the amount produced by members and by seeking to find as good a market as possible for the seed. The organization of such seed growing association is briefly this:

Seed growers from a special district join into an association, the members of which are responsible for its economy, either jointly or separately in proportion to the value of seed delivered by each member. The affairs of the association are handled by a board of directors who have to attend not only to the business of the association, but also see that the seed growers are strictly following the special rules of the association regarding the growing of seed, and give information to the members on the best way of growing the seed.

FURTHER DUTIES OF THE BOARD

The board decides which varieties should be grown by each member. Of course if any member wants to grow a special variety the board of directors if possible comply with this special wish. The seed is delivered to the members by the board of directors. Generally speaking, such an association is based upon the same principles as the Canadian Seed Growers' Association, as far as its field work is concerned. The business part of it is a little different.

The members must deliver all their seed, except what they want for their own use, to the store house of the association not later than the first house of December of each year. There it will be cleaned by means of special machines bought by the board of directors. When the seed has been cleaned and analyzed, each member will be paid according to the weight and quality of the cleaned seed. The members must when delivering their seed give a certificate as to the name of the variety. Early next spring the association pays to each member a certain amount, generally two-thirds of the estimated value of the seed delivered. As the finances of the association allow it, there is nothing to hinder the board of directors paying in advance, especially if the prospects for a profitable sale of the seed are favorable. The final settling of the accounts

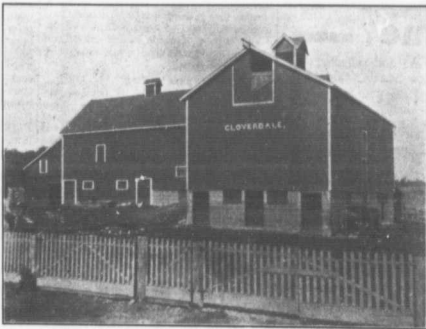
takes place next fall when the members obtain all the profits from the sale of the seed, with the exception of what has been spent for the running of the business.

It must be mentioned especially that the rules of the associations stipulate that the seed should be sold if possible without any middlemen, to the farmers directly.

HOW THE SCHEME WORKED OUT

Such are the outlines of the seed growing associations in Scandinavia. Although they are comparatively young, they have done a great deal of good for improving the quality and increasing the value of many kinds of farm crops. The formation of such associations should be of very great importance, especially for the clover producing parts of Ontario, for such farmers who are especially interested in seed growing as well as for those who prefer dairying.

The clover seed growing associations should



One of the First Considerations of the Winter Dairyman

Good building and successful winter dairying go together. Stables such as those here illustrated that are well lighted and ventilated and fairly warm enable the cows to do their best at the stall and make the capital invested in buildings profitable. The barn here illustrated is on the farm of Mr. J. L. Newton, Hastings Co., Ont., and is a type of the buildings found on the farms of that great dairy country.

not only work to the benefit of the seed growers by giving them the highest profits for their seed; they should also work to the benefit of those farmers who buy their seed, making available to them the very best quality of seed at the cheapest price. I sincerely believe that the formation of clover seed growing associations would be a powerful agent for the proper development of the clover growing possibilities of Ontario.

Regularity Cheaper Than Grain

"Regularity is the big point in success with dairy cattle; regularity in feeding; regularity in milking; regularity in rations fed. Regularity is cheaper than grain and it will produce more milk."

In these words an Oxford county dairyman who has achieved great success with his large herd of dairy cattle, they having produced almost 10,000 lbs. of milk each in the cheese factory season, told an editor of *Farm and Dairy* how he had secured such a good record.

"It is just this way," continued this dairy farmer. "A good many of us farmers will start in and feed at six o'clock morning and night for a week or two, and then some morning we feel a little lazy, and we stay in bed a little longer. The cows know perfectly well when six o'clock comes. They are uneasy and restless, and a decreased milk flow is the result. We notice this decreased milk flow, and to bring these cows back to normal flow we add to the grain ration. This

additional grain feed would be unnecessary had we fed regularly. That is what I mean when I say that regularity is cheaper than grain.

"We do not feed heavily nor do we feed concentrated meals. One pound of oat chop to six or seven pounds of milk, and sometimes eight pounds, is all that we feed in the grain line. We always mix salt with the chop and never have a sick cow. We do not believe in feeding the chop alone with the ensilage for then, if the cow will not eat all the ensilage and chop, both are wasted, while with our plan, if the cow goes back on her appetite, nothing is wasted but the ensilage.

"We first feed the silage, all that they will eat. The chop is then fed. We never feed a cow without first weighing the chop and weighing the milk. We then know exactly what we are doing.

"Another result of the close talk that we keep on feed and production is that my hired man who looks after the dairy herd is just as interested as I am. Get the right cow, take good care of her, observing regularity above all things, and good results will be yours."

The Making of a Dairy Cow

Wm. Wightman, Glengarry Co., Ont.

We begin the building of our dairy cows at an early age, when they are just calves. Our calves must first be selected from good dairy cows. The dam must have a good deep body, a deep chest, be thin at the shoulder, and with a well-sprung rib, wide and strong across the hips, and an udder well shaped, running well forward, and well up behind. One point that I am very particular about is that a good dairy cow should have but four teats of good length and medium distance between, and also a neat head with a bright eye, wide forehead, and a well shaped horn inclining outward. A cow having all of these points should be a good feeder, and unless a cow is a good feeder she cannot be expected to be an AI milk producer.

A DAIRY COW A WORKER

Some of us do not seem to consider for a moment the work that is required from a cow to produce a quantity of milk. Some think that all the cow has to do is to eat, drink, lie down to rest, and chew her cud. But we must bear in mind that our dairy cow requires a great amount of nerve and energy in changing these food products into proper material to make milk. When we buy a binder or any other farm implement we want one that will be strong and do the work required of it. It is just so with our dairy cow. We require to use great care in the building of her if we are to have one that will do the work required of her in the manner she ought.

A cow of the kind we have described bred to a good pure bred bull, should produce a good offspring for dairy purposes. And this calf should from the very first be given the best of care. I want a calf that will be a good drinker and eater from the first. If not we get rid of them as quickly as is possible.

Great care is taken the first year to see that this calf is fed regularly, but not over-fed. We do not like to see our dairy calves too beefy.

A calf may receive all the required attention during the spring and summer but if neglected as fall comes on and left out to a few cold rains, it is set back in both flesh and growth, and that for all winter. Good feeding will not bring it back to what it has lost. Hence we lose a portion of the quality we expected in our future dairy cow.

If one is careful in raising a calf from a cow such as I have described from birth to maturity there should be no reason why it should not turn out a good dairy cow. And in following along these lines a man in a short time can have a herd of good dairy cattle. We know for we have built up our herd in this manner.

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Fence **rod**

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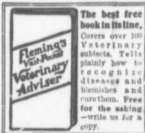
These remedies do not **always** cure—but we'll refund your money every time they fail. Try them: on the worst cases you can find—we'll stand behind them, as we stand behind all Fleming's Remedies.

Fleming's Tonic Heave Remedy—a remarkable tonic, which cures Heaves because it puts the system right.

Fleming's Colic Cure—will surely cure it anything can.

Fleming's Limp Jaw Cure—the first successful Limp Jaw Cure—to-day the standard treatment.

FLEMING BROS., Chemists, 63 Church Street, Toronto.



The best free book in the line. Covers over 100 veterinary subjects. Tells exactly how to treat all diseases and ailments and cure them. Free for the asking—write us for a copy.

Ottawa Winter Fair

(Continued from page 2)
year-old class as well." Bydant, Graham and Renfrow's Guelph champion secured first place, with Ness second and Smith & Richardson third. Competition for the championship was thus reduced to Baron Kelvin and Bydant, both owned by Graham, Renfrow Co. The championship was finally given to the older and better tried horse, Baron Kelvin.

In the female classes there was nothing very outstanding, but all the entries were right good animals. It is just possible that quality and style were emphasized a little too strongly in making the awards. Some of the ringriders believed that in several cases the awards should have been given to horses that excelled in substance, although they were slightly inferior in style and action.

Hockneys, standard breeds and thoroughbreds were represented in the light horse classes. The show in those classes was one of quality rather than numbers. Hon. Clifford Sifton and R. J. Thompson, Guelph, were among the largest exhibitors and winners in the light horse sections.

BEEF CATTLE

Some of the classes of beef cattle were exceptionally good. The class for export steers brought out as fine a bunch of animals as have ever been seen at a show in Canada. In the pure bred Shorthorn classes the greatest improvement was noticeable in the heifer classes. Prominent among the winners were W. R. Elliott, Guelph; Jas. Lesk, Greenbank; A. A. Armstrong, Fergus; Wm. A. Wallace, Kars; and Pritchard Bros., Fergus. Herefords were simply represented, but the individuals were good, L. O. Clifford, Oshawa, being the principal exhibitor.

Angus were few in numbers, and not up to the mark in quality when compared with the splendid showing that this breed has been making at other

shows. Grades were a large class and of good quality.

SHEEP AND SWINE

Such well known exhibitors as J. Fotherston, Stratsville, J. E. Brethour, Burford, and A. Dynes, Ottawa, combined their efforts to make the showing of Yorkshires the feature of the swine exhibit. The Yorkshires outnumbered all other breeds combined. The quality of the exhibits has never been surpassed at any show in Canada. In the classes for bacon hogs Mr. Fotherston was the largest winner; in the breeding classes Mr. Brethour got a little the best of the argument. Mr. Dynes also got a fair share of the prize money. Yorkshires were a very slim showing, there being only a few individuals entered. Several fine Berkshire were on exhibit, but that breed also was lacking in point of numbers. Grades and crosses were of good quality, and the classes were well filled.

The sheep exhibits out-numbered anything before seen at the fair and were of uniform high quality. Entries were about evenly divided between longwool and shortwool breeds. Shropshires, Cotswolds and Lincoln were the breeds most largely represented. E. Bryan, Ridgeway, was the largest single exhibitor. Other prominent exhibitors who were there were J. Lloyd Jones, Burford; L. Parkinson, Guelph; A. & W. Whitelaw, Guelph; John Kelly, Shakespear; F. T. Lee, Simcoe; J. Campbell, Woodville; R. H. Harding, Thorndale; and A. A. Armstrong, Fergus. Prize money was fairly even distributed among the various exhibitors. The special prize offered for the best sheep shown by a resident of Carleton county was won by Geo. R. Bradley, Carletonby.

POULTRY

Three hundred new coops had been added in the poultry department for this year's fair; and they were all filled. There were over 3,000 birds (Concluded on page 12)

North Toronto Breeders' First Annual Consignment Sale

90 RICHLY BRED REGISTERED **HOLSTEINS** 20 GRADES OF GOOD BREEDING

On Friday, February 9th, 1912, The Day After The Annual Meeting in Toronto of The Holstein Breeders' Association, these richly bred cattle, with records up to 26 lbs. Butter in 7 Days, will be sold at public auction at River Valley Farm, North Toronto

In Mr. Jos. Kilgour's large horse training arena

A feature of this sale is the relatively large proportion of females being offered, there being nearly 100 in all, and only a few bulls.

Twenty of the females offered are bred to the great \$1,500 bull, "Sir Lyons Hengerveld Segis," whose dam, Blanche Lyons De Kol made 33.39 lbs. butter in 7 days, and 134 lbs. in 30 days. He is sired by "King Segis," whose dam and her full sister averaged 33.25 lbs. butter in 7 days. His seven nearest female relatives average 32 lbs. butter in 7 days. It is said that there is no other bull on this side of the line to beat "Sir Lyons Hengerveld Segis." Here is a chance to secure some of his stock, which should be especially valuable.

This stock is being consigned by the following well known breeders: H. Gooderham, Bedford Park; R. F. Hicks, Newtonbrook; Jos. Bales, Lansing; O. Bales, Lansing; Geo. McKenzie, Thornhill; John McKenzie, Willowdale; C. James, Thornhill, and Jos. Kilgour, Bedford Park. For particulars regarding this stock, records, etc., see Holstein News in the issues of Farm and Dairy for Dec. 28, Jan. 4, Jan 11 and Jan. 18.

To get to the place of sale take a Metropolitan car from the north end of Yonge street. Cars leave here every 15 minutes, and pass with in a short distance of Mr. Kilgour's farm. On the day of the sale conveyances will be provided for meeting the cars and taking visitors to the arena where the sale is to be held.

Auctioneers: B. V. Kelly, Syracuse, and R. G. Haeger, Algonquin

Be sure and stay over from the Annual Meeting and come out to the sale. It will pay you. Further particulars from

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SWINE DEPARTMENT

Our readers are invited to ask questions in regard to swine. These will be answered in this department. You will receive most helpful suggestions or relate experiences through these columns.

Just About Pigs

Thumps are caused by too rich living and too little exercise.

Do not let the good brood sow go as long as she is a good mother.

Pigs do best when running on rape, if a meal ration is afforded in addition to the rape.

Do not let the boar run with the herd. He should be given an opportunity to take exercise.

As a rule, it will be found that the best milking sow is also the most prolific and the best mother.

When buying an expensive sow look over her to see that she has the full down on her legs, all well-formed, and not too small or obscure.

If there is anything a sow with a litter of pigs dislikes thoroughly, it is the undue interference of the herdsmen and disturbance of her habits.

Well drained yards and pens will help to keep the hogs more thrifty and profitable.

Roots for Hog Feeding

J. H. Grisdale, C.E.F., Ottawa

In eastern Ontario we are much interested in the pig growing industry, and if there is one class of live stock that will show good profits for feeding roots it is the pig. At the Experimental Farm we have a ration of which roots constitute the bulky and by far the less expensive part, and it has given us the best results both for breeding stock and young pigs and for fattening pigs of any ration fed. It is a ration of which at least four-fifths by weight is roots and the rest a mixture of bran and a little bit of shorts.

We winter our sows outside and they live upon a mixture of pulped roots with one to two pounds a day of meal mixture. The use of the root in pork production enables us to cut off one-third of what would otherwise be the cost of producing a cwt. of pork.

ALL KINDS GOOD

The kind of roots to grow for pork production is immaterial. We grow sugar mangels, sugar beets and common mangels, turnips or carrots; they are all found acceptable to all classes of swine. Probably for the average farmer the most suitable plan for growing roots would be to put four-fifths of the land in mangels and one-fifth in turnips.

It is more profitable to cook the turnips than to feed them raw. We cook them and mix with meal one pound of meal to three to five pounds of cooked turnips.

Proper Removal of Afterbirth

There is no period in the life of a cow when she requires and should receive more attention than at the time of freshening, owing to the fact that she is so susceptible to complication of diseases such as milk fever, retention of the afterbirth, stoppage or paralysis of the bowels, mastitis or inflammation of the udder, and many other diseases.

Of the diseases mentioned perhaps the retention of the afterbirth is the most common, and while it does not necessarily terminate fatally, it is exceedingly successful in ruining a cow as a profit producer. The afterbirth is oftentimes retained owing to the fact that the cow has been given cold water at the time of freshening, or

permitted to freshen in a cold, damp stable, or out in the rain when the weather is unfavorable.

REMOVING AFTERBIRTH

When the afterbirth is retained it should not be removed by main force owing to the fact that parts will remain. These parts are converted into matter which sets up an intense inflammation, causing a catarrhal condition of the genital organs. The animal absorbs the pus which forms

from the retained parts and the absorbing of such decomposed tissue upsets the entire system of the animal. This pus is excreted from the system to some extent from the kidneys, bowels and udder, thus rendering the milk from a cow that has retained her afterbirth unfit for human food.

Cows thus afflicted should be given a dry, clean, well-ventilated box stall. A blanket should be placed upon them in cold weather. They should be given

ground oats, bran, good clover or alfalfa hay, plenty of water with the chill taken from it, and such medicine as will have a tendency to ripen and expel the afterbirth. The genital organs should be washed out with an antiseptic solution and in this way a cow which has retained her afterbirth will soon be put in a strong, healthy, profitable condition, whereas if she was neglected she would be ruined as a profit producer.—Holstein Register.

HORSES

Can You Doctor Them ? Train Them Teach Them Tricks

Would you like to have a good Veterinary and Horse Doctor Book telling about the Diseases of Horses, Cattle, Poultry, Sheep and Swine, and giving the remedies, the cures for all these diseases?

Would you like to know all about Gleason's System of Practical Horse Training?

THEN YOU WILL WANT

Gleason's Veterinary Hand-book and System of Horse Taming

A book of 520 pages (7 1/4 x 5 inches) with illustrations

Which we have arranged to GIVE YOU FREE as described below

Every man who has a horse or other farm animals will meet some day (and it may come soon) when it will be worth many dollars to have at hand a reliable doctor book to which he can refer and be able to cure sickness.



In order that you may have such a horse Doctor book, we have completed arrangements whereby we can supply you with a copy of Gleason's famous Horse Doctor book at no cost whatever to you. Some of the things this book will teach you are:

PRACTICAL HORSE TRAINING

How to Cure Bad Habits (including Balking, Biting, Cribbing, Halter Pulling, Kicking in the Stall and in Harness, Running Away, Shying; etc.)

Breaking and Training Colts

Whip Training

How to make a Horse Trot Square

Training Trick Horses

(How to teach them to walk, to lie down, to bow, to sit up, to answer questions, to kiss you, to shake hands; etc.)

Hints upon Horse Shoeing.

Short Pointers for Horsemen.

This is a valuable book containing most valuable information. It is not as well bound as we would like, being in paper cover. (Same book in cloth binding for 25 cents additional.)

It is not for sale. We will give it to you free in return for only two (2) New subscriptions to Farm and Dairy, each taken at only \$1.00 a year.

Our regular subscribers to Farm and Dairy may have this book free in return for their own renewal subscription sent now, and one New subscription, each at our rate of only \$1.00.

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(Over 300 pages describing all the diseases of the horse, telling the symptoms, cause, and giving the treatment or cure.)

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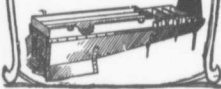
Diseases of Dogs. Diseases of Birds.

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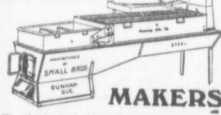
We have customers all over Canada and the United States who have been using our Evaporators for from one to twenty-five years. If you have a maple grove (any size) we can sell you a Champion Evaporator that will get more money out of it for you.

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Price low—quality high—product the best possible—the kind you like syrup—it retains its maple taste—all unnecessary expenses and middle-man's profits cut out. Sold at a price the poorest man can buy. Every one guaranteed. Write for pamphlet and recommendations. Do it now!

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Book of formulas and full instructions for Home Mixing will be sent

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Dr. WILLIAM S. MYERS, Director of Chilean Propaganda
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HORTICULTURE

Soils for Various Fruits*

Father Leopold, La Trappe, Quebec.

Carefully study the question of soil in its relation to the fruits to be grown. Some kinds of fruit do best on light soils, some do best on heavy soils. The difference between a sandy or a clayey location may mean the difference between success and failure. Apples: Almost any soil will do for the apple orchard, provided that it be somewhat elevated and sufficiently well drained. Very high sand or swampy muck would be least desirable; a loamy clay soil, most desirable.

Cherry trees do best in a light soil, well drained, but not too dry; sandy, loamy or gravelly soil may do.

The ideal pear soil is a rather heavy clay loam with a well drained subsoil. Heavy clay does well, if the underdrainage is sufficient. In sandy soils are not so good for this fruit.

Plums do well almost anywhere, if the ground is not too wet. This fruit, however, will stand much more moisture than the cherry. A clay-loam, rather moist, but without stagnant sub-soil water, would be ideal for the European and native varieties. The Japanese wherever they do come do better on a light soil.

THE HOME ORCHARD

The foregoing suggestions apply with most force, of course, to large orchards planted for market purposes. The home orchard for family use means necessarily an aggregation of various kinds of trees probably all set together on one kind of soil, and, therefore, it is not in this case always possible to cater all the requirements of each. But it pays to do so, as nearly as is practicable, even with a small family orchard.

Examine the sub-soil. Is it so hard and so heavy that the roots of tree roots can never hope to find a secure

*Extract from an address before the Quebec Pomological Society at St. Hyacinthe.

anchorage? Does water stand above the sub-soil in such quantity and with such persistency as to threaten "wet feet" to the trees? If the former, seek another location; if the latter, make up your mind to tile the field before setting the trees. There are few orchards which are not the better for a system of underground drains. Better do the necessary tilting at the start, rather than later. Have the tile buried three feet deep, and, if possible, lay it midway between the tree rows.

Drainage in The Orchard

Professor J. W. Crow, O.A.C., Guelph, Ont.

There are few soils in Ontario planted to orchard that would not be benefited by good drainage. In North-umberland county the soil is a sandy loam to a clay loam. One observation made in the orchard survey of that county was the splendid results that had been obtained from underdrainage in soils that were apparently naturally well drained.

On a clay loam soil under-drainage is almost a necessary condition for a decided slope. The drains three to four feet deep in the orchard keep the soil in first-class condition and enable the roots to go down deep, and they have a much larger acreage in which to forage for food.—Extract from an address.

Good Returns from Inferior Fruit

Dr. C. H. Riggs, Toronto

To take care of wind fallen fruit, and all apples not strictly classed as first or fancy, the erection of an evaporating plant would prove a very sound investment. I believe that no other fruit than fancy and firsts should be packed for shipment. There is a decided objection to second and the price falls off in much greater proportion than the quality would warrant.

The evaporating plant could only be operated by large concerns, but a company formed in fruit bearing districts should earn substantial dividends. The attention of orchardists is called to the profitable results certain to be attained by the erection of a cooperative plant.

Horticultural Notes

Mulching trees does not prevent winter killing. Any one who has once thinned fruit never goes back to the old practice. Thinning pays well. If we prune our trees that bear heavily, we would get crops every year. This pruning should be done in winter.

Heavy fertilizers applied in the spring, following a big crop, does not induce a large crop that year. If we have a large crop one year and wish to fertilize for a big crop the next year also, we should apply fertilizers in the spring of the first year as it is then that the fruit buds are formed for the next year.

Some varieties of apples require much more fertilizing than others. The Ben Davis is not considered among fruit growers as a choice apple, but the orchardist who has taken note of the bearing qualities of this variety knows that he can depend upon Ben Davis in "off years." It is essentially it may be said that they sell. The Ben is an acquisition to the consumer, but good for the grower and market man.

Orchardists who have practiced thoroughly cultivation have found that they do not have as much loss from the falling of immature fruit during the dry seasons as those who have not cultivated or have only cultivated a few times. If the season is dry the orchards should be cultivated quite frequently and later than usual, so that enough moisture will be conserved to mature the fruit crop.

POULTRY YARD

British Columbia Feeding Methods

Mr. S. G. Hanson, Nanaimo Dist., B. C.

The feeding system I practice on my poultry farms is as follows: Grain is fed in the morning, scattered in a litter. A dry mash composed of bran, middlings, cornmeal, linseed meal, soyabean meal, beef scrap and alfalfa meal is kept in boxes before the birds all the time. There are sufficient boxes to hold mash for a week's feeding. I fill these boxes only once a week. Water for the birds has a few grains of permanganate of potash in each dish. If green feed is scarce in the yard, I feed thousand-headed kale or lawn clippings.

The houses have runs on the south and north sides, which are plowed and seeded every six months. The

Is This Message For You?

Would you like to sell those cockerles, or that breeding stock, which you have kept over for the spring trade?

Get into good advantage through telling our people about it next week in our big Poultry Annual, out February 1st.

We make no extra charge for the extra service you will get next week.

We will need to hear from you right away with your copy for advertisement. Send your orders to reach us not later than 10 o'clock Monday morning.

Mr. C. Day, of Highgate, Ontario, recently advertising his poultry in these columns writes: "I consider Farm and Dairy gives good results. I have had a number of orders for my Barded Rock and Miramas."

Only 98c. per inch is all your ad will cost you. It will reach 12,000 possible buyers. Send it in to-day and have it appear on next week in our big Poultry Annual.

outh yard is kept for the winter. About 400 birds are run on an acre. The houses are open fronted, and are cleaned once a week, sprayed four times a year with Cooper's Friend, and occasionally air-slaked lime is scattered on the dropping boards in the winter.

Poultry Pointers

As a rule moisture on the inside of the poultry house is a sure sign of insufficient ventilation. Keep plenty of litter in the hen house from now on, where grain should be scattered to keep them busy scratching.

Plenty of meat food, cut fresh bone, or prepared beef scraps, must be provided the laying hens from now until they are on free range next spring.

Canker, sore head and chickenpox are germ diseases. A germicide applied to the sores first and then something of a healing nature will generally suffice.

Disease, filth, lice and inbreeding, all or any, cause lack of vigor among the breeding stock. Starved or over fed breeders will not produce strong hatching eggs.

Both salt and linseed meal are valuable adjuncts to the bill of fare, but they must be used with discretion. Too much bowel troubles and loss of feathers, and too much linseed meal will have a similar effect.

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5th-N. D.
COW
1st-A. S. T.
2nd-Hector
3rd-R. K.
4th-R. B.
5th-W. F.
N. D.
1st-N. D.
2nd-R. B.
3rd-D. T.
4th-A. W.
5th-Jan. I.
COW
1st-T. A.
2nd-N. Sar
3rd-A. S.
4th-R. D.
5th-J. W.
COW
1st-N. Sar
2nd-N. Sar
HEIF
1st-A. C. F.
2nd-Gordon
3rd-N. Sar
4th-N. Sar
5th-R. Dow
COW
1st-A. H.
2nd-H. E.
COW
1st-A. H.
2nd-J. H.
3rd-A. H.
HEIF
1st-A. H.
COW
2nd-A. H.
COW
1st-John D.
2nd-A. H.
COW
1st-R. A. J.
2nd-W. O.
3rd-McMilla
4th-R. E. T.
5th-Wm. O.
COW
1st-R. A. J.
2nd-W. O.
3rd-R. B. N.
4th-R. A. J.
HEIF
1st-R. A. J.
2nd-A. H. F.

Dairy Test at Ottawa

The dairy test at the Ottawa Winter Fair last week will be long remembered by breeders of dairy cattle in Canada. A new world's record has been established by Rhoads Holstein cow, owned by T. A. Spratt, Billings Bridge, Ont., with a production in the three days' test of 276.3 lbs. of milk containing 3.6 per cent. butter fat, established a world's record for the production of butter fat at a public test. But this was not the only world's record made. Rhoads Queen, a full sister to Maude De J., owned by Neil Sangster, Ormatown, Que., in producing 302.8 pounds of milk, established a new world's record for milk production at a public test. As her milk tested but three per cent., however, she scored lower than Maude De Kol and took second place in the test. An illustration of these two great cows appears on the front cover of Farm and Dairy this week.

The general quality of the entries was very high class, and this test may be regarded as one of the greatest, if not the greatest, public dairy test ever held in Canada. Ayrshires and Holsteins were particularly represented both from the stampons or

numbers and records made. The grade classes were particularly strong, there being 17 entries, and the reserves made were exceptionally large. The highest producing grade, owned by R. A. Heron, Billings Bridge, producing 213.5 pounds of 3.4 per cent. milk. Mr. A. H. Foster, Twin Elm, and John Kelly of Shakopee had some very nice dairy Shorthorns in the test, but their records do not compare with those made by the leading Holsteins and Ayrshires.

HOLSTENS IN BEST FLESH
The Holstein men had an advantage over the Ayrshire exhibitors in that their cattle were in letter shape and hence in a better position to make large records. Barcheskie Lucky Girl, the champion cow last year, and the largest producing Ayrshire at the fair this year, was not in anything like as good condition as in the last test. Lucky Girl had been fitted for the fall fairs and after their completion was turned to pasture and neglected. It was the general opinion amongst the Ayrshire breeders that had they had their cows in as good condition as had the Holstein men, they would have made much better records than they did. But even as it is they have good cause to be proud

of the records made by their favorites.
Eastern Ontario is essentially a dairy country. If the Eastern Ontario Live Stock Show is to truly represent agriculture in that district the dairymen must be given every opportunity for developing the dairy test and the dairy features of the show. The new stable erected two years ago is entirely inadequate to accommodate the entries that are now being made in the test, and as time goes on this deficiency will become more and more marked. The character of the stables in which the cows are housed has much to do with the records that they make in the competition, and it is not fair to those exhibitors who are forced to keep their cows in other parts of the building not so well suited to the production of high records. Dairymen are demanding more room for their exhibits and the fair management will do well to give their demands every consideration.

Coming Events

Eastern Ontario Live Stock and Poultry Show, Ottawa, January 16-19.

Free short courses, open to farmers and farmers' sons at Macdonald College, Quebec: Horticulture and poultry-keeping, January 23 to February 3.

First annual convention of the Ontario Plowman's Association, Toronto, February 2.

The Dominion Showmen Breeders' Association annual meeting, February 6, Temple building, Toronto.

Saskatchewan Agricultural Societies' annual convention, Saskatoon, February 6-9.

Ontario Association of Fairs and Exhibitions, Toronto, February 7 and 8.

Annual convention of the Canadian Forestry Association, Ottawa, February 7 and 8.

Dominion Conference of Fruit Growers, Ottawa, February 21-22.

Manitoba Winter Fair, Brandon, Man., March 6 to 8.

Ottawa Canadian Forestry Association, February 7-8.

Ventilation means good air and sunshine. Both are good for the health of farm animals.

Do not pile manure in heaps. It wastes too fast. Spread it.

Those nice young heifers that we sold would have been worth as much to us as to the buyer.

As a farm journal, I think Farm and Dairy has few equals and no superiors.—J. D. McLellan, Prince Co., P. E. I.

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WANTED

RAW FURS

Write for my prices before selling Ernest Howell, St. George, Ont.

\$3 a Day Star
Send us your address and we will tell you how to make \$3 a day every day. It is so easy that you can do it in your spare time. We will send you the full particulars free of charge. Write to: **ROYAL MANUFACTURING CO., Box 1211, WINDSOR, ONT.**

DRAKES Indian Runner and Large Pekins. These are good individuals and will be sold right.

COCKERELS White Wyandottes and Black Minorcas also. The Minorca Cockerels have their combs slightly frozen—they sell them at a bargain. Write at once if you want them.

JOHN W. ARNOLD - Eglinton, Ont.

AGENTS We will pay you well to hustle in your district for new subscriptions to **FARM AND DAIRY, Peterboro, Ont.**

Abe Lincoln said: "I will study and maybe my chance will come. It will pay you to study during these winter evenings. You will be ready to take advantage of your chance. All Agricultural books are to be had at lowest prices through **Farm & Dairy, Peterboro.**"

Make Your Own Tile

Cost \$4.00 to \$6.00 per 1,000 Hand or Power Write for Catalogue.

Farmer's Cement Tile Machine Company WALKERVILLE, ONT.

GOVERNMENT STANDARD SEEDS FOR SALE

ALFALFA, \$11.00 ALSIKE, \$11.00 RED CLOVER, \$14.00 Also, all kinds seed grain by the bushel or carload. **THE CALADONIA MILLING CO., Caladonia, Ont.**

RESULTS OF THE DAIRY TESTS AT THE OTTAWA WINTER FAIR

AYRSHIRES		Lbs. Percent	
COWS, 48 MONTHS AND OVER:		Milk.	Fat.
1st—R. N. Ness, Howick, Que.	Barcheskie Lucky Girl	276.3	3.6
2nd—R. N. Ness, Howick, Que.	Dairy Maid	258.8	4.3
3rd—A. S. Turner and Sons, Byekman's Corners, White Pines	170.5	4.2	
4th—N. Dymont, Clappison's Corners, Snowdrop of Hickory Hill	186.5	3.6	
5th—N. Dymont, Clappison's Corners, Beauty of Hickory Hill	153.	4.2	
COWS, 36 MONTHS AND UNDER 48:			
1st—A. S. Turner and Sons, Jemima of Springbank	2nd	153.3	3.3
2nd—Hector Gordon, Howick, Que.	Stomachoe Maggie	137.8	3.9
3rd—R. N. Ness, Howick, Que.	Barcheskie Lucky Girl	127.5	3.5
4th—R. N. Ness, Howick, Que.	Morton Mains Bonnie Nansy	102.4	4.4
5th—W. F. Kay, Phillipsburg, Barcheskie Royal Rose		114.6	3.6
HEIFERS, UNDER 36 MONTHS:			
1st—N. Dymont, Violet of Hillview		113.	3.9
2nd—R. N. Ness, Howick, Cherry Queen		106.8	4.0
3rd—D. T. Ness, Buriside, Que.	Loesmoock Ploamie	97.8	4.2
4th—A. S. Turner and Sons, Jemima of Springbank		97.3	4.3
5th—Jas. Benning, Flossie Gem of Glenhurst		97.	3.8
HOLSTEINS			
COWS, 48 MONTHS AND OVER:			
1st—T. A. Spratt, Billings Bridge, Mand De Kol		276.3	3.6
2nd—N. Sangster, Ormatown, Rhoads Queen		302.8	3.
3rd—A. C. Hardy, Brockville, Lady Waldorf De Kol		218.	4.
4th—B. Dowler, Ottawa South, Daisy Bell Jewel		235.5	3.
5th—J. W. Stewart, Lyn, Korndyke Pieterje De Kol	2nd	227.3	3.5
COWS, 36 MONTHS AND UNDER 48:			
1st—N. Sangster, Rhoads Queen	2nd	177.1	3.8
2nd—N. Sangster, Rhoads Queen	2nd	176.3	3.1
HEIFERS, UNDER 36 MONTHS:			
1st—A. C. Hardy, Brookville, Belle Model Johanna	2nd	183.	3.8
2nd—Gordon H. Manhood, Manhood Caveltie Elsie Johanna		159.8	3.4
3rd—N. Sangster, Edna Duchess Hengerveld		179.9	3.9
4th—N. Sangster, Rhoads Queen Princess		137.7	3.
5th—B. Dowler, Belle Jewel		104.5	3.
SHORTHORNS			
COWS, 48 MONTHS AND OVER:			
1st—A. H. Foster, Twin Elm, Dairy Maid		141.1	3.4
2nd—A. H. Foster, Lady Morning Glory		107.3	3.6
COWS, 36 MONTHS AND UNDER 48:			
1st—A. H. Foster, Twin Elm, Dairy Queen		134.6	3.3
2nd—John Kelly, Shakopee, Grace Gwynne	4th	128.7	3.3
3rd—A. H. Foster, Dairy Maid	2nd	92.5	4.
HEIFER, UNDER 36 MONTHS:			
1st—A. H. Foster, Lady Morning Glory	2nd	107.2	3.6
JERSEYS			
COW, 48 MONTHS AND OVER:			
2nd—R. A. Heron, Billings Bridge, Queen Bee		74.5	5.7
COW, 36 MONTHS AND UNDER 48:			
1st—John D. Ellis, Renfrew, Marjory of Renfrew		117.2	4.
GRADES			
COWS, 48 MONTHS AND OVER:			
1st—R. A. Heron, Bonnie		213.5	3.4
2nd—Wm. Owens, Montreal, Lunette No. 73		169.2	4.1
3rd—McMillan and Leggett, Front River, Miss Arthur		70.3	4.
4th—R. E. Neer, Ontario Delight, Burdette		197.5	3.9
5th—Wm. Owens, Clover No. 71		177	3.1
COWS, 36 MONTHS AND UNDER 48:			
1st—R. A. Heron, Alice		178.7	4.4
2nd—T. A. Spratt, Maggie B		121.7	3.1
3rd—R. E. Neer, Burnside Spottin		140.3	4.1
4th—R. A. Heron, Flo		133.7	3.5
HEIFERS, UNDER 36 MONTHS:			
1st—R. A. Heron, Edgemont		154.8	3.6
2nd—A. H. Foster, Little Wonder		119.1	4.2

MAKES HENS LAY
MARKET PRICE
STRICTLY FRESH EGGS
5¢ DOZ

A CHALLENGE FROM NEBRASKA

D. M. ALLEN writes: "I am now feeding INTERNATIONAL POULTRY FOOD to my flock of Black Minorcas, and I am open for competition against any flock in this or any other State."

1,500 EGGS FROM 30 HENS IN 60 DAYS

"I feed my hens INTERNATIONAL POULTRY FOOD and my 30 hens laid 1,500 eggs in sixty days," says Ira C. Ebridge.

How easy eggs are to get! Think of the money you can make by using INTERNATIONAL POULTRY FOOD. It doubles the number of eggs, by doubling the number of eggs that are laid, and by all winter, makes them scratch and bust—and by all winter.

INTERNATIONAL POULTRY FOOD protects fowls against Cholera—in fact, many breeders say that it is the best Chicken Cholera Cure in existence. Price, 35c., 80c. and \$1.00. Sold by dealers everywhere.

Write for free copy of our \$2.00 Stock Book—of interest to every man who raises horses, cows, sheep, pigs and poultry.

INTERNATIONAL STOCK FOOD CO., Limited, TORONTO

FARM AND DAIRY AND RURAL HOME

Published by The Rural Publishing Company, Limited.



1. **FARM AND DAIRY** is published every Thursday. It is a weekly paper of the British Columbia, Manitoba, Ontario and Quebec, Dairy Farmers' Association and the Canadian Holstein, Ayrshire and Jersey Cattle Breeders' Association.

2. **SUBSCRIPTION PRICE**, \$10 a year, strictly in advance. Great Britain, \$12.50 a year. For 30 days' trial copy, Canada and Great Britain, add 50c for postage. A year's subscription free for a club of two new subscribers.

3. **REMITTANCE** may be made by Post Office or Money Order, or Registrar.

4. **POSTAGE** stamps accepted for all amounts less than \$5.00. On all checks add 20c for exchange fee required at bank.

5. **CHANGE OF ADDRESS**—When a change of address is ordered, both the old and new addresses must be given.

6. **ADVERTISING RATES** quoted on application. Copy received up to the Friday preceding the following week is issued.

7. **WE INVITE FARMERS** to write us on any agricultural topic. We are always pleased to receive practical articles.

8. **CIRCULATION STATEMENT**—The past subscription list for Farm and Dairy exceeds 11,000. The actual circulation of each issue, including copies of the paper sent subscribers who are but slight arrears, and sample copies, varies from 11,000 to 12,000. All mailing lists are accepted at less than the full subscription rate. No mailing lists are sworn detailed statements of the circulation of the paper, showing its distribution by counties and provinces, will be mailed free on request.

9. **OUR PROTECTIVE POLICY**—We want the readers of Farm and Dairy to feel that they can deal with our advertisers with our assurance of our advertisers' reliability. We try to admit to our columns only the most reliable advertisements. Should any subscriber have cause to be dissatisfied with most reliable advertisements from any of our advertisers, we will investigate the matter, and if possible, should we have any reason to believe that any of our advertisements are unreliable, even to the slightest degree, we will discontinue immediately the publication of their advertisements. Should we have the circumstance warrant, we will expose them through the columns of this paper. Thus we will not protect our readers, and our protective policy, we need only to include in all our advertisements the words "Farm and Dairy advertisement in Farm and Dairy."

10. **COMPLAINTS** must be made to Farm and Dairy within one month from the date of any unsatisfactory transaction, with no refund thereof, and no return of the money from the date that the advertisement appears in order to take advantage of any trifling differences between readers and responsible advertisers.

FARM AND DAIRY PETERBORO, ONT.

CONSERVATION OF OUR FORESTS

The Grand Duchy of Hesse in Germany affords us an example of the way in which European countries conserve their forests. In 1908 the productive forest area in Hesse amounted to 182,263 acres. The total yield of timber in 1908 was 4,575,000 cubic feet. Expenditures for salaries, forest cultivation, and road building amounted to \$754,000, and the total gross income was \$1,161,931, which represents 2.1 per cent interest on investment.

The policy of forest conservation followed in the older countries of Europe will soon have to be adopted, to some extent at least, in Canada, or the great source of wealth that we now have in our forests will be obliterated. The area under forest in many parts of Ontario is already less than in those European countries, where farming is carried on in the most intensive manner.

Although we in Canada cannot copy European forestry methods closely,

there are measures that we should take at the present time for the preservation of our wood-lands. Sufficient money spent on Canadian forest reserves would greatly reduce the fire danger, maintain an adequate supply of lumber for the future, and in time the reserves would become a source of revenue to the Government. Municipalities could well afford to take over some of the cheap forest lands in their townships and hold it for the further benefit of their districts.

Individual farmers also should not be uninterested in the policy of forest conservation. The farm wood lot managed as are the wood lots of Europe will, with the advancing price of fuel, soon become a revenue producing proposition well worth considering.

THE COOPERATIVE BILL

In Canada we lack legislation for the easy incorporation of cooperative societies. This deficiency Mr. Monk endeavored to overcome in the last House by the introduction of his cooperative Societies Bill. The Bill, however, did not become law because of the strong opposition of the Retail Merchants' Association. The members of this association believe that the formation of cooperative societies, which would result from such legislation, would be detrimental to their business.

We can all understand why the members of the Retail Merchants' Association would oppose a bill that would make it easy for producer and consumer to come closer together. We cannot understand, however, why the interests of a few thousand merchants should be allowed to stand in the way of the greater prosperity of the millions of Canadian citizens. Middlemen are necessary; but the fewer of them we have between producers and consumers the more satisfactory will it be to both classes.

A good thing will not "own." The Cooperative Bill in some form or other will in all probability be again introduced in the Dominion House this session. It is certain that the Retail Merchants' Association will again make themselves heard to destroy the bill. If we farmers are alive to our best interests we will see to it that the objections of the Retail Merchants' Association are met by equally strong arguments by the friends of the bill, which include all of the farmers and farmers' associations of Canada.

Our systems of renting land are faulty and result in soil robbing; where the renter can not provide domestic animals, the owner should arrange to furnish them, so that rotation of crops may be had, and hay and grains fed on the farm.

Keep pure bred dairy cattle. The well bred, pedigreed cow requires no more food and no greater care than does the scrub. Even if the two give equal amounts of milk, the pure bred cow is preferable in that her offspring will many times outsell the ordinary animal that does not have the papers.

ABOUT FERTILIZERS

Can we afford to purchase commercial fertilizers? In the January 4th issue of Farm and Dairy, Mr. T. W. Shipley, of York Co., Ont., tells of splendid results that have been achieved by the use of commercial fertilizers on Indian corn. On page three of this issue, Mr. G. E. Cottingham, of Chateaugay Co., Que., tells of experiments that he has made wherein commercial fertilizers gave no returns whatever. Such contrary results are apt to confuse those of us who have not yet tried commercial fertilizers, and make us doubt whether they are worth while or not. Commercial fertilizers have made for themselves an all the old settled countries. We in Canada have not yet reached the stage where we fully appreciate the value of these fertilizers. Their use is not yet past the experimental stage with most of us. Even such unfavorable reports as have been given by Mr. Cottingham should not discourage us from giving commercial fertilizers a trial.

The fact that fertilizers in commercial forms are being used in ever increasing quantities in the older countries where they have stood the test of over one hundred years, should be convincing proof to us that there is something worth while in commercial fertilizers. The Scotch farmer, noted the world over for his caution, will think nothing of applying \$30 to \$40 worth of fertilizer to an acre. He certainly would not do so had he not proved to his own satisfaction that it is a paying proposition. In the corn growing sections of Ontario there are hundreds of farmers who are using commercial fertilizer regularly, and getting good results from it.

The use of commercial fertilizer is bound to increase and no more necessary or profitable work could be undertaken by our experimental farmers than a thorough investigation in so far as lies within their power into the various forms of commercial fertilizer and their use. Hitherto no systematic experimental stations have not given commercial fertilizers the attention that they deserve, and consequently data from that source are slim. So many factors, however, influence the results from fertilizer tests that they are very narrow in their application. The soil of practically every farm in the country has distinct and individual requirements in the line of fertilizer. We farmers on our own farms should conduct fertilizer experiments in a small way and thus determine the needs of our own soil.

It may be that in certain seasons and on very rich land the application of commercial fertilizers will not return a paying result. But the experience of agriculturists in older countries and of hundreds of farmers in our own country leads us to believe that many of us, probably the majority, could make much larger use of commercial fertilizer than we do and that its application would be followed by such increased yields as to make the venture a financial success.

The influence of a prospectus of some company about to be launched, painting in glowing colors how easy it will be to double and

treble one's capital in comparatively short time by investing in that company, has been the ruin of many farmers. Those of us who are thinking of investing our money away from the farm would do well to have in mind the opinion of such companies held by the late Russell Sage, a multi-millionaire. He remarked at one time that he would prefer a five per cent investment with a little uncertainty to a hundred per cent investment on a "sure thing." Several hundred per cent or even thousand per cent money making schemes have "gone through" recently, leaving the investors without even a return of the principal. The misfortunes of the shareholders in these concerns should be a warning to us. There is no better place to invest our money than right on our own farms in such improvements as tile drains and pure bred stock, but if we are determined to invest money in outside enterprises, let us beware of get-rich-quick schemes. Moderate expectations are much more certain to bring profitable returns.

The farmer's table may not have as much silver on it, or as large a variety of food as that of the wealthy city man, but the farmer has what the city man has not—a first class appetite.

Straight simple English is the most forcible language we can use. Profanity, or even slang, weakens our talk, betitles us in the eyes of those that love us, and ties us hand and foot against good clean speaking.

In those countries where they specialize in dairying, undivided attention has been given to the improvement of the milk yielding capabilities of cows. In Canada we are at a disadvantage in that we are inclined to keep our eyes on the beef end; and in working for two objects we sometimes fall down between the two. We get little milk and very poor beef.

The Man Himself

(Hoard's Dairyman)

Success in dairy farming depends almost entirely on the quality of the owner. Farmers do not think so, as a rule, but we are convinced it is true. They are very apt to overlook this important fact of human quality that makes his success or failure and ascribe success or failure to outside conditions. But you will never hear them measure a hired man in that way. It is personal quality every time, that makes him a success or a failure. And if this be true of the hired man, why not of the owner?

Viewed from this standpoint then, the thing for every dairy farmer to do is to pay more attention to his own mental equipment, the knowledge he possesses. There stands his business. Does he understand it in the light of the best knowledge he has? Is he taking proper pains with his own mind so he shall understand it that way? Those are the vital points to be considered. We admit that most farmers think they understand their business. But do they?

Criticisms

Editor, I at this season newspapers large headings of the conducted mental Union session at O Professor ary of the most a college his count of the improve but the reser his fertilizee he most un are convers soil fertilit

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EST RATE OU SMALLEST AD

We've always advertisers, and busy to pay the tion.

And we'll alw vertisements w seen, too.

Also there is tage: FARM AN "A Paper Farm

Criticism of Experimental Work

Editor, Farm and Dairy.—As usual at this season of the year the various newspapers are publishing, under large headings, the reports of the experiments of the cooperative experimental Union, which held the annual session at Guelph this week.

Professor C. A. Zavitz, the secretary of the Union, has always been the most prominent speaker at these meetings, and he heartily acknowledges his claims to recognition on account of the work he has done towards the improvement of our cereal crops, but the results he has obtained from his fertilizer experiments and the conclusions he has deduced from them are the most unconvincing to those who are conversant with the principles of soil fertility and fertilizing.

THE EXPERIMENTAL PLAN
The experimental plan which Prof. Zavitz adopted years ago and has

XIII

Farm and Dairy is not a big farm paper.

It's big enough for the biggest advertisers and we have them.

And it's not too big for the small advertiser, and we want and ought to have more of them.

Why?
For the best reason in the world (and one that applies to no other farm paper in this country with equal force) Farm and Dairy is not a read-in-a-hurry paper, and THE SMALL ADVERTISER WON'T BE OVERLOOKED.

The small advertiser cannot be lost in Farm and Dairy. Each one is given special position along side of live reading matter. Each is put on the special page in the special department where it is most certain to be seen by the people who will be specially interested.

Talk to any farmer who gets Farm and Dairy and other papers and he will tell you that he picks up Farm and Dairy first. "THERE'S A REASON."

The remarkably high standard our Editorial department has set itself to be of abundant, practical helpfulness; to feature only articles of the greatest interest, and to have these BOILED DOWN, CONDENSED TO THE VERY UTMOST—this policy insures that NOT A PAGE IS MISSED, NOT A COLUMN OVERLOOKED.

That's why the small advertiser CAN'T be lost in Farm and Dairy.

Much food in this fact to the small advertiser.

Then, there's yet more interest to him in the additional fact that FARM AND DAIRY'S RATES ARE WITHIN HIS REACH.

WE HAVE PUT OUR LOWEST RATE OUT TO EVEN THE SMALLEST ADVERTISER.

We've always time for small advertisers, and we're never too busy to pay them personal attention.

And we'll always put their advertisements where they'll be seen, too.

Also there is that other advantage: FARM AND DAIRY is—

"A Paper Farmers Swear By"

tenaciously adhered to ever since, is as follows:

Plot I.—Check plot no fertilizer.

Plot II.—60 lbs. nitrate of soda per acre.

Plot III.—160 lbs. muriate of potash per acre.

Plot IV.—320 lbs. acid phosphate per acre.

Plot V.—213 lbs. complete fertilizer per acre (containing one-third of each of above quantities).

Plot VI.—20 tons farmyard manure per acre.

Without consideration to the nature of crop, or other conditions, Prof. Zavitz has enforced this plan, without variation in sum or substance, and like the laws of the Medes and Persians, it altereth not.

The famous "Law of Minimum" was promulgated by Liebig more than 60 years ago and has long been recognized by soil chemists. Briefly, this "law" states that the best food substance present in smallest quantity in a given soil, governs the yield of crop in that soil. Another way of expressing the same law is: "The strength of a chain is that of its weakest link."

ALL FERTILIZERS MUST BE PRESENT

The plant food ingredients applied in fertilizers are nitrogen, phosphorus and potash and sometimes lime, and except under exceptional conditions a fertilizer should be compounded proportionately to these; it is seldom advisable to apply them singly, for if the other ingredients are deficient, the one applied would be ineffective. What benefit is derived by applying 160 lbs. muriate of potash an acre, alone, to the oat crop, when, in presence of a sufficiency of other plant foods, the crop could only use profitably half of the potash applied? The "complete fertilizer" consists of a mixture of nitrogen, muriate of potash and acid phosphate—in all 213 lbs., or just enough to give the potato crop an "appetizer."

It is generally considered advisable to use fertilizers in conjunction with farmyard manure for hoed crops, but Prof. Zavitz loses sight of this in his experiments. True, there is one matured plot in this plan, and the manure is applied at the rate of 20 tons an acre, the total value of this being given at \$6 for the 20 tons! Surely a very low estimate of the average value of farmyard manure in Ontario, and there must also be reckoned the cost of haulage and application—perhaps this, too, is included in the \$6!

THINGS TO THINK ABOUT
Perhaps Prof. Zavitz or some other author would answer the following questions:

1. What would be an average price per ton of ordinary mixed cow and horse manure in Ontario, and what would be a fair estimate of the cost of handling same?
2. Is Liebig's "Law of Minimum" considered generally applicable?
3. What problems in fertilizing is Prof. Zavitz' plan of experiment designed to elucidate?
4. What would be a more suitable and efficient plan than that at present employed by Prof. Zavitz in the cooperative tests?

We consider this subject of very great importance and shall be glad to know the opinions of our readers on the same.—F. V. Thomson, York Co., Ont.

Another Satisfied Cow Tester

W. J. Soman, Queens Co., N. Y.

We have tested our cows regularly once a month for the last two years and weighed the milk for four years. We have made more money out of our cows in that period than ever made before in twice that time. We have been able through our testing to weed out the low testing cows and leave the best ones in the herd. We take a greater interest in the herd and give more attention to feeding, attending and milking than we otherwise would.

DE LAVAL CREAM SEPARATOR

NEW AUTOMATIC OILING

The most important Cream Separator improvement since the introduction of the present type of De Laval machines.

The new automatic oiled De Laval Cream Separators are now being supplied in all sizes, and this improvement constitutes another great step forward in cream separator construction—the one thing possible in betterment of the previous De Laval machines of the present type.

The new system of De Laval automatic oiling is distinctively different from any other splash or spray system in that there is a constant regulated feed of fresh oil and discharge of used oil. Other splash systems use the same oil over and over, until it soon does more harm than good.

In the new automatically oiled De Laval machines all gears, shafts and bearings practically float in a mist-like spray of oil and literally never touch each other during their operation.

De Laval agents will be glad to exhibit the new machines and demonstrate the working of the new automatic oiling system, which more than ever enhances De Laval superiority in every feature of cream separator practicability.

DE LAVAL DAIRY SUPPLY CO. LIMITED

173 WILLIAM ST., MONTREAL 14 PRINCESS ST., WINNIPEG

In 1911 our cows did not give as large a yield as in 1910, because of the late pasture and shortage of fall feed. Our corn did not give very good results. It was a good growth, averaging about eight feet in height, but it got frozen early in September and did not appear to be much better for feed than straw. Although our cows were in much better order this spring than they were in the spring of 1910, their test was much lower and very irregular. We cannot account for this, unless the testing was not properly done.

We like Farm and Dairy exceedingly well and admired your stand on the reciprocity question. We were surprised to see the farmers as a class so ready to listen to the pultry yams of politicians. We trust that the day is not far distant when my brother farmers will see things in the light in which Farm and Dairy endeavored to show them.

Our Veterinary Adviser

SUPPURATIVE MAMMITS.—One-quarter of cow's udder became inflamed in July. It boils and breaks up, but gathers and breaks again, etc. W. M. Bentz Co., Ont.

When an abscess forms open up freely with a knife and flush the cavity out well three times daily with a 4 per cent. solution of carbolic acid in water. Keep abscess open until it is healed at the deep-seated parts. Give internally four drams hypophosphite of soda three times daily.

CORNS.—The shoes were not reset on one of my horses for three months. He now has corns.—E.K.J.

The treatment he received is well calculated to cause corns. Remove the shoes, pare down well at the seat of corn, and apply hot linsed meal poultices. Change the poultice every

six or eight hours until heat and tenderness disappear. Get the shoes changed every four weeks and have down so that there will be little or no weight upon the shoe at that part.

UNTERTHY COW.—Cow stays thin. She is well fed. She eats the manger.—E.J.

The symptoms indicate tuberculosis, for which nothing can be done, the only method of making a definite diagnosis is the tuberculin test applied by a veterinarian. If she does not eat well give her a linseed meal of the following three times daily, viz: Equal parts sulphate of iron, gentian, ginger and nux vomica. The eating of wood indicates a want of phosphates in the system. For this allow free access to salt and give her two grams calcium phosphate three times daily until the habit ceases. In the meantime cover the manger with tin or zinc to prevent her eating it.

CURB.—Six months old colt has a curb. I have been working at it with all kinds of dope without success.—J. G. York Co., Ont.

If that you consider a curb is a congenital conformation (which we think probable) you may as well use "dope" as anything else, as the enlargement cannot be reduced. But if really be a curb, the result of a sprain of the ligament, it can be reduced in time. Get a linseed meal of four drams each of biniodide of potassium and cathartics and four ounces each of glycerine and alcohol. Keep colt quiet in a box stall and rub a little of the liniment in once daily. It will probably take some months to reduce the enlargement. Treatment is helped when the patient is shod with a shoe high at the heel. This tends to lessen the stress upon the ligament, but the advisability of shoeing so young an animal is questionable.

THE "BAKER" BACK-GAEDR WIND ENGINE



Is Built for Heavy Duty. Neat and Compact in Design. Do Perfect Work. Because they are Built on Principles that are absolutely Correct, and the easiest Running Mill Made.

The wheel is built on a hub revolved on a long stationary steel spindle. As a result, there is less friction, and the hub will never become worn and cause the wheel to sag toward the tower.

"BAKER" wheels have large numbers of small sails, without rivets, as compared with other makes.

The small sails develop the full power of the wind and enable the "BAKER" mill to pump in the lightest breeze.

The engine is so constructed that the gears cannot wear out of mesh.

All working parts are covered with a cast iron shield, thus protecting same from ice and snow.

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FOR SALE—Iron pipe, Pulleys, Belting, Rails, Chain Wire Fencing, Iron Doors, etc. all sizes, very cheap. Send for list, stating what you want. The Imperial Waste and Metal Co., Dept. F. D., Queen street, Montreal.

The "Bissell" is a 3-drum roller

3 DRUMS make the best Land Roller. It is easy to understand how the "Bissell" Roller with 3 drums and supported by 6 heads is a STRONGER IMPLEMENT than any 2 drum Roller on the market. With 3 drums the centre bearing is not needed. When the "Bissell" Roller is at work, the axle turns with the drums.

Creamery Department

Butter makers are invited to send contributions to the Department, to ask questions on matters relating to butter making and to suggest subjects for discussion. Address letters to Creamery Department.

Grading Cream

C. Marker, Dairy Commissioner for Alberta

In the summer of 1909 the proportion of first class butter in 11 creameries in Alberta was 72.39, and of second class 27.61, the proportion of finest in the first class butter being only 9.13. In 1910 as a result of grading and paying for the cream on a quality basis the proportion of first class had increased to 84.33 per cent., of which 26.21 per cent. was finest. In 1911 it was 85.07 per cent., the proportion of finest being 32.87 per cent.

We are very well satisfied with our system of grading cream, as it puts a premium on quality; it is simple, easily understood and has had a great effect in not only reducing the percentage of second grade butter made, but has materially increased the percentage of extra fine butter included in the butter that grades as first class. The buyers endorse it thoroughly and now are buying butter according to grade.

Benefits of Cow Testing to the Factory*

C. F. Whitley, In Charge of Records, Ottawa

Every cheese and butter maker, as well as every factory proprietor, should be interested in extending cow testing because with its adoption the factory stands to make important gains in several ways. A proportionate reduction in the cost of hauling milk results as more milk is obtained per cow and, therefore, from the present territory. There will be less waste from teams hauling only half a load. With the same plant a larger output can be handled, thus effecting a proportionate lowering in the cost of making.

As the cows are cared for better, the factory season will be lengthened. This means running on a more economical basis, for no manufacturer refuses to see his machinery in operation only half or three-quarters of the year.

IMPROVES QUALITY OF PRODUCT

Patrons who take up cow testing pay better attention to their stock, ensuring milk gratitudo for better and delivered in better condition. This points to easier handling of the milk in the factory under more pleasant conditions, resulting in a shorter day's work and a better quality of product.

As the district becomes the home of better dairymen the factory and its goods receive gratitudo advertising and a desirable reputation.

An increased cash income also results, because more and better milk will help to raise wages; besides this, it

*Extract from an address at the E.O.D.A. at Campbelford recently.

the Department of Agriculture at Ottawa pays for each test the cheese or butter maker makes for members of cow testing associations.

There will be a growth in estimation of the worth of the maker to the district as his factory becomes a clearing house of progressive dairy information and practice.

Ottawa Winter Fair

(Concluded from page 6)

on exhibition. A pleasing feature of the exhibits was the great preponderance of birds of the utility and utility and utility breeds. Wandotters were egg laying breeds. Wandotters were there in greatest numbers, with



The New President of the E. O. D. A.

Mr. J. H. Singleton, Smith's Falls, Ont., the new president of the Eastern Ontario Dairymen's Association, has had a life-long experience in dairy work. For many years as a director and recently as vice-president of the association Mr. Singleton has rendered valuable service for the promotion of dairying in Eastern Ontario. As president of the E.O.D.A. he will be in a position to render even greater services to dairying.

White Rocks a good second. White Leghorns were also a numerous showing. Some of the best birds on exhibition were of the old standby, the Barred Rock. The purely fancy breeds were there, but not in great numbers. The entries in the classes for turkeys and geese were unusually large.

A feature of the poultry abate was the fine display of dressed poultry. Pairs of dressed fowls were the strongest class. The quality of the fowls packed in boxes ready for shipment showed great improvement. All of the birds were well fitted. Barred Plymouth Rocks supplied most of the entries.

SEEDS

There were 20 more entries than last year in the competitive classes for seed grain. The most noticeable improvement in quality was the purity, various being less mixed than at previous fairs. In the Field Crops Competition, there were the same number of entries, but as one bag of grain constituted an entry instead of two as previously, the display was not so imposing. Oats were particularly good. Most of the corn on exhibit was from western Ontario, but some well matured ears had been grown in the east, thus disposing of the idea that corn will not come to maturity in Eastern Ontario. The

Seed Division was attractively decorated with sheaves of grain and grasses from the Central Experimental Farm.

Near Mr. C. F. Whitley, of cow testing fame, was on hand with specimen scales, test books, bulletins, and Mr. Whitley's enthusiasm interesting farm visitors in the subject of testing cows. The Carleton County Branch of the Department of Agriculture also had a booth nearby, and the line they were booming was farm poultry.

Lectures were given when judging was not in progress. These for the most part were similar to those given at the Guelph Winter Fair.

The proper stirring of cream during the time it remains on the farm is a point that needs much attention—J. A. Farrell, Dauphin District, Man.

The man who sends our rich cream is getting skinned to a finish when the pipette is used. After a summer's experimental work, I cannot recommend the pipette for creamery work. I have seen a difference of five per cent. in the over run in the same cream tested with the scales and with the pipette.—Geo. H. Bell, chief of the Dairy Division, Ottawa, Ont.

NEWERMIFUGE

The best and most effective remedy for bots and other worms in horses. (Guaranteed by the Farmers' Horse Remedy Co. under the Pure Food and Drugs Act, June 20, 1906, Serial No. 2071). It is guaranteed to kill and bring from the body dead in from 18 to 24 hours all pin worms and bots.

It is absolutely harmless and can be given to mares in foal before the eighth month. Practical horse owners have written us Newermifuge has removed between 500 and 800 bots and worms from a single horse. An animal whose stomach is full of worms cannot get fat or help being obstinate. Send your order to-day. Beware of imitations.

6 capsules, \$1.25; 12 capsules, \$2.00
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Full particulars from Grand Trunk Agents.

Cheese

Makers are in this department matters relating to suggest subjects for discussion. Address letters to Creamery Department.

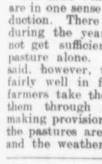
Dairy Conditions

J. A. Ruddle
The slow Australasia hearing on the does from the local production rapidly than a large proportion is available for very important with the province. We have a large increase export trade are years. In our the more market of the new in a branch of not include dairy. The milk winter are in one sense ducted. There during the year get sufficient pasture alone. Still, however, fairly well in farmers take them through making provision the pastures are and the weather

*Extract from E. O. D. A. Convention

GASOLINE

Statio nary Mo



WINDMILLS

Grain Grinders, Saw Shafes, Large Capacity, GOULD, SIMPLY Brantford Wi

CHEESE FOR

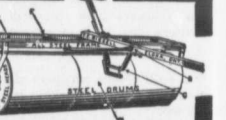
First class cheese plant. Best dairy. Flowing spring pipe. Write for literature. Apply Box 5, F. D.

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Being 150 acres of state of cultivation. Dwelling has hot water ed with gas. A large section if desired. P. We have also a large size. See for Pamph

ORMSBY WOODSTOCK



Grass Seeder Attachment furnished if required. Write Dept. R for free catalogue. 63

T. E. BISSELL CO., LIMITED, ELORA, ONT.

Cheese Department

Makers are invited to send contributions to this department, to ask questions on matters relating to cheese making and to suggest methods for discussion. Address letters to The Cheese-Makers' Department.

Dairy Conditions in Australasia*

J. A. Ruddick, Dairy Commissioner, Ottawa

The slow growth of population in Australasia has a very important bearing on the export of dairy products from these countries. Agricultural production is increasing more rapidly than home consumption, so that a large proportion of the increase is available for export. This is a very important point in connection with the probable export from any country. We have seen the effect of a large increase in population on the export trade of Canada during recent years. In our case, it has been the more marked, as a large proportion of the new population is engaged in a branch of agriculture which does not include dairying.

The mild winters of New Zealand are in one sense favorable to milk production. There is a very short period during the year when the cattle do not get sufficient nourishment from pasture alone. There is this to be said, however, that as the cows do fairly well in favorable seasons, the farmers take the chances of carrying them through every year without making provision for the months when the pastures are sometimes very bare and the weather inclement. When a

*Extract from an address before the E.O.D.A. Convention at Campbellford.

bad season occurs the cattle suffer very much. It is reported that during the past winter a large number of cows have starved to death in New Zealand.

AUSTRALIAN CONDITIONS
Winters in Australia are milder and drier. The thing most dreaded by



The Reward of Skill and Care

The largest winner in the dairy exhibit at Ingersoll last October was D. Menzies, Molesworth, Ont., who won for the year both the cheese buyers' challenge cup and the Imperial bank cup. These trophies must be captured three times or twice in succession before they become the property of the owner. Mr. Menzies and his trophies may be seen in the illustration herewith.

Australians is the occurrence of droughts, which have sometimes lasted for several years, with most disastrous results. It is claimed, however, that with the application of dry farming methods and the securing of

artesian water, future droughts will not prove as serious as they have in the past.

The Patrons' Interest

R. W. Ward, Peterboro Co., Ont.
The question has been asked me, "Who should be paid for these curing rooms?" I believe that the producer should. The benefit that the cheese-maker gets from a cool curing room is largely in satisfaction, but the producer gets it in good cold cash. The saving in shrinkage and the better quality largely result to the producer's interest.

It makes little difference to the cheese-makers' finances whether or not the reputation of our cheese in the Old Country is guarded. It makes less difference to the buyer. It is the dairy farmer who owns the dairy industry. It is up to them to build up their reputation, and they will never do it by shipping green cheese. As long as we have poor cold curing rooms there will be a strong tendency to ship out the cheese before it has a chance to spoil. The necessity for these curing rooms should be the greatest lesson of the season of 1911.

Our Cheese in Great Britain

As a result of observations made during his trip to Great Britain last summer, Chief Instructor Publow, at the annual convention of the Eastern Ontario Dairymen's Association, held at Campbellford, stated that he had concluded that the line of instruction followed in Eastern Ontario is on the right basis. We still have to continue endeavoring to make the quality of our average cheese approximate more closely to the quality of the best.

He had gathered a great deal of information of a technical character. This he intends to impart to the dairy instructors as well as to the cheese and butter makers who attend the dairy school at Kingston this winter. In addition, he intended to have the instructors call meetings of the makers in their districts. He proposed attending these meetings and thus imparting and the same information to the makers who do not attend the dairy school.

IMPROVE THE RAW PRODUCT

The next great improvement must be made in conditions on the farm. Because of the careless methods of some patrons in the handling of their milk, it was costing the patrons in their factories as much as a cent a pound more for the manufacture of their cheese through the extra amount of milk required to make a pound of cheese. There are still sections in which the patrons oppose efforts at improvement. The instructors have gone to the farms of patrons and had them move their milk stands to more sanitary locations, but have barely left the farms before the patrons have moved their stands back into the old locations, and other farmers in the section have laughed and approved of it when they heard about it. The only way to reach such patrons was to prosecute them, and this is apt to be done in future cases of the kind.

ABOUT REJECTED MILK

Trouble was still being experienced, Mr. Publow said, through milk rejected at one factory being accepted by a neighboring factory. This led some of the directors to ask if the certificates of makers who accept inferior milk that has been rejected at neighboring factories could not be cancelled.

Mr. Sanderson told of a case where a maker, who had accepted such milk, and his patrons as well, were somewhat alarmed when it was reported that he might lose his certificate on account of his action. Mr. Publow did not care to advise such action, but he felt that affairs were moving in that direction.

Temperature of Milk Determined

The principal resolution passed at the W.O.D.A. Convention at Ingersoll dealt with the care of milk. The resolution was introduced by Chief Instructor Frank Hens. In the preamble it was set out that a considerable portion of the milk delivered to cheese factories during winter is over-ripe, caused by insufficient cooling immediately after milking, and that it has been well established that such milk will not make the greatest possible quantity nor the finest quality of cheese. For this reason it was moved and carried, that:

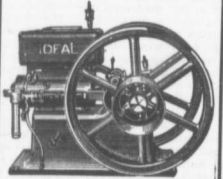
"Whereas, in the opinion of this meeting some definite temperature should be established for milk sent to cheese factories;

"Be it Resolved, That the night's milk for dairy delivery be cooled immediately after milking, to a temperature of 65 degrees or under, and that the temperature of this milk should not be higher than 70 degrees when delivered at the factory. If for any reason it is found necessary to mix the night's and morning's milk, the night's milk under these conditions should be cooled to a temperature of 60 degrees Fahr. or under, immediately after milking, and milk so mixed should be delivered at the factory at a temperature not higher than 75 degrees F. To keep milk over Sunday for Monday morning delivery, it is recommended that the milk be cooled immediately after mixing, to a temperature of 60 degrees or under, and held at this temperature at the factory."

This resolution, which was carried unanimously, will be read at as many annual meetings of factories as possible.

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1 CYLINDRICAL 300-GALLON OREAM COOLER. We are using Mechanical Refrigeration and have no use for same. Point Abino Creamery, Ridgeway, Ont. For Sale Up-to-date cheese factory with dwelling: good well. One acre land; received \$1.50 per 100 lbs. cheese for manufacturing 1/2 mile to school. Reason for selling—accepted Government position. This factory runs year round, and receives \$600 to \$900 loss per day in summer. Address FRED S. HADLER, GREEN LEAF, WIS. U.S.A. R. R. No. 2, Box 5

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WHAT the world needs is more day-to-day living; starting in the morning with fresh, clean ideals for that day, and seeking to live that day as if it were all time and eternity.

The Second Chance

(Copyrighted)

NELLIE L. McCLUNG

Author of "Sowing Seeds in Dany"

(Continued from last week)

Pearl, the oldest daughter of John Watson, a C. P. R. section man living in Millford, Mass., receives a large sum of money from the relatives of a young Englishman she had nursed when ill. She decides to educate herself and the rest of the family. The Watsons are joined by their Aunt Kate, who proves not an unmitigated blessing. Pearl proves an efficient and clever scholar and has dreams of being a school teacher. She sees that her small brothers are learning bad habits in the town and gives up her ambition to be a school teacher and suggests moving the family onto a farm, to which John Watson agrees. We are introduced to the children at a country school. Tom Steadman, a bully, in a game of shindy, intentionally strikes with his club Libby Anne Cavers, for which he is thrashed by Bud Perkins. Libby Anne does not dare to say the blow was intentional, as her father owns Mr. Steadman money. Bud Perkins is angry, but forgives Libby Anne, as he understands the circumstances. In the meantime the Watsons are getting established on the farm. Pearl calls on Mr. Burrell, the pastor, and asks him to attend the country school. Pearl calls on Mr. Burrell, the pastor, and asks him to conduct services in their school house. All attend the Pioneers' picnic. Sandy Braden, hotel keeper, promises Pearl not to give Bill Cavers liquor, but his bartender does. Bill is found dead.

JUST then Sandy Braden, wearing a black suit, drove into the yard and tied up his horse. The little house was filled to overflowing with women; the men stood bareheaded around the door. Mrs. Cavers sat beside the coffin with an arm around Libby Anne. Mrs. Steadman, with the cerise roses still nodding in her hat, said on the way home that it did seem queer to have Mrs. Cavers and Libby Anne. Anne did not shed a tear. Mrs. Steadman did not understand that there is a limit even to tears and that Libby Anne in her short years had seen sadder sights than even this.

The Reverend John Burrell conducted the funeral.

"Shall we gather at the river?" he gave out as the first hymn. Some sang it falteringly; they had their own ideas of Bill's chances in the next world, and did not consider the "river" just the proper figure of speech to describe it.

The minister then read that old story of the poor man who went down to Jericho and fell among thieves.

Mr. Burrell's long experience with men had made him a plain and pointed speaker, and given him that rare gift, convincing earnestness. Now he laid his hand on the coffin and spoke in a clear, ringing voice that carried easily to every person in the house and to those who stood around the door.

"Here is a man who is a victim of our laws," he said, in beginning. "This is not an exceptional case. Men are being ruthlessly murdered every day from the same cause; it is not the only home that has darkened. It is going on all over this land and all the time because we are willing for the sake of a few dollars' revenue, to allow one man to grow rich on the fallings of others. We know the consequences of this; we know that men will be killed, body and soul, that women will go broken-hearted, that little children will be cheated of their childhood. We know today—the dead man in his coffin, the sad faced wife and child,

the open grave on the hillside—is a part of the Traffic. They belong to the business, just as much as the sparkling decanters and the sign above the door. Every one of you, no doubt, has foretold this day. I wonder have you done anything to prevent it? Let none of us presume

FACE THE SUN

Don't hunt after trouble, but look for success,
You'll find what you look for; don't look for distress,
If you see but your shadow, remember, I pray,
That the sun is still shining, but you're in the way,
Don't grumble, don't bluster, don't dream and don't think,
Don't think of your worries, but think of your work,
The worries will vanish, the work will be done,
No man sees his shadow who faces the sun.

to judge the brother who has gone. I would rather take my chances before the judgment-seat of God with him, the victim, who has paid for his folly with his life, than with any one of you who have made this possible. "Ye who are strong ought to bear the infirmity of the weak." I do not know how it will be with this man when he comes to give an account of himself to God, but I do know that God is a loving, tender Father, who deals justly and loves mercy, and in that thought to-day we rest and hope. Let us pray."

"Impress this scene on our heart to-day, dear Lord," he prayed; "this man cut down in his prime, this woman old with sorrow, not with years; this child, cheated of her father's love. Let us ask ourselves how long will it sit idly by, not caring. And oh, God, we pray Thee to bless the one man who, among us all,

has said that as far as he is responsible this traffic shall cease; be less him abundantly, and may his troubled heart find peace. May he never forget that there is a fountain where all sin and uncleanness may be washed away. Remember, dear friends, that how He died to save us from the sins of selfishness and greed, and ever lives to cheer and guide us. Let us hear the call that comes to us to-day to do a man's part in protecting the weak, the helpless, and the young. Let the love of this woman for her husband call to our remembrance Thy unchanging love for us, and if it be in keeping with Thy divine laws, may the precious coin of her unflinching devoted purchase for him a holding in the heavenly country. For the sake of Thy dear Son we ask it."

The funeral went slowly along the well-beaten road that skirts the sandhills of the Assiniboine, and crawled like a long black snake through the winding valley of Oak Creek, whose banks were hanging with wild roses and columbine, while down in the shadowy aisles of the creek bed, underneath the stunted oak that gives it its name, pink and yellow lady's slippers gave out their honeyed fragrance.

"It is hard to die and leave this all behind," Thomas Perkins said, looking down the valley, where the breeze rippled the leaves. "I always think it must be hard to snuff out in June or July and have to pass with one's hands up, and not know how the crowd'll turn out; but I guess now, from what I've heard, when the clock strikes quitting time, a fellow won't be worryin' about the crops."

On the quiet hill, dotted with spruce, that looks down on the Souris they laid Bill Cavers away. Very early in the coffin was lowered into the sandy bed as the minister read the beautiful words of the burial service and the neighbours and friends stood silent in the presence, the majestic presence of Death. Just before the

a woman's quick understanding, "I know," she said.

CHAPTER XXI.

FROZEN WHEAT

For them 'at's here in airliest infancy

It's a hard world;

For them 'at gets the knocks of boy-

hood's ages,

It's a mean world;

For them 'at nothin's good enough

they're gittin'.

It's a bad world;

For them 'at learns at last what's

right and wrong and

It's a good world.

James Whitcomb Riley.

The summer was over, and the harvest, a great, bountiful harvest, was gathered in. The industrious hum of the threshing-machine was heard from many quarters, and the roads were dotted thick with teams bringing in the grain to the elevators.

In the quiet field on the hillside, where the spruce trees, straight and stiff, stand like faithful sentinels, the grass that had grown over Bill Cavers's grave was now serene and green, and the early pansies were green still and gave with blossoms mute emblems of the love that never faileth.

Mrs. Cavers and Libby Anne were still living on the rented farm. After Bill's death the neighbours, with true Western generosity, had agreed among themselves to harvest the crop of her. The season had been so favourable that her share of the crop would be a considerable amount.

It was a typical autumn day in middle September. The golden and purple flowers of the fall bespangled and brightened the hillside, and centred gairdilla, wild sage, and the goldenrod. The bright blue of the cloudless sky set off the rich tints of autumn. The stubble fields still showed the golden-yellow tinge of the harvest, and although the maple leaves were fast disappearing before the lusty winds of autumn, the poplars, yellow and rust-coloured, still flickered gaily, the wild rosehaws and frost-touched milkweed still gave a dash of colour to the shrubbery on the river-bank.

There had been an early frost that fall, which had caught the late wheat, and now the grain which was brought into the elevators had to be closely graded. The temptation to "plug" the wheat was strong, and so much of it was being done that the elevator men were suspicious of every one.

Young Tom Steadman was weighing wheat in the Farmers' Elevator while the grain was on, and although there was no outward hostility between him and Bud Perkins, still his was too small a nature to resist what he was hearing that Bud had given him at the school two years ago, and, according to Tom's code of ethics, it would be a very fine way to get even if he could catch Bud selling "plug" wheat.

The first load that Bud brought in Tom asked him if he had plugged it. Bud replied quite hotly that he had not.

"I suppose," said Tom, "you stopped all that since you joined the Church."

Bud's face flushed, but he controlled his temper, and answered: "Yes, that's what stopped me, and I'm not ashamed to say so."

The manager of the elevator, who was present, looked at him in surprise. "Were you ever caught?" he asked.

"No," said Bud; "I was not." "Well, then, you're a fool to ever admit that you did it," he said severely.

(Continued next week)

The

Have No

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The Upward Look

Have No Root of Bitterness

Follow peace with all men, and holiness, without which no man shall see the Lord; Looking diligently lest any man be brought into bondage by the root of bitterness, and thereby many be defiled.—Hebrew 12:15

Much of the trouble and unhappiness in the world has been caused by our forgetting the instruction given in this text, or neglecting to follow it. Our great troubles, no matter what they may be, are our great opportunities. If, therefore, when trouble comes upon us, we will remember this fact and steal away for a while and commune quietly and in faith with God the hidden opportunity, that for His human wisdom prevented us from seeing, will soon stand revealed before us and our hearts once more will throb with joy over the assurance "that all things work together for good to them that love God."—Romans 8:28.

The weakness of our love and faith often stands revealed before us when dissensions arise in our churches. How often has God been grieved on such occasions by our readiness to forget His most important commands and our proneness to neglect to wait for His guidance while we strive for gain in our own strength through special views for which we contend. Then it is that Satan is present in our midst in power, playing on our likes and dislikes, our prejudices, and warning our judgment, and even misquoting Scripture in order that he may lead us farther and farther into such difficulties only too often result in great triumph for the Evil One, whose victories are the disgrace of those congregations where they occur.

Satan is always striving to create trouble in the hearts of God's worshippers. When, therefore, we see that trouble is arising in our midst, we should realize that it simply means that we have a great opportunity to glorify God.

Our first duty, no matter what the cause of dissensions may be, nor how important it may seem to us, is to see that it means that the Evil One is working in our midst. This thought is such an awful one it should exceed in importance everything else. It should lead us to humble ourselves before God and implore His aid to guide us aright. We should ask Him to reveal unto us any sins that may unconsciously exist in our hearts and to give us grace and humility to confess our sins not only before Him but before others, even our supposed enemies, if God so directs. We should pray with all the intensity of veneration whom we feel are the cause of the trouble. God should be asked to give us nothing but the tenderest guides for them. Our hearts are our guides. Not until we are free of all manner of doubt, but love for God and love for our fellow men is guiding us and that we love our enemies as we do ourselves, are we fit or should we dare to take any part in the consideration of the questions at issue. When we feel sure that God is with us then we should strive to see that all the best done, are led to approach the same in the same spirit. God must be held up in our secret prayers, in our counsels with our friends, in the meetings of the conference, so high that all may see Him. Never for an instant should His presence be forgotten. We should realize that every angry word and look is a revelation

of the Evil One in the heart of whoever offends, it may be our own. It should lead us to humble ourselves once more before God and ask Him for His forgiveness. It is better that we should wait for days and it may be for weeks before God until we midst, than is that we should endeavor to settle such matters quickly while we feel that any root of bitterness still remains in our midst. It may seem for a time that the forces of evil are triumphant, but the faith in God and His love in our hearts, we may confidently expect that God's way will prevail in the end, for when we work with God in love all things become possible unto us.—I. H. N.

Fire Protection on the Farm

By *L. Mitchell*

When you invest \$50 in an insurance policy, fire protection for the home. A fire prevented is much better than one paid for after the house and all its contents have gone to the wall.

First, buy a large, open-mouthed crock and place it in a closet of the kitchen, in the landing at the head of the cellar stairs, or, preferred, in one corner of the pantry. Keep this filled with common salt, and closely covered. Some day the soot in the chimney may take fire, and if a liberal amount of salt be at once thrown into the stove the gas arising from it will extinguish the flames. More farmhouses burn from fires in chimneys than from any other cause.

FIRES ON THE ROOF

Next, build a light but firm ladder long enough to reach to the eaves of the house. Buy two sets of tin snips, and to one attach a rope long enough to reach from the roof to within two or three feet of the ground. Put a hook in the back porch, where they can be easily reached. When lightning strikes the house or a spark from a burning boiler ignites the dry eaves of the roof, a bucket brigade acting promptly will probably confine the flames to their starting point.

Very often the head flying from a match or mishearing those same dangerous bits of wood and brimstone left in a bureau drawer start a fire on the second floor, which could be extinguished very easily the moment it is discovered, but which, by the water is brought from a well in the yard, has gotten beyond control.

RUGS AS EXTINGUISHERS

If possible have a heavy woollen rug in every room, and if the flames start in a curtain or drapery they may be extinguished by tearing them down, throwing them on the floor and smothering them with the rug. Another precaution is the keeping of large corked jugs of water in every room.

If a liberal layer of charcoal is placed in the bottom of the jug the water will not sour, and some time, that one jug of water carefully poured over a fire may extinguish it and save the house.

Every member of the house should know exactly where to find the fire-fighting paraphernalia, and, most important of all, don't buy the vessels and then allow them to get emptied. We may not need them for 10 years, but we may be sure that if they are needed on the eleventh hour they will not fail us because of our neglect.

Ornamental Pyramid for Table

Boil loaf sugar as for candy, and rub it over a stiff form, made for the purpose, of stiff paper, which must be well buttered; set it on a table, and begin at the bottom and stick on to this frame wax and tallow, rows of macaroons, kisses, or other ornamental articles, and continue till the whole is covered. When cold draw out the pasteboard form and set the pyramid in the centre of the table with a small bit of wax candle burn-

ing within, and it looks very beautiful.

Opportunity for the Farmers' Sons

One reason why so many boys leave the farm for the city is because of the failure of the father to take the boy into his confidence and make clear to him that he is not merely a "brower of wood and carrier of water," but that he is in full partnership with him and has a personal interest in the success of the work.

Those of us who were raised on the farm know, of course, that it would be practically impossible for the father to always demonstrate this to his son by a cash consideration; but if the seeds of dissatisfaction are not to be planted, some greater consideration for the son's services will have to be made than that of merely board and clothing. If, say, the son knew that he would receive even a small share of the proceeds from the sale of a pig, or a lamb, or a calf, and occasionally of a cow or a horse, to do with as he might like, to save or to spend, we believe, speaking from experience, that the arrangement would be mutually advantageous.

GOING TO FATHER

The son does not like to feel under the obligation of going to his father every time he wants a few cents for some expenditure; and, besides, he should be in a position to lay up something for his rainy day. The needs of a quarter of a century ago do not accord with the needs of the present day; nor did the boys of that time have the same facilities for investment as the boys now enjoy.

To-day we have practically at our door strong financial institutions which accept small amounts on deposit; and we also have the Canadian Government's great annuities system, in regard to which a word of explanation may not be out of place. It was approved by Members of both Houses of Parliament, has at the back of it the security of the whole of the Dominion of Canada, and there could be no better or safer plan of investment as a means of making provision for old age. The payments may be spread over as many years as may be desired. The Government attends to all the details free of charge.

WHAT \$13 WILL DO

For example, a payment of \$13—the price of one hog—made for a boy of 10 and continued until he is 60, will give him an annuity of \$215.20 for life. If the payments are continued until 65, he will receive \$338.73, or over \$120 a year more than he would receive at 60. The same annuity could be purchased for a boy of an older age at a little advance in this cost. If, therefore, a farmer's boy knew that at the time when he shall be no longer able to work he would have an annuity provision for the remainder of his days, and that if he died before drawing the first payment of annuity all that he had paid in with three per cent. compound interest, would be returned to his heirs, what a difference this would make in his outlook? How much more contented he would be to remain on the farm—for there is no occupation more honorable—and how much more independent he would be in his old age!

It is worth the serious consideration of every farmer who has boys, and of every farmer's son who is old enough to reason for himself. The government's system is, of course, available not only to farmers, sons and daughters, but to the sons and daughters of every other man who makes Canada his home, no matter what his nationality or creed may be, who is willing to read the Provincial Literature explaining this provincial system may be obtained at the Post Office, or on application to the Superintendent of Annuities, Ottawa, to whom your letters go free of postage.

One of the best investments that any farmer can make, with a view to helping his boys and girls in the future, is in giving those boys and girls a good liberal education, that will enable them to compete with others and hold their own in the future. One thousand dollars and a good education equip a young man much better for his struggles in life than will two thousand dollars and no education.

OLD COUNTRY DOMESTICS

Capable Scotch, English and Irish maids; also Danish girls. Parties arriving twice a month. Apply now. The Guild, 71 Drummond Street, Montreal, 47 Pembroke St., Toronto, or 227 Bank St., Ottawa

Farm Help AND Domestic Servants

Can be had on application to the Salvation Army Immigration and Colonization Dept. Head Office, 22 Albert St., Toronto, Ont. Our men have great satisfaction. We bring out the best class of men and take care in the training of them.

"If Wishes were Horses Then Beggars might Ride"



Some people wish they had some pocket money. Others take advantage of their opportunities and earn some.

Here is your opportunity to earn as much as \$30.00 or more.

During the past few years hundreds of our people have won valuable premiums and cash commissions through showing FARM AND DAIRY to their friends and neighbours and getting them to subscribe to this paper.

We want you to see one of our neighbors or one of your friends right away and get him to take Farm and Dairy this year.

We will pay you \$30 cash if you return us 20 new subscribers to Farm and Dairy each at \$1 a year.

We will pay you \$15 cash if you get us 25 new subscribers each at only \$1 a year.

Why not take a few days off right now and help us introduce Farm and Dairy amongst your friends and neighbors? You will do them a right good turn by bringing Farm and Dairy to their notice. And you will make good pay.

We will give you a very liberal cash commission on each new subscriber you get should you not be able to get the 25. Therefore you cannot lose.

Now is your slack time. Here is your opportunity, start in right away to get new subscribers for us.

FARM AND DAIRY PETERBORO

Note.—This is an excellent opportunity for you to make talent money for your church, Sunday school or Young People's Guild.

WIPE YOUR FEET

Mud, snow, dust and dirt will not be tracked over your floors if you use **Grab's Foot Scraper** outside your door. The only device of its kind which cleans the soles and sides of shoes in less than a second. It is made of special paraffin plates for scraping and is so constructed that it cleans sides of shoes and soles and sides of shoes simultaneously. It is made of special paraffin plates for scraping and is so constructed that it cleans sides of shoes and soles and sides of shoes simultaneously. It is made of special paraffin plates for scraping and is so constructed that it cleans sides of shoes and soles and sides of shoes simultaneously. *(Text repeats in a circular fashion)*

dealer will not accept you, don't make a habit of your order direct to us. Illustrated folder FREE.

Outward Mfg. Co., Berlin, Ont.

Anything to Sell

We want to hear from every reader of FARM AND DAIRY who has anything to buy, sell, or exchange. Have you **LIVE STOCK** for which you want buyers? Have you a **CREAM SEPARATOR**, **BABCOCK TESTER**, **INCUBATOR**, **BOOKS**, or anything that you would like to exchange for cash or for other articles of value equal to yours?

The small trader can connect with possible customers by putting a small advertisement in **FARM AND DAIRY**. Our rate is **25 CENTS** per insertion for each counter space in our classified columns at 7 cents a word. Make out your advertisement and send it to **FARM AND DAIRY, Peterboro, Ont.**

SYNOPSIS OF CANADIAN WESTERN LAND REGULATIONS

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

Duties—Six months' residence upon and cultivation of the land in each of three years. A homesteader may live within nine miles of his homestead on a farm of at least 90 acres solely owned and occupied by him or by his father, mother, son, daughter, brother or sister.

In certain districts a homesteader in good standing may pre-empt a quarter-section alongside his homestead. Price \$1.00 per acre. **Duties**—Must reside upon the homestead or pre-emption six months in each of three years from date of homestead entry (including the time required to earn homestead patent and cultivate fifty acre extra.

A homesteader who has exhausted his homestead right and cannot obtain a pre-emption, may enter for a purchased homestead in certain districts. Price \$1.00 per acre. **Duties**—Must reside six months in each of three years, cultivate fifty acres and erect a house worth \$500.00.

W. W. OORBY,

Deputy of the Minister of the Interior, N. B.—Unauthorized publication of this advertisement will not be paid for.

FARM DAIRYING A New Book by LAURA ROSS. Price only 51-55 postage. Order through Book Dept., FARM AND DAIRY, Peterboro, O.



1912 CONTEST
COUNT THE Xs AND Ts
\$10,000
GREAT PRIZES

And many other prizes according to the Simple Condition of the Contest (which will be sent).

This is a chance for clever persons to win Cash and other Prizes with a little effort. Count the Xs and Ts in the Square, and write the number of each that you count neatly on a piece of paper or post card and mail it to us before the time specified, telling you the X and Ts. You may win a valuable prize. Try at once.

SPEARMINT GUM & PREMIUM CO., Montreal, P.Q. Dept. 34 A

THE COOK'S CORNER

Recipes for publication are requested. Inquiries regarding cooking, recipes, etc., gladly answered upon request, to the Homestead Editor, Farm and Dairy, Peterboro, Ont.

LIMA BEANS

Ingredients—One qt. Lima beans, salt, pepper, butter, 1 qt. of milk. Take one quart of Lima beans, wash and soak them over night in cold water; simmer over a slow fire four hours; then add salt, pepper, butter (the size of an egg), and one quart of sweet milk; boil for half an hour.

SPONGE JELLY CAKE (ROLLED)

Ingredients—5 eggs, 1 cup of sugar, 1 cup of flour, and 1 teaspoonful of baking powder. Beat the yolks and sugar to a cream, add the whites, beaten to a stiff froth; then the flour, in which the baking powder has been mixed. Bake in a dripping-pan. When done, turn out on a cloth, spread jelly on the bottom of the cake, and roll from the side.

INDIAN MEAL BREAKFAST CAKES

Ingredients—1 qt. of Indian meal, 2 eggs, 1 teaspoonful of dissolved saleratus, 1-2 oz. of butter, salt to taste, milk sufficient to make a thick batter. Beat the eggs very thick and light. Cut up the butter into the meal; then pour over enough boiling water to wet it. When it is cool add the eggs and salt; pour the dissolved saleratus into the milk, and add as much milk as will make it into a thick batter. Butter square tin pans, fill them about two-thirds full, and bake in a quick oven. When done, cut into squares and serve hot.

SINGERS BUTTS

Ingredients—1-2 lb. of butter, 2 lbs. of flour, 1 pt. of molasses, 2 eggs, 6 oz. of ground ginger, 3 oz. of ground allspice, 1 oz. of powdered cinnamon. Mix in the same manner as for gingerbread. Roll out the dough into ropes about half inch thick; cut these transversely into pieces, which roll into small balls; place those at a little distance apart; upon greased baking sheets, and flatten them down with the palm of your hand; when the sheet is full, wash them over the tops with a brush dipped in thin molasses, and bake in a moderate oven.

OYSTERS (STEAM)

Ingredients—Oysters, butter, pinch of flour, cream, salt, pepper, nutmeg, least bit of cayenne, finely minced parsley, yolk of an egg, juice of half a lemon, plain omelet. Parboil oysters in their own liquor, remove the beads, cut each oyster in four or six pieces; melt a piece of butter in a saucepan, add to it a pinch of flour, the liquor of the oysters, a little cream, salt, pepper, nutmeg, the least bit of cayenne, and some finely-

minced parsley; put in the oysters, and toss them in this sauce just long enough to make them quite hot; stir into this of the fire the yolk of an egg beaten up with juice of half a lemon, and strained. Insert this in the shell of a plain omelet, or serve it round the omelet.

Take Foul Air Out

Of late we have noticed several quite lengthy and in some cases lengthy articles on the ventilation of homes and public buildings. And yet in every case the writer failed to get at the first and most important principle in ventilation. This is, that before you can get fresh, pure air into a room you must first take the foul air out.

If for this sole reason that a room with a fire in a fire place is always well ventilated, even if the windows and doors are tightly closed. First make a vacuum by taking the air out and you need worry but little about the air coming in. But even scientific men seem strangely obtuse on this essential first step.

If you take a vacuum with water and set it on the ground with the cork out you may pour water into it all day with but very little change in its fluid contents. Both air and water are fluids and both act much alike under similar circumstances. If one wishes to get fresh air into a building, provision must first be made to take the existing air out. Do that and outside air will come in. It is practically impossible to keep it out. But the first step must be taken first.—Hoard's Digest.

Useful Hints for Housewives

Dry salt sprinkled among your feet and under the soles of your shoes is an excellent preventative of odors. Lamp chimneys will shine in a hurry if a little kerosene is put in the water with which they are washed.

Old fly-catchers can be removed by a solution composed of equal parts of skimmed milk and water warmed. Try steaming fowl instead of boiling, and you will find that the meat is always tender, and the full benefit of the fowl is kept, beside a very delicate flavor.

To get rid of ants in the pantry, wash the surface of with hot water, in which has been dissolved as much alum as the water will take up. If this doesn't bring results, sprinkle red pepper in all crevices.

Keep a small whisk-broom in the kitchen sink to wash all your pots and pans with. It removes sticky substances much more easily than a cloth and makes the dirt removed by your hands in water during the process.

When baking potatoes cut a little from each end and they will bake much quicker.—F. W.

A certain piece of furniture can be almost obliterated by rubbing vigorously with linseed oil.—E. M.

A little alum put in the rinsing water will restore any faded colors. A piece dissolved in the starch will greatly improve the appearance of gingham, muslin and other wash goods.—R. T.

As one family table each member makes the duty of the occasion to tell any interesting or funny thing that he has heard during the day, and the father and mother are not exempt either.—T. C.

In putting down linoleum or oil-cloth have strips of molding nailed above the linoleum where it comes to the base board. This prevents dirt from getting underneath and also preserves the edges from moisture under floor coverings.—C. D. T.

When a valuable piece of music begins wearing out at the sides, if you will be able to preserve it much longer if you bind the ragged edges with passepartout. After applying the binding press the sheet with a warm iron.—D. L.

The Sewing Room

Patterns 10 cents each. Order by number and allow five cents for giving age; for adults, give measure for waists and waist measure for skirts. Address orders to the Pattern Department.

WITH SEPARATE SLEEVES

The work upon that can be adapted by means of a single button and button-hole is one that busy women are sure to welcome. This one is made in that way. It is also a very pretty and practical. It is generally protected, yet it shows becoming lines.



Medium 38 or 40, large 42 or 44 bust. TWO-PIECE SKIRT FOR MISSES AND SMALL WOMEN.

The two-piece skirt is a favorite one and in addition to its smartness it is simple and of moderate width and the seams at the sides can be left plain or trimmed.

For the 16 year size will be required 4 1/2 yards of material 27 inches deep.

For the 27 year size will be required 5 1/2 yards 33 or 34 inches deep. The width of the skirt at lower edge is 17 1/2 yards.

THIS pattern is cut in sizes for misses of 14, 16 and 18 years of age.

GIRL'S DRESS, 7237

All kinds of over-lap-neck effects are fashionable this season and in this dress that is so very prettily and attractively there are narrow panels of trimming material that afford attractive contrast and the mode is a quite simple one at the back.

For the 12 year size will be required 6 1/4 yards 33 or 34 inches wide with 3 1/2 inch deep 21 inch wide for the trimming.

This pattern is cut in sizes for girls of 10, 12 and 14 years of age.

CHILD'S DRESS, 7237

The gaiter frock is always one of the prettiest that the younger child can wear. Here we give a quite novel idea. It is trimmed in an unusual manner while all the simplicity of the style is retained.

For the 6 year size will be required 3 1/4 yards of material 27, 3 1/4 yards 36, 2 3/4 yards 38, 2 3/4 yards 40 inches deep. The width at top 27 inches wide to 18 inches as illustrated.

This pattern is cut in sizes for children of 4, 6 and 8 years of age.

CHILD'S DRESS, 7237

OUR FA

GREEN MASHING AND LOE A few crows and other prices. Eggs, for 30c to 35c; potatoes, 47; rice, 43; glutin 22; corn oil, 10; hides, 36 to the separating and United States.

January 17—7 amount of her States from her \$1; oats, 6c; 7c and 8c; 8c; H. C. H.

HASTED SIDNEY CHORSE the has been v week. The crop soon. Feed is having out line now to have lime for 313 \$9; straw, 84; on 24; corn, 80c; \$18 to \$25; butter, 3 80 to \$55; hogs, 40 to 45.

WELLING METS, Jan. 15 severe weather changeable weather. Buffalo, Fed by interest. great many auction prices. It is not a good light weight. Potato very heavy. Most eastern with wire.

WATERLOO ELMIRA, Jan. 14 at West Montrose copper on Friday had a rousing time almost above expectations and farmers' down to the New Year.

WATERLOO ELMIRA, Jan. 14 were at present, the as 23 degrees below zero makes this some farmers to be comfortable and will take more food to which makes it so people with a short crop. being expected as abundant supply of supply of good straw, some alfalfa abundance, with good for no kick coming.

WATERLOO ELMIRA, Jan. 14 Hay is selling for \$10 grain high turns; price, \$22; middling from \$150 to \$200; corn, 65c; oats, 45c; potatoes, 40c, 42c. Prices for high-landed corn come at last and king—8 H.

NORFOLK ERIE VIEW, Jan. variable, with cold order. Snow is piled

OUR FARMERS' CLUB

Correspondence Invited

ONTARIO

GRENVILLE CO. ONT.

MAYNARD, Jan. 17.—We have good shearing and farmers are busy with wood and ice. A few are fattening their cull cows and old ones and realizing good prices. Eggs, \$6.40; hogs, 40c to 45c; butter, 30c to 35c; chickens, 60c to 75c each; corn, 17c; bran, 82c; shorts, 82c; corn meal, \$20; gluten meal, \$25; gluten feed, \$22; corn cobs, \$25; beef, \$7 to \$8; hides, 9c to 10c. Our cheese factory is separating and sending the cream to the United States.—J. C.

LEEDS CO. ONT.

January 17.—There has been a large amount of hay shipped to the United States from here; the local price is \$12 to \$14 a ton. Straw sells at from \$8 to \$10; oats, 40c; potatoes, \$1.25 a bag; beef is 7c and 8c; butter, 28c; eggs, 45c.—C. H. C.

HASTINGS CO. ONT.

SIDNEY CHORRING, Jan. 15.—The weather has been very severe for the past week. The crops are well protected by snow. Feed is plentiful. Farmers are now to have time for their winter. Timothy hay sells for \$13 to \$15; clover hay, \$8 to \$9; straw, 5c; oats, 45c to 40c; barley, 60c to 65c; corn, 60c; peas, 81c; wheat, 90c to \$2; middlings, 92c; fresh eggs, 35c to 40c; butter, 30c to 35c; potatoes, \$1.50 to \$1.75; milk cows, \$40 to \$75; springers, \$40 to \$50; hogs, 86.25.—J. K.

COLLINGWOOD CO. ONT.

COLLINGWOOD, Jan. 15.—Our district representative, Mr. Jas. Laughland, is preparing to give us a short course in agriculture in the Collingwood Collegiate Institute from February 3 to March 5. Our district representative recognizes the need of special training for the profession of agriculture, and this course is provided for those of us who cannot get away from the farm to take a course elsewhere. We have Ontario Agricultural College. We have lots of snow and cold weather. Farmers are busy getting in their season's supply of wood.—L. B.

WELLINGTON CO. ONT.

METZ, Jan. 15.—We are having very severe weather. We have had very changeable weather up till now. Hogs buy. Feed is very scarce. There are very great many auction sales, but still the prices do not lower. Poultry is plentiful and is a good price. Chickens sold at live weight. Potatoes are very scarce and very high. Most of them are badly spotted with wire worms.—P. R.

WATERLOO CO. ONT.

ELMIRA, Jan. 15.—The Farmers' Club at West Montrose held its annual supper on Friday evening, Dec. 29, and had a rousing time. The attendance was almost above expectation; about 200 farmers and farmers' wives and children sat down to the heavily laden tables prepared by the good ladies. After supper a good program of speeches, recitations, songs and singing with music was given by a Chorus in the care for the young people. All went home in best spirits and were glad they were farmers. Our club has a good program for the coming season, with some new ideas for the summer which will greatly interest the young people. The readers as well as the members to Farm and Dairy readers as experiments terminate.—A. B. S.

WATERLOO CO. ONT.

ELMIRA, Jan. 15.—The weather is severe at present, the mercury going as low as 23 degrees below zero. The short food supply makes things a little lively for some farmers to keep the stable comfortable and will necessitate the stock taking more feed to keep up animal heat which makes it so much harder for people with a short supply of feed. Your eggs being especially blooded with an abundant supply of feed, hay, a good supply of good straw and chaff, a silo of corn, some alfalfa, hay and roots in abundance, with good stables, has therefore no kick coming; but in general feed hay is selling for high and hard to obtain. Grain high; turnips, 14c a bus.; mangolds, 15c; corn, \$2.22; middlings, 92c. Horses sell from \$150 to \$200; cows, fresh, \$40 to \$60; diet, 86 a cwt.; butter, 30c; eggs, 35c; potatoes, \$1.25. Prices such as these give returns for high priced feed. Winter has come at last and king winter is monarch.—S. H.

NORFOLK CO. ONT.

ERIE VIEW, Jan. 10.—The weather is variable, with cold winds on the blizzard order. Snow is piled in heaps. Hogs are

selling at \$5.00 a cwt. The municipal elections passed off very quietly; reeve and all candidates elected by acclamation. Since the defeat of the government and the loss of reciprocity, politics have cooled. Beef is selling at 6c and 7c. All stock is doing well. Dairy cows are giving a good quantity of milk for this season of the year. Eggs are 30c; butter, 24c.—R. B.

MIDDLESEX CO. ONT.

APPIN, Jan. 8.—An open month during December has had a favorable effect on the supply of feed, many cattle and horses having the run of pasture till New Year. I doubt the value of this grass, however, and the effect on next year's pasture of this practice. Coarse grains are very scarce. Farm is very high. Hay is short, and so feeding is reduced to the science of economy.

BRUCE CO. ONT.

WALKERTON, Jan. 9.—We have had an early winter. It started in November. During the month of December it was nearly a week, but since New Year's it has been rather cold. Last week we had 31c; chickens, 11c; geese, 12c to 13c; wheat, 80c; buckwheat, 60c to 70c; oats, 40c to 45c; barley, 70c to 75c; corn, 70c; hogs, 60c; herring, 51c; potatoes, 81c to 85c; bran, 83c; middling, 82c; hay, 81c. Farmers on an average have plenty of feed.

BRUCE CO. ONT.

CLUNY, Jan. 12.—The weather this past week has been the coldest yet this month. There are very few cattle compared with other years. Butcher cattle are scarce. A number of the farmers complain of their cows not being in calf this year. Hogs little considering the prices of coarse grain. The horse market is very quiet; severe weather has stopped the progress of the telephone line that is being built in Bruce township.—J. Mack.



Increases the Flow of Milk

Molasses Meal is a profitable feed for the dairyman to give his cows, on account of its great palatability, ease of digestion and health promoting qualities. It increases the flow of milk and improves the favor of both cheese and butter.

Caldwell's Molasses Meal

increases the feeding value of hay, oats and chop. It contains no spices or drugs. Over 60 per cent. pure cane molasses. Feed it regularly to your cows and they will yield you more profits. They will also be kept free from milk fever, flatulency, etc. Mail the coupon and we'll send you an interesting booklet and particulars about buying Molasses Meal direct from the mill at close prices.

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Can you afford to take these chances?

Read these clippings—all taken from the same paper—the result of an electrical storm.

LOSSES BY LIGHTNING.

BARNS BURNED IN DIFFERENT SECTIONS OF THE COUNTRY.

Farmer Loses Live Stock and Crops—Fleming Mill at Niagara Falls and Large Stock of Lumber Destroyed—Other Fires.

(Special Dispatch to The Globe.)
Lindsay, Sept. 15.—A more than ordinary electric storm, doing considerable damage, passed over this section this morning at about 1 o'clock in the rural districts. Several barns were destroyed by fire from lightning. Among others the following have been reported: The barn of Nicholas O'Connell, containing the season's crop, owned by Mrs. Eliza, total loss; the barns, crop and horses belonging to Wm. H. Skuce of Mount

The dwelling house and barns of Mr. Lamb of the township of Verulam are reported destroyed, but the structure here has been received. In the P. of Lindsay the storm

"EASTLAKE" METALLIC SHINGLES

will prevent such losses—they are LIGHTNING PROOF—an absolute protection for your crops and implements. "EASTLAKE" SHINGLES are the EASIEST to lay, and cost less than a wooden roof equipped with lightning rods. A Metallic Roof saves you money—it reduces your insurance rate and remains IN PERFECT CONDITION for a lifetime.



Another Barn Burned.
 St. Catharines, Sept. 15.—(Special Dispatch.)—Lightning struck and set fire to the house of John Harrison on a tower about a mile north of Vineland. The house was destroyed, and the electrical storm in this vicinity was very severe. The barn of J. Harrison was entirely destroyed, and some of the horses, including two valuable ones, were killed. The barn was used to store the implements of the farmer. Most of the buildings in the district had received considerable damage from lightning. The barn of J. Harrison, which had been insured for \$1,000, was destroyed, but the owner was insured for the loss of his stock and crops. The barn of J. Harrison was destroyed, and the owner was insured for the loss of his stock and crops. The barn of J. Harrison was destroyed, and the owner was insured for the loss of his stock and crops.

FREE BOOKLET

Our interesting free booklet "Eastlake Metallic Shingles" gives valuable roofing information. Write for it.

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SUNNYSIDE AYRSHIRES.

Imported and home bred, are of the choicest breeding of good type and have been selected for production...

Ayrshires and Yorkshires

FOR SALE—High class Ayrshires, all ages, including three bulls fit for service. Yorkshire pigs, all ages...

THE SPRINGBANK HERD OF AYRSHIRES

Contains world's Champion milk and butter producers than any other herd in America...

AYRSHIRES AND YORKSHIRES

WE have on hand several thirty young bulls of good type from R.O.P. cows. Also proved sires...

CHOICE AYRSHIRES

Are bred at "CHERRY BANK" A few young bull calves for sale. Write for prices.

CITY VIEW AYRSHIRES.

R. O. P. cows and two-year-old heifers for sale. One yearling bull and one yearling cow...

Burnside Ayrshires

Winners in the show ring and dairy tests. Animals of both sexes. Imported or Canadian bred, for sale.

Ayrshires

World's Champion herd for milk and production. Some young bulls and bull calves, all from R.O.P. cows...

RIVERVIEW HERD

Offers bull calves from 2 to 10 mos. old BRED BY KING BREEDERS WALKERS, whose 3 nearest dams and sinter average 20 lb. BUTTER IN 7 DAYS...

LAKESIDE AYRSHIRES

WE have a number of fine young bulls of different ages all sired by top imported bull and the majority of them from dams second or qualified for the second of performance...

LUMPK ROCK SALT FOR STOCK

50.00 PER TON F.O.B. TORONTO TORONTO SALT WORKS 128 Adelaide St. East G. J. OLIPH, Manager

MARKET REVIEW AND FORECAST

Toronto, Monday, January 22nd.—Trade is rapidly improving. Spring orders are coming in nicely. A good covering of snow on the coast over all Canada is largely accountable for improving conditions in the wholesale and retail trade.

Prices in almost all lines of agricultural produce have strengthened this past week. Coarse grains are particularly strong. The export demand for wheat is good, and on the cattle market the strongest prices for some time are reported.

WHEAT

Wheat is quoted to higher than last week, although the market is not now so bullish. The losses to the crop in the Argentine have been large, but latest statistics would indicate an exportable surplus over 3,000,000 bushels greater than the previous record. This factor, along with the record crop in the Canadian West, is making an amazing effect on the British market, and the advance has not been so large as in the previous week.

COARSE GRAINS

The coarse grain market has experienced another strong week. Barley shows a marked advance. Western Oats and corn are both stronger and trade has been brisk.

MILL STUFFS

Prices are steady at last week's quotations. Flour market is quiet. Shorts are higher. C.W. No. 2, 81¢; No. 3, 81¢. Manitoba feed wheat, 73¢ to 73.5¢.

HAY AND STRAW

The brisk demand for hay and straw continues at the high prices ruling lately. Wholesalers are paying for No. 1, 81¢ to 81.75¢; No. 2, 81¢ to 81.50¢; straw, 85¢ to 89¢ on track here. No. 1, 81¢ to 82¢; mixed hay, 81¢ to 81.75¢; straw, bundled, 81¢ to 81.8¢.

HIDES AND WOOL

The market for hides is steady at last week's decline. Prices paid by country merchants are: Hides, cured, 31.5¢ to 31.5¢; green, 31.5¢ to 32¢; lambs and pelts, 80¢ to 81¢; horse hides, 8.25¢; horse hair, 20¢ to 22¢; calf skins, 15¢ to 15¢. Cattle quotations are: No. 1, 11.50¢; No. 2, 11.50¢; No. 3, 11.50¢; mixed, 14¢ to 15¢.

POTATOES AND BEANS

We may soon have an additional market for our potatoes. There is a strong agitation in the United States to have the duty removed on potatoes coming into that country. Potatoes have reached an abnormally high price, which consumers are unwilling to pay for.

HONEY

Wholesale quotations remain unchanged. Strained cream is 10¢ to 11¢ in 60-lb. tins, 12¢ to 15¢ in 50-lb. tins; buckwheat honey, 6¢ to 7¢ in tins, 5.5¢ to 6.5¢.

FRUIT AND VEGETABLES

The local market for apples is steady. Quotations are: Greenings, No. 1 83.5¢ a barrel, No. 2 82.75¢; Baldwin, No. 1 83.75¢, No. 2 83¢; cooking varieties, 82.50 to 83.00.

EGGS AND POULTRY

The egg market is a little easier. Wholesale quotations remain the same, but retail prices are down 5¢ to 10¢. Good sleighing, which makes easy delivery, accounts in some measure for the drop in the retail price.

SEED GRAIN

If you can sell good clean oats, you will sell 25 lbs. or more, and 1 lb. sample. State quantity and we shall submit our best offer. f.o.b. your nearest station, and supply loads.

GLYDESDALE STALLION

Registered Canadian-bred Clydesdale Stallion, 4 years old. Nice field bred in color with white points. Sire, Mont-trave Matchless; dam, Queen of Roses. Apply.

W. J. COX

Box 735 PETERBOROUGH - ONT. Phone 1397.

Poland Chinas

One boar ready for service, also a number of young ones, all registered. A few young sows at low prices for quick sale.

REGINALD J. A. SMITH

FAIRFIELD PLAIN - - ONT.

PEERLESS-PERFECTON

Advertisement for Peerless-Perfecton wire fencing, including text: "Real Fence Service Guaranteed", "Peerless Wire Fences is built to give absolute safety and maximum protection..."

BREEDER'S DIRECTORY

Advertisement for Breeder's Directory, including text: "Cards under the head inserted at the rate of \$1.00 a line per year. No card accepted under two lines, nor for less than six months, or 3 insertions during twelve months."

Don't Out Out A HORSE BOIL, CAFFER OR ROCK OF BRUISES FOR ABSORBINE

Will remove them and leave no scars. Rubs out any sort of swelling. Does not blister or irritate the skin. For use on horses, dogs, cats, etc. Sold in 60¢ per bottle delivered. Block & Co.

SEED GRAIN

If you can sell good clean oats, you will sell 25 lbs. or more, and 1 lb. sample. State quantity and we shall submit our best offer. f.o.b. your nearest station, and supply loads.

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Registered Canadian-bred Clydesdale Stallion, 4 years old. Nice field bred in color with white points. Sire, Mont-trave Matchless; dam, Queen of Roses. Apply.

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own the Cl 2-year-old 61 days and 61.5 in old living 18.5 in 80.7 in 30 days. For sale for 100. Also females, all ing.

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Farming

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It's no longer a "hit-or-miss" occupation, where "any old way" is good enough. Farmers are buying pianos and automobiles as never before. They're *living* as well as *working*.

The farmer has learned that it *pays* to employ progressive methods. That's why he is ever ready to receive helpful suggestions for improving his crops, his land and his home. It's also the reason that more than fifty thousand Canadian farmers are enthusiastic about our handsome book,

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It isn't a catalogue, nor an argument for you to buy something. It is clearly-written, interesting, profusely illustrated. It describes the various uses to which concrete can be put on the farm. Not theories, but facts, based on the *actual experience* of farmers all over the continent. It is the most complete book on the subject ever published, fulfilling the

purpose behind it, which is to help the farmer take advantage of concrete's possibilities. The list of subjects covers every conceivable use for concrete on the farm. The book's actual value to you will far exceed the list price of fifty cents, but if you will send us your name and address at once we'll be glad to

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