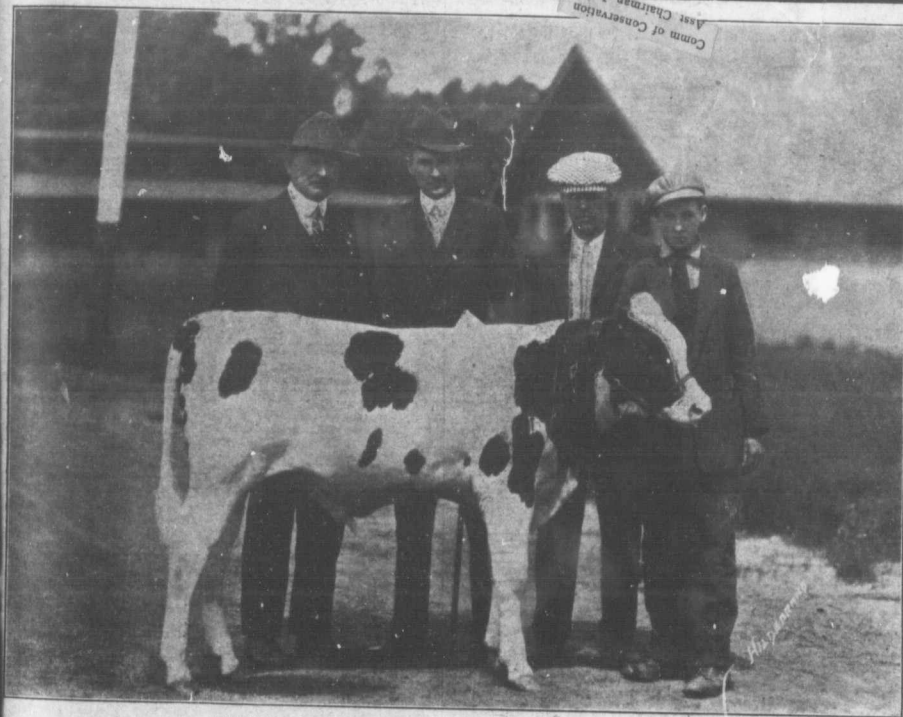


FARM AND DAIRY

RURAL HOME

BETTER
AND
COUNTRY LIFE

Toronto, Ont., June 20, 1918



THE \$105,000 CANADIAN BRED CALF, CHAMPION SYLVIA JOHANNA.

From left to right, E. A. Stewart, buyer, Carnation Stock Farm, Seattle, Washington; A. C. Hardy, seller, Brockville, Ont.; Hamilton Lynn, herdsman.

No Time to Quit Dairying

A Review of the Situation, by I. M. Ross (Page 3).

The Balanced Unbalanced Rations

New Factors in Animal Nutrition (Page 5).

Making a Poor Farm Productive

"Mac" Visits an Old Friend (Page 4).

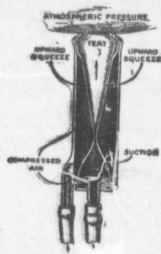
Fertilizer Requirements of Ontario Soils

A Soil Survey by Prof. R. Harcourt (Page 4).

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Compressed Air Operated "Upward Squeeze" which releases the teats and draws back the milk perfect health and comfort to the cow. Teats and udder are massaged and the milk flow. Patent ONLY in the Sharpley Mfg. Co.

Sharples "Upward Squeeze" is the correct milking method

A thousand different experiments were tried before Sharples developed what he believed to be the correct milking principle—the famous Sharples "Upward Squeeze" tent cup. And the success of the Sharples Milker has confirmed his belief! To-day over half a million cows are being milked twice daily with the

SHARPLES MILKER

"The Only Milker with Positive Squeeze"

Sharples is the only Milker that has a positive massaging action and upward squeeze—the result of a patented compressed air principle. This action carefully massages back to the udder the blood drawn down to the small test veins by the milking, thus keeping the teats in perfect condition.

Tests also have proved that the Sharples is the world's fastest milker. This has more than one advantage. Not only does it enable you to finish milking in one-half to three-quarters of the time required by other milkers, but fast milking actually increases the milk flow. Perry Empey, of Chesterville, Ont., found that his cows gave from one to five pounds more milk per day with the Sharples Milker than when milked by hand. He offers his milk sheet to prove it.

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SYDNEY BASIC SLAG The Ideal Fertilizer for Fall Wheat

Mr. R. P. Bhatta, R. R. No. 2, Weland, Ont., writes on 12th May, 1916:—

"In reply to your inquiry I put in about forty acres of wheat last fall and for experimental purposes, your goods being new to this district, I applied Sydney Basic Slag to one of my fields. To-day I measured the growing grain and found it stood on an average twenty-six inches in height. In all the years I have been farming I never had such a fine crop and I am perfectly certain it cannot be beaten in Western Ontario. I am now thoroughly satisfied that Basic Slag is the ideal fertilizer for fall wheat, and I will only be too pleased to show the crop to any one you care to send to inspect it. Some of my neighbors who used Basic Slag on their wheat are equally well satisfied and I believe that once our farmers in Ontario get a knowledge of your goods there will be a very large sale for them."

Sydney Basic Slag costs \$24 per ton at any station in Ontario and is the best value obtainable in fertilizers.

The CROSS FERTILIZER CO., Limited Sydney, Nova Scotia

The Great Holstein Sale at Milwaukee

Its Central Feature the \$106,000 Bull
From Men Who Were There—By "Mac."

HOLSTEIN breeders in particular and the live stock world in general received a severe jolt last week when the press despatches came in, telling of the buying in the commingled sale at Milwaukee of a Holstein bull calf seven months old for the hitherto unheard of price of \$106,000. Naturally the question arises, what really is the value of such animals? What other high priced animals were there; what particular merit was there in this calf to warrant such a price; what about the seller and why did this unknown breeder who pays such a price for a single animal?

The Sale.

It was generally realized that some high prices would be paid. It was a sale of real quality stock, but it was a question if many Canadian breeders were really aware that this bull calf was even consigned in the sale, to say nothing that he would bring over \$100,000. It is probable that previous to the sale a great interest was shown and more conjecture was indulged in regarding Mr. W. L. Shaw's world record holder. This animal Hot Loo Floriole was sold the same day for \$15,000.

The Calf and His Breeding.

But what is there about the breeding of this bull calf to warrant a price of over \$100,000? To begin with it is an Inbred May Echo Sylvia. Canadians have claimed and Americans have admitted ever since May Echo Sylvia made her phenomenal record of over 1,000 lbs. of milk in a week, and over 40 lbs. better in a week, that she was "the greatest dairy cow of all history." Her records are not from records. They have been made during years of continuous work. However, it is dollars which count in this business, and the real value of any cow lies in the price which breeders are willing to pay for her bull calves. The incident in question has proved our suppositions to be correct. May Echo Sylvia is the most valuable cow in the world to-day and the calf just sold is the most valuable bull.

Yes, his sire is May Echo Sylvia. His sire is King Echo Sylvia Johanna, the junior sire at Quentin McAdams Brothers' Farms, Uxida, N. B., whose dam is Belle Model Johanna 2nd, a twice 37-lb. cow and the only cow of the breed having three records all above 32 lbs., besides having a daughter with three records above 32 lbs. His sire's sire is Avan Pontiac Echo, the oldest son of May Echo Sylvia and bred by that noted bull King Pontiac Artis Canada. This, then, is his breeding, and as the photo on our front cover shows, he is individually all that could be desired.

The Seller.

Mr. A. C. Hardy needs no introduction to Canadian breeders. At his farm near Brockville, under the able management of Mr. L. N., some of the best records of the breed have been made. Here Lady Waldorf Pletje made her 36 lb. four-year-old record and her daughter, Lady Waldorf Pletje 2nd made her two-year-old record of 36 lbs., besides numerous others.

How the Calf Sold.

Whenever any sale somewhat out of the average is made, it is always those who are "in" who get the "take," and no doubt this was no exception to the rule. Knowing this, breeders who had so many people, Mr. Hardy was naturally attending to the photo well's sale at Oshawa last week, making a public statement on the matter. He said that so far as he was concerned when he put the calf into the sale ring, he put him up at the mercy of the public, and he absolutely did not know who the

would be, or who the likely bidder would be and that while he was being sold, many of the men who were doing the bidding as well as the buyer were strangers to him. It was also stated that if anyone could prove that this had not been a genuine, above board sale he was willing to forfeit \$25,000.

Later on in the day while waiting at the sale at Oshawa for the Montreal train, the writer got in conversation with Mr. Hardy. Mr. Hardy said that the whole thing was a great surprise to him as it was so unexpected.

The first bid was somewhere less than \$5,000. Bids came slowly up to \$10,000, "John Ardman's bid" here he hung for quite a while, no effort on the part of the auctioneer seeming sufficient to give him another bid. Someone said, "Well John, I guess it's your's." This seemed to break the spell and the most immediate someone made an extra \$5,000 bid. Then he started an \$5,000 and \$10,000 steps and he got up just the mark set last year by Mr. Cabana's \$25,000 bid. Mr. Hardy said that there were several men bidding. Some of them he knew, but others were strangers to him. After this point, the bids came more slowly. Several of the bidders dropped out until it was left to just the two men, Mr. Stewart of the Canadian Milk Company and the other man, who, if Mr. Hardy informed the writer of his name, I have forgotten. At several times, the latter contended was about to drop out. When the price was about \$80,000 he would have done so, but one of the prominent American breeders came up to him and offered him \$100,000 each in service fee for several of his cows. This gave him courage and each time that he seemed to be getting "weak in the knees," a few more of the breeders came up to him and by making the same offer. By the time the bids were nearing the six figure mark he had \$15,000 already promised in the way. Finally Mr. Stewart bid the even \$100,000 and he was one who gave permission that the company was induced to make the next bid of \$5,000. However, he did so, but when it was immediately covered by an extra \$15,000, he decided to drop out leaving Mr. Stewart in possession of the bull.

The Buyer.

Mr. Stewart is manager of the Canadian Milk Company of Seattle. While this is their first really sensational buy, they have been in the Holstein business for some time. They have several large herds in the state of Washington and should be in a position to satisfactorily handle a bid of this sort. With 600 cows on a farm besides their several other farms, the income from the offspring of such an animal is almost beyond the average breeder's comprehension. When we consider this fact and the general publicity and attention which will come to the man who paid such a price, it is easy to understand how such a price is probable. In fact, it is commonly said that by paying a breeder has the right kind of females, the higher price is put for his herd and that the profit is in it.

It is certain that Mr. Hardy's sale was a success. It is a fact that it was the only sale which they had ever achieved in any other way. It is a fact that breeders in general, as well as the public, are uniformly with Mr. Stewart's action in this concern and it is a fact that Mr. Hardy did not know the conditions on the premises which he has achieved, a promise which will be shared to a large extent by his fellow Holstein breeders.



W's Volume Proves Trade increases the wealth of the nation

VOL. XXXVII

Europe is usually quite hard to get good for him when his first direction. In the same way, nothing in the world to lead an healing for ultimate, rather

This is how it is with the sale at the present time. It is kicking and, naturally, it is not gaining is a pity for its own sake, as of the consumer. In plain English, the dairy to miss the best opportunity. He is being penny-wise and p the brake on an industry w Canada's greatest asset for the that he is not looking beyond dering around in a circle a problems in the spotlight of vantage. It does not take realize that the dairymen a now is going to help himself war time personal relations n the national cause.

The dairy farmer has taken consuming public has got to He raised the price of people jumped on him—very had a whole lot of problems to wife knew nothing about. If a wife have been so ready to blame remember—that since the beg price of cows has gone up 50 cent, and labor 75 per cent, butter has advanced abo cheese 50 per cent.

Price Went—Consumption As the price went up, consumption of the dairy farmer at the time of his life securing he cost of labor on a dairy farm \$30 a month. Now it is anywhere and hard to get at that. Ene dairy farmer has to be a

He has not seen his way ver been kicking so hard that he chance to progress. He sees a the dairy industry and feels the as the part of the consumer, clear as in 1914; if the Atlan danger; if there were as much able now as before the war—al and hard to get at that. Ene dairy farmer has to be a

And why? Because Europe to-day, in her at her breeding animals. This is that all nature rebels against. I he exacts her toll for each want then it has to be, when there elmsing for meat.

Great Britain's Market Not only that, in the past E much of her butter from market off for various reasons—R way and Sweden, for instance, from foreign countries have far e own possessions. As a nat es her colonies for dairy produc es she will lean most on C This is one salient point for to remember when it is facin

DAIRY AND DAIRYMAN

& RURAL HOME

The Recognized Exponent of Dairying in Canada

We Welcome Practical Progressive Ideas.

Trade increases the wealth and glory of a country; but its real strength and stamina are to be looked for among the cultivators of the land.—Lord Chatham

VOL. XXXVII

TORONTO, ONT., JUNE 20, 1918

No. 25

Its No Time To Quit Dairying

Europe is Slaughtering Milch Cows for Meat and Future for Canadian Dairymen Looms Gigantic

It is usually quite hard to convince a man what is good for him when his face is set in the other direction. In the same way, it is not the easiest thing in the world to lead an industry along the road leading for ultimate, rather than immediate advantage.

This is how it is with the dairy industry in Canada at the present time. It has a grouch on—so end of a grouch. It is kicking every inch of the way, and, naturally, is not gaining much momentum. This is a pity for its own sake, as well as for the sake of the consumer.

In plain English, the dairy farmer is bidding fair to miss the best opportunity ever presented to him. He is being penny-wise and pound-foolish by putting the brake on an industry which should be one of Canada's greatest after the war. The trouble is that he is not looking beyond to-day. He is meandering around in a circle and failing to see his problems in the spotlight of national economic advantage. It does not take much perspicacity to realize that the dairymen who helps his country now is going to help himself in the future, and in war time personal relations must be subservient to the national cause.

The dairy farmer has taken cold feet and the consuming public has got to help him warm them up. He raised the price of milk and immediately people jumped on him—very unreasonably, too. He had a whole lot of problems to meet that Mrs. Housewife knew nothing about. If she had she would not have been so ready to blame him. There is this to remember—that since the beginning of the war the price of cows has gone up 50 per cent., feeds 75 per cent., and labor 75 per cent. During this period the increase in the price of milk has been under 30 per cent.; butter has advanced about 40 per cent. and cheese 50 per cent.

Price Up—Consumption Down.
As the price went up, consumption went down. The dairy farmer was discouraged. He was having the time of his life securing labor. Two years ago the cost of labor on a dairy farm ranged from \$25 to \$30 a month. Now it is anywhere from \$37 to \$60 and hard to get at that. And for some time the dairy farmer has been asking himself: Is it worth it?

He has not seen his way very clearly and he has been kicking so hard that he has not had much chance to progress. He sees a cloud hanging over the dairy industry and feels the lack of appreciation as the part of the consumer. If the sky were as clear as in 1914; if the Atlantic were as free of danger; if there were as much shipping space available; if before the war—all would be well. He would go ahead. As it is, he can only see the difficulties of export and feel the lack of response on the part of the public. What he is discounting altogether is the fact that after the war the dairy industry of Canada may be fairly expected to assume gigantic proportions.

And why?
Because Europe to-day, in her dire need, is killing off her breeding animals. This is the kind of thing that all nature rebels against. In the final analysis, she exacts her toll for such wanton destruction—but that it has to be, when there are starving people clamoring for meat.

Great Britain's Markets for Us.
Not only that. In the past Britain has imported much of her butter from markets which are now cut off for various reasons—Russia, Denmark, Norway and Sweden, for instance. Her dairy imports from foreign countries have far exceeded those from her own possessions. In future she will lean more on her colonies for dairy products. And of all her colonies she will lean most on Canada!

This is one salient point for the dairy farmer to remember when he is facing odds. Britain's

By I. M. ROSS, Canada Food Board.

shortage of butter, due to the war, is 300,48,784 pounds. Of this vast amount Canada sold only 7,123,568 pounds to the Motherland last year. The disproportion is striking.

It is true that there are more milch cows in Canada to-day than there were in 1914, but the numbers are relatively small when we compare them with the figures for such distinctive countries as Denmark and, indeed, England itself. In 1914 there were 2,673,286 milch cows in Canada; to-day there are approximately 3,500,000.

Canada has only about one-seventh the number of cows of the United States. She has fewer than Great Britain and Ireland; fewer than France and more than Denmark. The French cow population has fallen off by 21 per cent. as a result of the war. The British cow population is still normal.

Our Exports Increasing.

Why doesn't Canada increase the size of the milch



Canada First in Food Production Per Capita

Dr. C. A. Zavit, C.A.C. Guelph, Ont.

FOR the three years previous to the war, viz.: 1911, 1912 and 1913, the average crop acreages of the most important agricultural staples of the world, excluding China, for which statistics are not available, are given in the following order: United States, Rumania, India, Germany, Austria-Hungary, Argentina, France, Italy and Canada.

These countries which had the greatest crop acreages per capita were: Argentina, Canada, the United States, the Russian Empire and France.

Based largely on Danish experiments, and on estimates made in the United States Department of Agriculture, the following give the relative percentages of food stuffs produced from farm crops of the most of population, in the leading agricultural countries of the world:

Countries.	Per Cent. per Capita of Food Materials from Farms Crops.
Canada	80
Argentina	60
United States	45
Australia	35
Germany	30
Austria-Hungary	25
France	23
Russian Empire	24
Italy	14
Great Britain and Ireland	11

It will be seen that Canada produces, per capita, more food materials obtained from farms than any of the other principal countries of the world. Her domestic consumption is low. This enables her to export a relatively large production of the essential food materials produced in the country.

The Canadian farmers form one of the greatest food sources of the present time. Every effort should be made to produce and then to export the maximum possible amount of meat, milk and strongest possible agricultural products.—[Editor.] Canada's farms of their skilled labor.—Editor.]

cow herds? It is a certainty that this European shortage will create an overwhelming demand not only for dairy products, but also for cattle. Something has to be done to replace the 28,000,000 head that Europe has been obliged to send to the shambles. It is gradually strengthening where dairy products are concerned. The following table of exports goes to prove this:—

	1913.	1917.
Cheese	155,216,000 lbs.	180,733,426 lbs.
Butter	828,423 "	7,390,960 "
Condensed milk ...	338,845 "	15,858,096 "

Hon. T. A. Crerar, Minister of Agriculture, sees great possibilities for Quebec and Ontario capturing while the Maritime Provinces, Norway and Denmark; the markets of the old land, should be able to command an ever increasing trade with the Eastern States in butter and cheese, he believes.

The three million odd milch cows that are scattered over the country at the present time represent more than the milk supply. The butter-making, cheese-making, condensed milk and ice-cream factories depend on them. So that there are more forces at work where the dairy farmer is concerned than the average man or woman suspects when they are raising an outcry about the price of milk.

The Consumer's Side of It.

In fact the consumer has himself to thank in large measure for the retrograde movement which is apparent in the dairy business. He has not been using enough milk. In the same breath the Canada Food Board says to the dairy farmer: "Go ahead full age the milch cows!" and to the public: "Use more milk. Encourage the dairymen!"

Remember this! Milk and all its products are the cheapest forms of animal food on the market to-day. The price of milk has not increased to the same extent as the prices of other foods.

Skimmed milk should figure more prominently in every woman's list of substitutes. It is good fare. It stimulates growth and is wholesome at all times. Let the woman demand it, the farmer will supply it soon take his cue!

It is estimated by the Department of Agriculture that the daily consumption of milk by the population of Canada is one-half pint per day per capita. The more skimmed milk used in Canada the more cream there will be to make into butter and cheese. Milk can only be sent overseas in restricted quantities, condensed or powdered. But butter and cheese are used in immense quantities. The Canadian soldier gets an ounce of cheese a day in his rations, 1 ounce of milk powder and 2 ounces of butter. Besides this, the civilian population of Europe is in dire need of the fats which we are not producing in them as freely as we might.

There need be no skepticism about the foreign market for dairy products. It is a reality. And it stretches into the future with infinite possibilities.

Anyone who is expecting to raise a number of hogs during the coming season, should try to get some seed of an early maturing corn, such as Quebec Yellow, for use in the finishing period next fall. With the price of grain as high as it is, hogs may be pastured during the summer. The hogs come off the pasture, and might probably be "hogged down" as they do in the corn belt of the United States. It would help to sow rape between the rows of corn at the last cultivation. In this way a large number of hogs might be finished on a small acreage without much labor.—G. R. Rothwell, C.E.P., Ottawa.

The Fertilizer Requirements of Ontario Soils

Sidelights on the Soil Survey Now Being Conducted by Prof. Harcourt

IN the past three years, all unknown to the most of us, the soil of Western Ontario have been carefully analyzed and classified by soil experts, working under the direction of Prof. R. Harcourt of the Ontario Agricultural College, Guelph. The initial survey work in the western counties has now been completed. The soils to be broadly classified as to their physical composition and the samples taken by borings on every sideroad and by-road west of Toronto are now being subjected to a chemical analysis. Similar work will be started in Eastern Ontario in summer. When this work is finally completed our knowledge of Ontario soils and their fertilizer requirements will have been increased immensely. A couple of weeks ago Prof. Harcourt gave the editors of Ontario's agricultural publications an outline of the work accomplished and a glimpse of some of the more important conclusions arrived at.

Broadly, the soils of Western Ontario may be divided into two general classes: (1) The lowland or deposit soils, once on a lake bottom; these for the most part are heavy clays. (2) The upland soils on the other hand are glacial deposits and are generally gravelly and loamy, and it is these upland soils that the problems of fertility are of most moment. These requirements, Prof. Harcourt classifies under three heads—organic matter, lime and phosphorus. "Organic matter," said he, "is at the basis of all fertility problems. Organic matter is the mainstay of the soil, holds water and provides the agencies by which plant food is made available." Organic matter is generally found in sufficient quantity in the heavy clays when at all intelligently farmed, but in the upland soils the organic matter is one of the big problems of soil management.

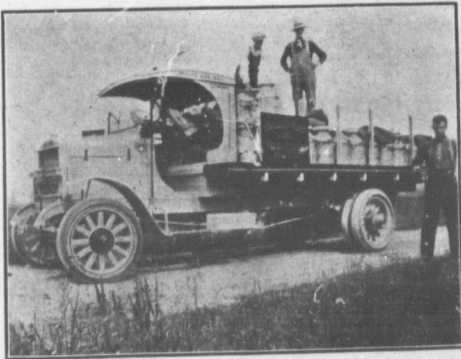
Lime Needed in Ontario.

Few realize how generally lime is required in the soils of Ontario. In the borings made by Prof. Harcourt's assistants it was found that, on the average, lime was not found in sufficient quantities until a depth of 24 to 28 inches had been reached. Where lime was originally present in large quantities, for instance in soils of limestone formation, there may not now be sufficient lime in the surface soil to properly nourish a crop. The organic acids formed in the soil bring the lime into solution and in a soluble form it leaches down into the subsoil. This will happen in the richest soils and the better a farm farms and the more organic matter he incorporates in his soil, the stronger will be the acid soil conditions and the greater the liability to lime leaching out. In the long run, therefore, the men whose farms will need lime applications most are those who farm the best. Prof. Harcourt mentioned it as a common observation over Ontario that clovers which first needed lime make an abundant supply of growth, but once they had gotten their roots down into the subsoil would grow luxuriously. "This is because the roots have reached a supply of lime," said Prof. Harcourt. "I am convinced that in many cases the winter killing of clover in Ontario is due to nothing else than an acid soil."

"How much can one afford to pay for ground limestone?" was asked.

"Just as much as the farm would be worth without it," replied Prof. Harcourt. "and that might not be much. If a soil is allowed to become depleted of lime it is done for so far as crop production is concerned." Even in the lowland clay soils the need of lime is often great. In what Prof. Harcourt called the Haldimand clay, there is an abundant supply of lime, while the "Milton" clay is deficient in lime. It was mentioned at this point that alfalfa thrives on the Haldimand clay, but its growth is rather doubtful on the Milton clay. The lime content of the two soils explains the difference and the survey which Prof. Harcourt is just completing will show in a general way just where in Western Ontario lime applications will be profitable and where they are not needed. One experiment in particular was mentioned. On an application of ground limestone doubled the yield of potatoes, both plots being fertilized equally with manure.

Under average conditions an application of two tons of ground limestone to the acre will rectify any lack of lime in the soil. Where is this limestone to come from? Several companies in Ontario are now grinding limestone. A Buffalo concern has been making enquiries as to an Ontario market, and it is just possible that they will supply lime more cheaply than any of the concerns now offering their products on the market. A still more promising



A Connecting Link between Producers and Consumers.

"This shows the up-to-date way in which our milk hauler delivered our milk last summer," writes Wm. Scoble, of Westwold Co., Ont., in sending this illustration to Farm and Dairy. The motor truck is coming into common use in collecting milk for city consumption.

source of supply is the cement companies, and just recently a representative of the Canada Cement Company called on Prof. Harcourt to discuss the feasibility of making ground limestone one of their products. These companies own limestone deposits and they have all the facilities on hand for grinding limestone on a very extensive scale.

Making a Poor Farm Productive

"Mac" Visits an Old Friend and Learns a Few Things

HOW often we entertain misconceptions as to the operations of our own neighbors! They are men whom we have known for some time and whom we unconsciously think of as "business farmers." We know that they sell from their farms a tremendous quantity of produce. They are generally considered "big" farmers, and yet their work may not be more than one hundred acres or even less. We wonder what is the secret of their success, and usually find that dairy cows, covered ditches, and general careful farming have played a large part in working out the success that has been achieved.

Such a farmer as this is Wm. Campbell, who lives three miles north-west of the village of Maxville, in Glengarry County. I had lived within a couple of miles of his farm for eight years. I had driven past his gate dozens of times and had seen his team passing into town morning after morning with the wagon well loaded with milk cans, and had, without taking the trouble to enquire, gathered the idea that he was one of the more extensive farmers of the district.

It was not till recently, when in the neighborhood, and I called on Mr. Campbell, that I found out my mistake. As we walked through the big barn and looked at the rows of heavy producing grade Holsteins, 25 milkers, besides young stock, the stable full of farm horses, and the flock of sheep, I saw everything to confirm my former opinion as to the size of his farm. When I casually asked him how much land he owned and he informed me that he had, as he told, 125 acres, but that quite a bit of it was occupied by bush and non-productive pasture, I was more than surprised. The most natural question for me then to ask was, "How much feed do you buy?" His reply was "Nothing but a few tons of concentrates."

Then Mr. Campbell grew reminiscent and said, "This farm wasn't always as productive as it is now. When I came here 15 years ago there were two frog ponds which drained across what is now a fine

level flat, and kept the whole thing just one grade higher. The drier ground had been cropped with grass for years till it simply wouldn't grow anything."

Mr. Campbell was thus up against two problems, that of draining these wet lands, and of restoring the fertility of the soil. He saw that to restore the latter he must have stock—preferably dairy cattle, and that to produce feed for those cattle while the poor soil was being improved, he must bring his bog land into production. To do this he completed a ditch that he had dug in the open ditch run down the centre of the flat to a satisfactory outlet. He connected the frog ponds by means of a covered ditch, which drained into the open one. He also put covered ditches in the other open spots, which formerly were so sour that they would not grow anything but "horse tails." Regarding the change that during the intervening time had been wrought said, "When I took my first crop off that eighteen-acre field, I got two loads. Last year I took eight loads off two acres of it."

Farm Equipment.

In equipping his farm Mr. Campbell has not gone to any unnecessary extent. He says that he has preferred to invest his spare cash in improving the land. However, soon after taking over the farm, he was obliged to build a barn. This still stands, a large structure which is both comfortable and fire-resistant. To be sure, he built a concrete silo and a cement block milk house, and at the time of my visit had just erected a new iron frame machine shed. The latest addition to the farm equipment was a new milking machine. It did not cost him much, but he said that it had been put up a few days before he bought the machine he had no intention whatever of doing so.

He had always had sufficient help for milking and had got along alright. However, when he got his milk were put ahead of him, he had to get his milk

(Continued on page 13.)

New

THESE experiments for show the limitations of a balanced ration and the very great importance of sides protein and energy in diet. It was, indeed, surprising to find that the common wheat kernel, though low toxicity, and that the ter is of such great importance to keep in mind that, while the milk standpoint it is important by conforming in feeding the lowest requirements of it is also important to remember well to have sufficient excess necessary constituents in order a safe margin for the animal. tion of the amounts of two constituents to the border line between two different rations. a serious matter, but when he ed in one ration the effects tious. Similarly, as brought animals fed with wheat grain of toxicity may or may not be the animals, depending on the character of the other congnation. The necessity of col factors as toxicity, suitable promoting substances or vit proper balance of salts, and problem of nutrition really is



The Effect of Ad. A cow and her calf showing the use alfalfa hay. With half the ration period was sufficient, the cow was apparently healthy and vigorous.

is that the relative importance of dairy exposed in order that various feeds in their proper

A word about vitamins. I identified chemical substances absolutely necessary for growth. Without them no growth will be near to be abundant in milk and leafy portion of plants. One class is abundant in seeds, while another is fat—this apparently not so abundant very little about either class that both kinds must be produced that a ration is to be complete. Of these ration are not to be attributed of the fat soluble vitamins

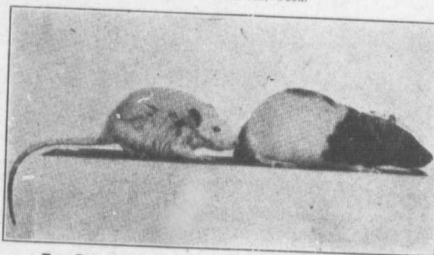
buttermilk, which contains it in improve it for reproduction. In the mines—the water soluble type—used by the wheat grain. A number of years ago chemists animals to grow on rations which contained of carefully purified protein salts and salt mixtures from the of these salt mixtures must contain alfalfa hay when the body of the and include potassium, sodium, phosphorus salts of sulphur, and phosphoric acids. When such rations milk not only do not grow, but are great length of time, ordinary months. The essential thing to these experiments is that the Dairy purified.

When a Balanced Ration is Not Balanced

New Facts in Feeding for Growth and Reproduction That Upset Some Old Theories

(Continued from last week.)

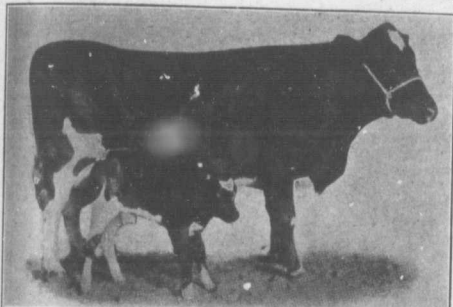
THESE experiments for the first time show the limitations of the theory of a balanced ration and indicate the very great importance of other factors besides protein and energy in the successful diet. It was, indeed, surprising to find that the common wheat kernel had a definite though low toxicity, and that mineral matter is of such great importance. It is well to keep in mind that, while from the economic standpoint it is important to prevent waste by conforming in feeding practice to the lowest requirements of our standards, it is also important to remember that it is well to have sufficient excess of the various necessary constituents in order to provide a safe margin for the animal. The restriction of the amounts of two indispensable constituents to the border line of deficiency between two different rations may not be a serious matter, but when both are restricted in one ration the effects may be disastrous. Similarly, as brought out with the animals fed with wheat grain, the presence of toxicity may or may not be shown by the animals, depending entirely upon the character of the other constituents of the ration. The necessity of considering such factors as toxicity, suitable proteins, growth-promoting substances or vitamins, and a proper balance of salts, indicates how complex the problem of nutrition really is and how necessary it



Two Rats of the Same Age. Food Made the Difference.

The rat on the right received a small amount of butter fat; the one on the left received an equal quantity of vegetable oil similar to the oils from which oleomargarine is made. Otherwise their rations were the same. The second ration lacks "vitamins." Those vitamins, which are necessary in both animal and human rations, are also found in the yolks of eggs and in the leaves of plants, are also found in the yolks of eggs. The illustration explains why the universal substitution of oleomargarine for butter would be disastrous to the human race. It also throws light on the newest problem of animal nutrition.

If we take such a mixture of foodstuffs which do not allow an animal to



The Effect of Adding Alfalfa to a Wheat Ration.

A cow and her calf showing the effect of a ration of wheat grain, wheat straw, and alfalfa hay. With half the roughage as alfalfa hay, reproduction in the first season period was successful. The calf was normal and strong and the cow was apparently healthy and vigorous. This illustrates the great influence of a good roughage.

is that the relative importance of the factors be clearly exposed in order that we may place the various feeds in their proper category.

Vitamins. These are as yet unidentified chemical substances in foods, which are without them no growth will take place. They appear to be abundant in milk and eggs and in the leafy portion of plants. One class—soluble in water—is abundant in seeds, while another class—soluble in fat—is apparently not so abundant in seeds. We know very little about either class, but we know that both kinds must be present in ample quantity if a ration is to be complete. Our results with the wheat ration are not to be attributed to a low supply of the fat soluble vitamins since the addition of butterfat, which contains it in abundance, did not improve it for reproduction. The other class of vitamins—the water soluble type—was abundantly supplied by the wheat grain.

A number of years ago chemists tried to get young animals to grow on rations which were made up of mixtures of carefully purified proteins, carbohydrates, and salt mixtures from the chemical laboratory. These salt mixtures must contain all salts which are left as ash when the body of the animal is burned, and include potassium, sodium, calcium and the magnesium salts of sulphuric, phosphoric, and hydrochloric acids. When such rations are fed, the animals not only do not grow, but they will not live any great length of time, ordinarily not over two months. The essential thing to remember about these experiments is that the foods used were

necessary for growth while other fats do not contain such substances, there has arisen the necessity of speaking of the presence or absence of fat soluble vitamins. These vitamins are closely, though not exclusively, associated with fats, as seeds to a certain extent and the leafy portion of plants to a considerable extent also contain these substances. Alfalfa leaves are a very good source of these unknown constituents, although there is every reason to suppose that the storage portion of plants in general is a better source of this class of vitamins than the grains.

Another Class of Vitamins. Besides the fat soluble type of vitamins we have still another class to consider. Suppose that to our unsatisfactory ration of proteins, carbohydrates and salts there is added the egg yolk fat or butterfat; we will find that the ration will still be unsatisfactory. If now we make a water extract of the egg yolk from which the fat has been previously removed and add this

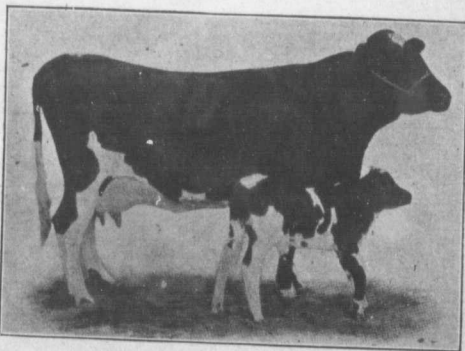
to our ration prompt resumption of growth will occur. It was not, then, the addition of fats alone, or substances carried by them that caused resumption of growth when untreated egg yolk was added, but it was the addition of fat soluble vitamins and water soluble vitamins. Both are indispensable for growth. Like the fat soluble vitamins, the water soluble vitamins can be obtained from various sources. They are found in abundance in eggs, milk, grains and in the leafy portion of plants, from which they can be readily extracted with water. They are not present in starch, sugars and fats and are found only to a very limited extent in polished rice.

The fact that the leafy portion of plants appears to carry a bountiful supply of both classes of these indispensable vitamins adds another good reason for the use of good roughages in feeding our stock. It is just those roughages with plenty of leafy material remaining, such as clover hay, alfalfa hay, and corn fodder, that are the most valuable. Those with practically no leaves and only the stems, as in the case of the straws, constitute the poorer class of roughages.

While the experiments outlined above show that our knowledge of feeds is incomplete and that there is much to learn about balanced rations, yet the farmer would gain nothing by discarding his present methods of balancing rations and would indeed lose much by so doing. Energy and proteins are the nucleus of good ration construction and calculating their proper proportion as prescribed in the standards should be continued. It will be in the majority of cases bring success. What we learn in addition in the future about the balancing of salts in a ration, about the supply of vitamins and their preservation in the handling of our farm crops, about the inequality of the nutritive value of the proteins, about the content of toxic materials, and about the central nucleus of ration construction is sound and such results as given here should only whet our appetite for more knowledge and should not in the least shatter our faith in what we already possess.

Eventually the balanced ration will mean the complete ration, but that only when more knowledge is available; and the complete ration which we hit most of the time now (but when we miss it are at a loss to know the reason thereof) will include more than protein and energy; it will include both of these, and in addition it will mean a proper mineral content, an absence of poisonous materials, an adequate supply of vitamins, and possibly things yet to be discovered. Our understanding of nutrition must expand. Under conditions of forced restriction it is danger zone, as in the case of the Nebraska farmers, and only when we have complete understanding of all the nutritional factors required by animals and

(Continued on page 13.)



The Effect of the Wheat Ration Fed Continuously.

The same cow shown, showing the effects from the continuous feeding for the second season period of a ration of wheat grain, wheat straw, and alfalfa hay. This calf was carried to the full time, but was weak, and at first was fed from the bottle. It grew strong, but the fore legs were so weak that it stood for the first few days of its life on the first joints. This calf was blind. The mother, however, remained in an apparently good condition.

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Poultry Pointers

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It is taking a big risk to continually change the bill of fare. Too many cannot let well enough alone.

Thanks to the Pure Food Commission, the time has arrived in the United States when cold storage and preserved eggs can no longer be paraded under a different guise. They must be labelled just what they are. This move not only protects the customer, but it gives the buyer a chance to sell his fresh-laid eggs at a price that will give him his just dues.

Geese thrive on the same food as that given other poultry. Grass is their natural diet during the winter when grass is a scarce article, they do wonderfully well on a mash in which bran and meat scrap are well represented, with whole grain—corn, wheat and oats—at night. A pair of geese will produce an average of a dozen goslings each year and these find ready sale around the holidays.

The changeable, and at times hard winters we have been having, is a severe blow to the health of fowls. It is easy for them to catch cold, and the wide-awake poulterer is kept continually on the watch. But the cry of ruin is not heard so much now as formerly, and this is due, we firmly believe, to the poultryman grasping the fact that the more we keep our poultry in fresh air conditions, the harder they will become.

It is claimed that the Commission merchants of New York City handle 1,274,000,000 eggs every year. This makes New York the greatest egg-consuming city in the United States. One commission merchant who had an idle hour, got down to figuring. He learned that the hens of the United States lay about 15,523,948,195 eggs every year, and the egg measures about two inches in length. If all the eggs laid were placed end to end, the line would extend 4,923 miles—a line four times the distance from New York City to Jacksonville, Florida; or it would go away out to San Francisco and start back to New York again.

No one can foretell the sex of chicks while still in the egg. But it is known that eggs collected in the early part of the season will predominate in males; also, when a cock had only a very limited number of hens cock in spring is in his full vigor, but becomes less vigorous as the season advances. If the male parent is old and the females young more hens than cocks will be laid; the contrary in time if the cock is young and the hens old. As to the shape of the eggs it varies according to the age of the layers; thus, the eggs of pullets are smaller and more pointed than those of old hens. Loose and pointed eggs do not give any more males than round ones. Some say that the egg produces a cock if its crown or air space is horizontal, a hen if it is perpendicular to its standing. In our experience we have not found such results.—M. K. B.

Dried Eggs in England

THE high cost of eggs in England has led to the birth of quite a new big business in dried eggs and eggs in solution. One large firm selling dried eggs undertakes an extensive advertising campaign to push these eggs upon the attention of

retailers, who in their turn are being enabled by other advertising matter to attract their customers to the goods.

The dried eggs which they advertise are entirely soluble and take up the water like a lump of sugar and thus give the perfect creamy liquid of a beaten whole egg ready for instant use on mixing. Dried eggs are no longer to be regarded as raw food; they have come to stay. This firm predicts that in the near future the properly dried eggs will become one of the very largest used and most important of our foods.

Turkeys and Their Management

TURKEYS require a wide range as they do not endure confinement, being as yet rather wild in their habits, preferring to seek their feed in the fields than to stand around the farmhouse. Where they can have the run of a farm they require but little feed after they are a few weeks old until it is time to fit them for market.

They should be fed a little grain each evening to keep them in the habit of coming home to eat, but this is not always effective, as they will not come home very regularly at the season when grasshoppers or other natural feed is abundant.

After the young turkeys, which are called "poults," are hatched, they should be kept for several days in a coop to which is attached a small run. This should be set on dry ground, and the sloping part should have a board floor. Move the coop and run frequently, so the little poults can get at fresh grass. Protect them from dunneps and the direct rays of the sun if the weather is at all warm, as they cannot endure direct sunshine when very young.

The poults may be fed bread which has been soaked in sweet milk and pressed as dry as possible by squeezing in the hand. A little fine grit and finely cracked oats, wheat and corn make good foods for them. They like young onion tops cut fine, and these are good for them. Give them plenty of pure water at all times. Good sweet beef scrum in small quantities are also advantageous. As a general thing, copy nature as nearly as possible, never giving really wet feed. The wild poult is a seed and grass eater, and there is no advantage in trying to change its habits of feeding when we raise it in the farmyard. Do not overfeed young turkeys. This is very easily done and leads to trouble. Feed them often, but never more than they will eat with a good appetite.

Place finely-broken charcoal where they can get it at any time. This prevents bowel trouble. As the poults grow give them coarser feed and allow them to run about the place. As soon as the young begin to show the characteristic red caruncles on the neck they are safe. This is called "shooting the red," and as soon as the poult begins to shoot the red the owner need not worry about keeping it protected any longer. It will then endure any kind of weather. Turkeys do best when they sleep out of doors or under an open shed, protected from the coldest winds. They are perfectly hardy and withstand the severest weather and do perfectly well. If they are kept in close houses they are likely to become diseased and lose their hardiness.

In the fall begin feeding grain to the turkeys in larger quantities, and towards the time they are to be marketed give them all they will eat. Corn is a good fattener for turkeys. It makes the flesh sweet and tender, and puts a finish on the body that gives it a very attractive appearance in the market. What gives a fine, firm fleshing, but its feeding is now prohibited by law.

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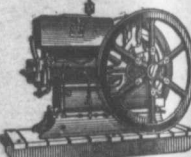
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HORTICULTURE

Strawberry Growing in Prince Edward County*
Howard Leavens, Prince Edward Co., Ont.

STRAWBERRY growing in Prince Edward County has assumed large proportions in the last five years, due to a large extent to the demand by the canning factories for the fruit at good prices. There are from 15 to 30 factories in the county, and although there are not enough berries grown to supply all the factories, enough factories run on them to take all that are grown. In fact the Dominion Canners not being able to get enough berries from outside growers have been growing a large acreage on their own farms.

The prices paid by the factories have been good, averaging about nine cents the last three years. Last year 10 cents per quart box was paid for the whole crop. Some growers ship their berries, but the high prices paid at home has not warranted very heavy shipping, as at least four cents per box more must be realized in order to pay the extra expense of boxes, crates and express. Also in shipping berries a great deal more care has to be taken in filling the boxes and sorting the fruit. Factories will accept fruit that will not ship, when they are getting the whole crop. At the end of the season as well after a rain there is a certain amount of fruit not good enough to ship, but will sell at the factory. Taking this all into consideration, a margin of at least four cents is needed to break even with the factory prices.

There is considerable land well adapted to growing berries around Picton and Bloomfield, as well as in the western part of the county. This land is mostly level and some black ground. Usually a heavy coat of manure is applied to the land the season previous to setting the plants, and a hoe crop is grown to clear the land of weeds. Very little fertilizer has been used in the county, most growers depending on manure. Potatoes have been a favorite crop to precede as well as follow the strawberry crop.

The Varieties Preferred.

The main varieties grown have been the Wilson, Senator, Dunlap and Parson's Beauty. Probably 75 per cent of the berries grown are the Dunlap. The main objection to the Dunlap is the white tip, which affects the appearance of the fruit in the can. The Parson's Beauty is a deeper red all through, and shows up better after being canned although the Wilson variety is the best quality of the three varieties.

Season before last a blight affected a large number of patches and after two or three pickings the plants withered and died. This blight affected practically all varieties except a few plantings of Wilson berries, and they seemed immune, a full crop being harvested from them. Whether this was due to the variety or the land or conditions under which they were handled I cannot say.

Some growers in setting the plants, especially where a number of acres are set, are using the tomato planter for this work. This machine with three men, will set and water from 15,000 to 18,000 plants a day. Those that have used it claim that it is equal to hand setting, and saves a great deal of time. We have found it pays to set plants as early as possible in the season so as to give them a good root before too much dry weather sets in. We have not tried setting in the fall, but believe that early spring setting suits our conditions best.

Where the land is fairly clean of weeds, two crops are taken off before the patch is plowed up, although the

second crop is not expected to be as heavy as the first. Some plow two furrows through the centre of each old row and cultivate this down after the first crop is harvested, and if the season is favorable the new plants will run during the fall, which makes a patch for another year, practically as good as a new set patch. The weather conditions have a good deal to do with this practice, and also the conditions of the land. Sandy loam can be plowed at any time, but some of the other soils, especially if there is a clay mixture, have to be plowed after a rain, and this does not always come at the right time.

Winter Covering.

We find it necessary to cover the plants in the fall with a coating of straw for two reasons: In the spring if the plants are not covered they are frosted and thawing weather; and also if there is not straw enough around the plants at pickling time the fruit will be very gritty and dirty, especially after a shower, which spatters the soil on the berries and makes them unfit for use.

The yield of berries varies a good deal according to the care and attention given during the plants and the season. One grower put 15,000 plants into the factory from one acre and another parties make a specialty of berry growing where some other growers have strawberries more as a side-line, have not had as large yields per acre, but mostly have not put on the same expense per acre. There is a good outlet for berries in shipping them by boat from Picton to Kingston, Gananoque, Brockville and some of the smaller places along the boat route, as well as direct daily trains to Ottawa and Toronto, although Toronto is not as good a market for us as the Niagara fruit generally fills that market.

So far there has been sufficient help for picking the crop. This help comes from the villages and cities and some of the smaller places are moving in about that time, preparing for the factory season, although each season help is getting scarcer and the cost of the handling of the crop is greater.

A City Garden

ABOUT a year ago I was visiting a friend in the city of Ottawa. He had just had his city garden plot worked up and was ready to plant his seed. As it was many long years since he had planted potatoes—for that was to be the principal crop of the garden—he asked me about a few hints for him before it was time for my train, so he would know how to proceed. I did so, and the next time I spoke to him was about a year from that date, when he wrote ready to plant his garden this year. I asked him how his potatoes had turned out last year. His answer was: "Oh, well, the ones that you planted were alright, but there were more potatoes in those few hills than in all the rest of the patch. I want you to plant them all for me this year." This I was unable to do. Possibly it is just as well, as I might not have maintained my good reputation. I do not know what particular virtue there is in the potatoes that I planted, which caused them to yield better than there just now being about the same farm touch which the potatoes could not help responding to.

The incident, however, goes to show that growing crops merely planted in the seed and being assured of a hundred fold increase. There is many a slip 'twixt the cup and the lip, and often a day or so difference in the planting of the crops may mean a difference in the conditions of the soil, depth of planting or other seemingly insignificant cases. It may mean the difference between a good crop and a failure. Oh, yes, there's a risk even in growing a city garden. "Mac."

Sunday Labor in Con

On Friday, May 30th, operating a condenser factory at Aymer issued to farmers supplying it with cooling delivery of the night and Sunday morning Sunday.

In support of this request a party stated that, up to the date of the circular, Saturday night had been delivered at the rate as eleven p.m., and the facilitates keeping factory who handle scotch tanks etc. must be taken into account. This system, it was asserted other factory engaged in cooling and etc. remaining until four o'clock Sunday morning. It was stated that the delivery of milk and Monday morning's Monday morning, added to the order from the factory, practically the handling of supply on Monday. This, it made the factory—an unplace for employment and it is difficult to get the factory with factories in eastario and the United States, receive milk seven days a week. While the request for delivery of milk on Sunday is urged as "time necessity," a correspondent tends that, if the custom is limited during the war, it is to remain after the war is over. A correspondent's assertion founded. All the arguments for "war-time necessity" will be strong after the war as they are. Moreover, delivery of milk on Sunday at the factory will not Sunday labor now demanded factory employees, but will raise the cost of Sunday's milk. It will be almost any other day in the week. The factory question is concerned.

The question raised here is a greater question involved present conditions. The absence of Sunday labor is a result under present conditions necessarily should be most slow for every operation per cent on that day.—Toronto Globe.

To Limit Profits of Producers

THE Canada Food Board has issued an order which is expected to definitely prevent extensions in the produce business to limit profits to a reasonable level. The order provides that on and after July 1, no dealer wholesale in meats, lard, cheese, tallow, oleomargarine or eggs, in addition to a retail dealer, or others not in the business, shall charge on any transaction more than the cost over his cost price delivered to the house. When salaries men are employed in buying, or when commission is paid, the charge for such commission shall be recognized for buying or the carry-over commission paid. In selling to another wholesaler the charge on each transaction must not exceed the cost price more than 4 per centum. When selling portions of butter which have been moulded or cut by him, the wholesaler dealer may be permitted to charge an additional percentage over the cost of such moulding or cutting, but this additional percentage must not be more than 3 per centum of cost. In selling or storing eggs that have been candied by himself, the wholesaler dealer may add up to two cents a dozen to cover cost of candles, fillers, and loss from breakage. If the dealer sells or sells out of cold-storage he may add more than 3 per centum to cost of labor and loss from defective eggs. When the produce dealer is held for more than thirty days the cost of holding or carrying it

Not an Experiment

The New York State Agricultural Experiment Station at Geneva, N.Y., has a herd of pure-bred Jerseys, of which the officers are particularly proud.

Naturally they want the best results from this herd in both milking and health.

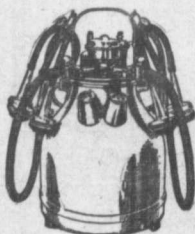
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* A paper read before the recent Fruit Growers' Convention.

Sunday Labor in Condensery

On Friday, May 30th, a company operating a condensed milk factory at Aymer issued a circular to farmers supplying it with milk, requesting delivery of the Saturday night and Sunday morning supply on Sunday.

In support of this request the company stated that, up to the date of the circular, Saturday night's milk had been delivered at the factory as late as eleven p.m., and that this necessitates keeping factory employees, who handle scales, tanks, etc., at work until one o'clock Sunday morning. This system, it was added, necessitated other factory employees, engaged in cooling and condensing, remaining until four to six o'clock Sunday morning. It was further stated that the delivery of Sunday's milk and Monday morning's milk on Monday morning, added to that carried over from Saturday night, meant practically the handling of two days' supply on Monday. This, it was said, made the factory—an undesirable place for employment and made it also difficult for the company to compete with factories in eastern Ontario and the United States, which receive milk seven days a week.

While the request for delivery of milk on Sunday is urged as "a war-time necessity," a correspondent contends that, if the custom is established during the war, it is likely to remain after the war is over. This correspondent's assertion is well founded. All the arguments based on "war-time necessity" will be just as strong after the war as they are now. Moreover, delivery of milk on Sunday at the factory will not reduce Sunday labor now demanded of factory employees, but will rather increase it. Sunday will be simply like any other day in the week so far as factory operation is concerned.

The question raised here is part of a greater question involved in our present-day civilization. A certain amount of Sunday labor is unavoidable under present conditions, but necessity should be most clearly shown for every operation performed on that day.—Toronto Globe.

To Limit Profits of Produce Dealers

THE Canada Food Board has passed an order which is expected definitely to prevent speculations in the produce business, and to limit profits to a reasonable margin over cost. The order provides that on and after July 1, no person dealing wholesale in meats, lard, cheese, butter, oleomargarine or eggs, in selling to a retail dealer, or others not wholesale dealers, shall charge on each transaction more than 10 per centum over his cost price delivered to warehouse. When salaried men are employed in buying, or when commission is paid, the charge for such commission shall not exceed that recognised for buying or the customary commission paid.

In selling to another wholesale dealer the charge on each transaction must not exceed the cost price by more than 4 per centum.

When selling prints of butter which have been moulded or cut by himself, the wholesale dealer may be permitted to charge an additional price to cover the cost of such moulding or cutting, but this additional price must not be more than 3 per centum of cost.

In selling or storing eggs that have been candied by himself, the wholesale dealer may add up to three cents a dozen to cover cost of candying, cases, fillers, and loss from defective eggs. If he candies eggs for sale out of cold-storage he may add not more than 3 per centum to cover cost of labor and loss from defective eggs.

When the produce dealt in has been held for more than thirty days, the cost of holding or carrying may



HERE IS THE DAY YOU REGISTER

ON June 22nd, Saturday, every man and woman, resident in Canada, who is 16 years and over, must attend at one of the places provided for registration, between the hours of 7 a.m. and 10 p.m., and there truthfully answer all the questions set forth upon the registration card.

Upon signing the card, vouching for the accuracy of the answers, the man or woman will receive a Registration Certificate, as shown below, which must be carried upon the person thereafter.

Why the Certificate is so Important

For failure to register a maximum fine of \$100 and one month's imprisonment is provided, also an added penalty of \$10 for each day the person remains unregistered after June 22nd.

Persons remaining unregistered cannot lawfully be employed, and cannot draw wages for work done after June 22nd. Employers who keep unregistered persons in their employ will be liable for fines equal in amount to those recoverable from the unregistered employees.

Unregistered persons cannot lawfully purchase transportation tickets, and may find themselves barred from travelling on railroads, steamboats, etc. Similarly they may be denied board and lodging at any hotel, restaurant, public house or boarding house.

In a word—All persons remaining unregistered, and all persons having dealings with unregistered persons, knowing them to be such, incur heavy penalties under the law.

REGISTRATION IS LAW— Don't Fail to Register

This Certificate is YOUR Protection. Get it and Carry it



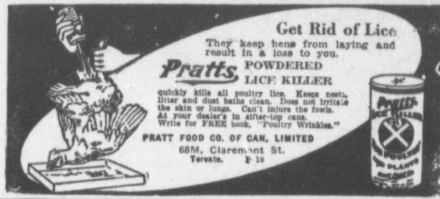
Issued by authority of Canada Registration Board

Get Rid of Lice
They keep him from laying and
result in a loss to you.

Pratts
LICE KILLER

It is a powder which kills lice, keeps cows clean and healthy, and keeps the skin of sheep, cats, horses, etc., free from lice and other parasites. Write for FREE booklet, "Poverty Writings."

PRATT FOOD CO. OF CAN, LIMITED
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Toronto, O. C.



be added to the cost price delivered to warehouse, and the cost of carrying, including storage, public tariff rates, insurance, interest at 7 per centum and shrinkage.

FEEDERS CORNER

Milking Three Times a Day

OUR cows are grade Holsteins and Assafries with a couple of grade Durhams. They are giving all their milk from 30 to 40 lbs. of milk daily. Would it pay to milk the herd three times a day? We have the help in the family to do it, the increased production would pay for the work? Or does the profit from three times a day milking come in smacking official records with pure-bred stock?—"Dairyman," Agricultural Co., Que.

In Denmark, Sweden and other European countries, the practice of milking three times a day is very common, and evidently with their available cheap labor, very profitable. It is doubtful, however, if this practice can be profitably adopted in Canada other than in rare instances where the labor is available or in the making of official records. It is doubtful if the milking of a cow giving less than 40 pounds of milk daily in two milkings would pay for the extra labor of the third milking. The extra milking in itself may be responsible for an increased milk flow of 8 per cent to 30 per cent, depending on the cows. For cows carrying a very heavy flow of milk even these figures may be exceeded.

The common practice is to give the same number of feeds as the number of times milked. Undoubtedly the heavy milking cow can digest more feed and produce from 15 to 30 per cent more milk under this system.—E. S. A.

Millet as a Feed

WHILE I will be short of hay next year with only about half the usual supply of clover. We are planning on five acres of common millet, which would like to know something about its feeding value as compared with other feeds, and how it should be fed. Will hay, and ration need to be much heavier as compared with clover feeds at that stage should millet be cut to make the best hay?—"Cowboy," York Co., Ont.

Millet makes only a fair feed for cows, its value depending largely on the care in harvesting and curing. If properly made it is slightly superior to average timothy hay but much inferior to clover or alfalfa. The common millet is the earliest, most drought resistant and makes the finest and best hay of all varieties. Millet hay should not be fed too liberally also it may induce scours or similar digestive troubles. It should be fed to cows in conjunction with meal and silage or roots. Changes from other hays to millet may be made gradually. Millet for hay should be cut when the heads of plants start to shoot. If left till later the stalks become too woody and more indigestible. Millet hay contains 13.3 less protein than clover hay and is less digestible form, hence more meal of a protein nature is needed in the ration.—E. S. A.

Use of Calf Meals

WE are shipping milk to Montreal and feeling almost 3 cows, delivered. We have a half dozen better calves on hand and more are expected. These are pure-bred animals and we don't like to part with them. Will you give me the formula for a good substitute and tell me how to feed it? Can I get as good calves from calf meal as from feeding whole milk and skim-milk?—J. W. P., Huntingdon Co., Que.

It is not possible to raise as good heifers to eight months of age without whole milk or skim-milk and in the absence of these feeds greater care must be used. However, very good calves may be raised without these feeds and the somewhat later developing may be just as good as those of age as the milk reared calves.

Remove dairy calves from the cow at birth. Do not allow them to suck, unless weak or unable to drink, or unless the cow's udder is severely

caked. Mother's milk for the first four days, at the rate of 12 to 14 pounds divided into three or four feeds is essential. Continue whole milk till the calf is four weeks of age. Then during the following two weeks gradually replace the milk with a well prepared calf meal. There are many excellent calf meals on the market, such as Royal Purple, Gold Dolar, Caldwell, etc., which will give good results. A hominy or oat meal which makes a good milk substitute is composed of: Flaxseed, fine ground, 1 part; oats, fine ground, and sifted, 2 parts; corn, fine ground, 2 parts; wheat shorts, part. Any such calf meal should be prepared by mixing with a little cold water to moisten, then pour on boiling water and allow to stand for a time before feeding as a gruel. Feed at a temperature of 70 degrees F. Start the calves on half pound of this meal daily and increase gradually to two pounds daily till the calf is five months of age, when she may go on dry meal.

At three weeks of age, feed a small quantity of whole oats in the manger. Fine clover hay and clean water should probably be kept before them from this time on. Replace the whole oats at four weeks of age with a grain mixture of equal parts bran, rolled oats, and ground corn.—E. S. A.

Grain on Pasture:

OUR cows have just gone out on grass and I am debating whether or not to feed grain. A year ago I read in Farm and Dairy an account by Mr. Gray, of Ottawa, that he liked to let the cows a rest on June pasture. More recently I have read that the cows that cows should be fed at least a little grain on the pasture. Still other mention the advisability at all if soiling crops are provided. Will Mr. Archibald kindly tell me what grains to feed and how much on good pasture, fair pasture and poor pastures? My cows are Holstein grades and mostly fresh in April and May.—W. C. O., Oxford Co., Ont.

Whether or not it is advisable to feed grain to cows on pasture depends on the condition of cows, quality of pasture, price of grains, and many similar conditions. When the good pastures are at their best it is doubtful economy to feed grain to cows giving 30 pounds of milk or less, but with the heavy producing cows it is essential to feed some grain in order to uphoenix the milk flow. Although a cow may gather 50 to 75 pounds, or even more, of grass daily, this may not be sufficient to maintain a heavy flow and body weight. When the pasture is very watery it is necessary to feed some grain to balance the ration and supply the necessary nutrients. However, as the pasture becomes better the grain may gradually be withheld and with heavy producing cows discontinued. Good pasture is relatively high in protein, in fact almost perfectly balanced as to the relation of protein and carbohydrates. As the grass becomes more watery it is more starchy and extra protein must be given in the meal unless a rich green feed, such as peas and oats, is available. During the periods of dry pastures, late fall pastures and that of intense heat and flies, it pays to grain feed milk cows in order to hold up their condition and milk flow till other feeds are available. Generally speaking, for heavy milking spring freshening, Holstein grade cows, it may pay to feed grain as follows:

1. On good pasture a grain mixture of bran, 4 parts; corn or corn bran, 2 parts; cottonseed meal or gluten or oil cake, 1 part; fed at the rate of one pound for every eight pounds of milk produced.
2. On fair pasture a grain mixture of bran, 4 parts; corn or corn bran, 2 parts; and cottonseed, 2 parts; fed at the rate of one pound grain per eight pounds milk produced.
3. On poor pasture feed at least some green peas and oats or silage and a grain mixture of bran, 2 parts; corn or corn bran, 2 parts; cottonseed or oil cake, 2 parts; and gluten or dried distillers' grains, 2 parts; fed at the rate of one pound grain per 4½ to 5 pounds produced.—E. S. A.

FIELD NOTE

By "Mac."

Springtime Observations Eastern Ontario

TO one who has been accustomed to farm life, and who has seen the masses, there is no country, has become accustomed to observe the little things of interest during the most interesting of the year than a trip through farm districts. During the month has been my private gain considerable time in the parts of the eastern part of the province, and possibly a few natural observations would be just to my readers.

POSSIBLY the thing that is noticeable on such a trip is the fact that the farmer is so busy that he has no time to spare for anything but the most strenuous and busy season of the year and shortage of help is in evidence at present. Owing to the fact that in many places the planting was done so late that the work has been held back to a considerable extent. Land which was prepared in the fall in most cases has been put in good shape for the time, but there are some fields and parts of fields in the country which were plowed in the spring after the other crop had gone in and which cannot be put in for a full crop during the season. One of the most serious results of this is where part of the soil has been sowed at one time

at another time, thus causing unevenness in the time of ripening. The early part will necessarily over-ripe if allowed to wait later part, and the later part will be ripe enough if the field is plowed in time for the early part. In general, the farmer's son has been a favorable one in Ontario. In most districts they were not held up to an extent by bad weather, a season which was plowed in was put in in good time and shape. There were some however, for instance along Lawrence River in the more rural counties, where the land level, that the soil had not sufficiently before rain came down to get the crop in. Thus or more of wet weather later operations for the crop longer time, and at the time that it is possible that there grain not needed. However, in section such as this and in the soil of the St. Lawrence, in this condition causes little loss.

THIS unusually severe winter also left its mark upon the soil of the land. During the month there has been much tillation as to the possibilities fall wheat crop, and judging its appearance the lowest estimate the most nearly correct, watching from the car through the counties of Hastings and Northumberland I noticed fields which appeared to have had there through them large areas of couch grass. After several of these I made the discovery that what I supposed was grass was in reality fall wheat farmers, who owned the fields, to save every precious acre of this crop, had left every tiller even though it be only a few diameter, and worked up the field for the spring crop spring crop coming in so late that what standing in patch and there through the fields very much like bunches

Three in One



A Unique
Mutual Life
Policy

THE "Paid-up and Maturity" policy issued by the Mutual Life of Canada is a proposition well worth your consideration.

A Life Policy

Under the terms of the Paid-up and Maturity Policy the profits may be accumulated in place of being paid in cash, or may be used to reduce premiums. In course of time the accumulated profits may become sufficient to prepay all future premiums, and the policy will then be endorsed as

A Paid-up Life Policy

if the assured so desires; and this Paid-up Life Policy will earn profits which will be payable in cash annually. If the assured does not wish a Paid-up Contract he can continue to pay the regular premium until the total of the reserve and accumulated profits equals the face value of the policy, which thus becomes

A Matured Endowment

payable in cash if so desired. If neither of these options is selected, the profits will continue to accumulate and will be payable at the termination of the contract, if not previously withdrawn.

Thus an Ordinary Life Policy may develop into a Paid-up Life Contract, or a Matured Endowment, or an increasingly valuable investment.

The length of time required to develop the "Paid-up" feature or the "Maturity" feature depends partly upon the age of the assured but chiefly on the dividend-earning power of the Company, and, as "all the world" knows, the dividend-earning power of the Mutual of Canada is unsurpassed.

Write for full particulars of our different plans of insurance.

The Mutual Life
Assurance Company of Canada
Waterloo, Ontario

537

Farm and Dairy stands foursquare against everything that is detrimental to the farmer's interests, and whatever appears in its columns, either advertising or editorial, is guaranteed reliable.

FIELD NOTES

By "Mac."

Springtime Observations in Eastern Ontario

TO one who has been accustomed to farm life, and who from the car window or from the seat of an auto, as he rides through the country, has become accustomed to observe the little things of interest he passes, there is nothing more interesting during the present season of the year than a trip through the farm-in districts. During the past month has been my privilege to spend considerable time in various parts of the eastern part of the province, and possibly a few notes on natural observations would be of interest to my readers.

POSSIBLY the thing that is most noticeable on such a trip as this is the fact that the farmers, in spite of all that may be said to the contrary, are putting in a very strenuous and busy season. Late hours and shortage of help are quite in evidence at present. Owing to the fact that in many places very little plowing was done last fall the spring work has been held back to a considerable extent. Land which was prepared in the fall in most cases has been put in in good shape and in good time, but there are many fields and parts of fields all through the country which were plowed this spring after the other crop had been put in and which cannot be counted as for a full crop during the coming season. One of the most serious results of this is where part of a field has been sowed at one time and part at another time, thus causing unevenness in the time of ripening. The early part will necessarily be overripe if allowed to wait for the later part, and the later part will not be ripe enough if the field is cut at the proper time for the early part.

Taken in general the seeding season has been a favorable one in Eastern Ontario. In most districts farmers were not held up to any great extent by bad weather, and the ground which was plowed in the fall was put in in good time and in good shape. There were some sections, however, for instance along the St. Lawrence River in the more easterly counties, where the land is very level, that the soil had not dried sufficiently before rain came in order to get the crop in. Thus a week or more of wet weather later on held up operations for a considerably longer time, and at the time of writing it is possible that there is still grain not seeded. However, in a dairy section such as this and in the fertile soil of the St. Lawrence Valley, this condition causes little alarm.

THE unusually severe winter has also left its mark upon the face of the land. During the past month there has been much speculation as to the possibilities of the fall wheat crop, and judging by present appearances the lowest estimates were the most nearly correct. While watching from the car window through the counties of Hastings and Northumberland I noticed many fields which appeared to have here and there through them large bunches of couch grass. After noticing several of these I made the discovery that what I supposed was couch grass was in reality fall wheat. The farmers, who owned the field, wished to save every precious stalk of this crop, had left very little patch, even though it be only a few feet in diameter, and worked up the rest of the field for the spring crop. The spring crop coming up later with the fall wheat standing in patches here and there through the field looked very much like bunches of couch

grass, which is so commonly seen through the fields in many parts of the province.

In other places the higher and lower parts of a field have been replowed and seeded with some other kind of grain, while possibly sheltered hill face, running across the field, was still standing with a crop of fall wheat. Apparently the average farmer wishes to produce all the wheat that he possibly can, or he would not go to the trouble of leaving small patches and small strips scattered through his other crops.

NOR is fall wheat the only crop which is killed out by the severe winter. So also is the clover. In most places the new seeding is coming through in good shape, but in many fields, even of alsike clover, where there was a splendid crop last year, there is nothing left but a thin scattering of timothy. Just what this will amount to is difficult to say at present. In many places a second growth will come up later, if the weather is at all moist, but in other places these fields will be practically unproductive, unless they are plowed and seeded with some later crop.

The hay crop as a whole, however, appears to have come through in fairly good shape, and with reasonably good season ture should be a fair crop of hay in Eastern Ontario. On one farm I saw a stoney field which had been seeded down a few years ago with a permanent pasture. It was a mixture of hardy grasses suitable to the district and had satisfactorily withstood several other cold winters. As it stands, to-day, however, the greater part of it is practically useless and will have to be reseeded.

Another thing which appears to be the result of the unusually cold winter is that in many parts the apple trees have been killed. Some may think that this is the result of the ravages of the tent caterpillar, but in passing orchards which I knew had been sprayed and cared for in every way to protect them from these pests the number of dead trees seems to be just as large as in the orchards which had not been treated. Naturally the conclusion is that the varieties formerly considered hardy enough for certain localities have during the past unusually cold winter proved themselves not quite equal to standing the climate to which they were exposed.

One of the results of the labor scarcity and the desire on the part of the average farmer to produce as much as possible and produce as cheaply as possible is the increase in the use of three and four horse teams. This is particularly so on large smooth farms but we must admit that, in the use of such outfits, the Ontario farmer is still a long way behind where he ought to be. To one accustomed to working such outfits there is nothing more discouraging than to see a farmer walking back and forth on a fine level field following a two horse team. There is no doubt that nicer work can be done, that it is somewhat easier to drive two horses than four and requires less time for hitching and unhitching, but man-power is at too great a premium to-day for it to be profitable, except on special occasions, for a man to confine himself to the use of a two-horse team. The number of places where you see two or three two-horse outfits working on different machines in the same field are all too common. There are, however, many farms where four-horse outfits appear to be the general rule, a smaller number where four-horse outfits are in general use and on one or two occasions I saw one man handling as many as five horses.

If several places during the last month it has been my privilege to roam across the Government tract

Factory Equipment on more than 1 1/2 million Fords.

The Ford car has been developed from the point of engine efficiency.

Champion

Dependable Spark Plugs

are factory equipment on all Ford cars as an important part of that efficiency.

Every Ford owner who would preserve that efficiency should insist that his replacements be Champion "X" plugs.

The patented asbestos-lined copper gaskets, an exclusive feature in all Champions, protects the porcelain and gives long and dependable service.

Look for the name "Champion" on the porcelain. It guarantees "Absolute satisfaction to the user, or free repair or replacement will be made."

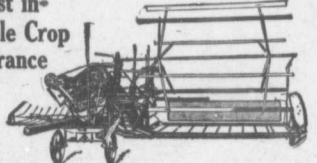
Sold by dealers everywhere.

The following is quoted from the instruction book in each Ford car:

"There is nothing to be gained by experimenting with different makes of plugs. The make of plugs and engines are equipped when they leave the factory to best advantage, the requirements of our motor."

Champion Spark Plug Co. of Canada, Limited, Windsor, Ont.

Invest in Whole Crop Insurance



THERE is one kind of insurance you may not know about, which requires no premiums, on which you realize every year, and which this year is fully as important as any other insurance you carry. When your crops are ready for cutting, McCormick binders and twine insure the harvesting of the whole crop. No matter whether the grain be heavy or light, tall or short, standing or down, lodged and tangled, a McCormick binder cuts and binds it all without waste. That is what we mean by whole crop insurance.

McCormick harvesting machines and binder twine, always efficient, are better than ever this year, when every bushel of grain is needed. Remember this when you come to buy your binder and twine for the season's work. Remember, too, that the larger sizes conserve labor. Buy the largest binder you can use, and buy a new machine if there is any question at all about the efficiency of the old one. A new McCormick binder is absolutely reliable.

You can be sure of having your new machine on time by placing your order with the local dealer as soon as possible, or writing the nearest branch now for catalogues. The dealer will appreciate having your order early so that he can give some service to your neighbors who delay. And the world will appreciate it!

International Harvester Company of Canada, Limited

BRANCH HOUSES

WEST—Brandon, Man., Calgary, Alta., Edmonton, Alta., Estevan, Sask., Lethbridge, Alta., N. Battleford, Sask., Regina, Sask., Saskatoon, Sask., Winnipeg, Man., Yorkton, Sask.

EAST—Hamilton, Ont., London, Ont., Montreal, Que., Ottawa, Ont., Quebec, Que., St. John, N. B.

tors at work and the general satisfaction which they are deriving certainly is an encouragement to the movement. Two instances down in the County of Glengarry may be of interest to any one thinking of availing themselves of its opportunity of securing these machines.

At the farm of Mr. D. P. MacMillan, who works over 300 acres near the town of Alexandria, I noticed a large double section milk harrow commonly used with the tractor and asked him regarding his success with its use. He said, "I have been both plowing and disking with the tractor. It plows more cheaply than I can plow with my own horses. Consequently, I let it do the plowing and in the meantime I can find other work about the farm to do with the horses." On that day the tractor was working on the farm of D. A. MacLeod, a few miles south of the MacMillan farm, and when we drove up to the barn at Mr. MacLeod's the engine was standing at the barn being replenished with gasoline. Mr. A. Kennedy, who was operating it, remarked that previous to taking charge of this machine he had had no experience with engines of any kind and that so far he had had no trouble whatever in operating it. Nothing had gone wrong and it had never been tied up with breakages. It was a 5 1/2 h.p. and when working at the MacLeod farm was pulling a big double disk with a drag harrow tied behind—a good seven-horse load. It was covering 20 acres a day and leaving it in excellent shape for the drill. With this outfit preparing the soil and three big farm horses on a 20 disk drill, Mr. MacLeod is putting in his crop in excellent shape and in

good time. We asked the operator if it seemed to injure the soil any and he said that it had often gone back over the field to try to find where the tractor wheels had run and he said he had never succeeded in doing so and that if the ground was fit to seed it was in fit shape to carry a tractor.

City Milk Supply

The Woodstock Dairy Company

WOODSTOCK, in the heart of the great dairy county of Oxford, has a city dairy that is a model of its kind. It was the very modern and very new dairy building that first attracted the attention of one of the editors of Farm and Dairy when in Woodstock last fall. We dropped in for a chat with the manager, Mr. S. McCrimmon. "How is the company owned?" we asked.

"The Woodstock Dairy Company is a joint-stock enterprise," replied Mr. McCrimmon. "It was organized by a company of dairymen in January of this year, and we have been in this new plant since July. All of the shareholders and organizers of the enterprise were in the milk business, either as producers or peddlers. They were keen enough to see that a central dairy company was going to be started some time, and decided that they might as well own the company. Stock was subscribed, and the retailers who did not wish to come in were still individual peddlers in the

town, but the great bulk of the milk is handled through this company."

"Then your producers are also stockholders?"

"Yes," agreed Mr. McCrimmon; "to a great extent they are."

"How then do you govern the price to the producer?"

"The price is governed by the price paid by the shipping station of the Toronto City Dairy. Any profits we may realize will be further divided among the producers in the form of dividends on stock."

In company with Mr. McCrimmon we then inspected the plant. We found it to be a model for sanitary handling of milk and equipped in the most modern manner. A part of the woodwork was of white enamel. The equipment consisted of a pasteurizer and milk cooler, bottling machines and bottle washers and sterilizers, and an ice machine which afforded the refrigeration. The company deals in butter-milk, cream and butter as well as in milk. Of the latter about 1,300 quarts are handled daily. As a result of the formation of the company milk is handled in a more sanitary manner and with better satisfaction to the citizens of Woodstock than ever before, and economies of distribution are also being effected.

Organizing an Association

ORGANIZATION is in the air nowadays, and almost all that any body of men needs to promote an organization in their midst is someone to start the ball rolling. Just how easy this is done was illustrated by Mr. F. Young, president of

the Guelph Milk Producers' Association, in telling how their association came into being.

"The price of milk to producers varied from \$1.40 to \$1.80 before we started our association," said Mr. Young. "The price was not high enough and I rebelled. I got in touch with some of the heaviest milk producers of the district, and within a week we had an association of our own. They were all ready for just such a move. Now we are in a good position to dictate our own prices."

Milk Producers and Combines

MILK producers in the State of New York need fear no further prosecution under the anti-combine laws of the State. The farmers' representatives at the State capital have succeeded in amending the anti-combine law, which makes contracts of monopoly illegal and void, and the clause now coincides with the following provision:

"The provisions of this article shall not apply to cooperative associations, corporate or otherwise, of farmers, gardeners or dairymen, including livestock farmers and fruit growers, nor to contracts, agreements, or arrangements made by such associations."

Milk producers in other parts of the United States, some of whom are now under indictment by State authorities, have good cause for wishing that their own State governments were as considerate of the farmer's interests as is the government of New York State.



Senlor Champion Aylen
Glenhurst Torrs Mayor. From tip
strongly constituted kind.

A Balanced Unbalanced

(Continued from page

what any natural feeding material contributes to a ration will position to steer the breeder or promptly and accurately paths of safety.

It was to pave the way for the quidion of such definite in that these experiments were and they have returned us n damental knowledge.

Up to this time we are including that a ration made corn plant will be found safe respect for a growing and leg beef.

What Safe in Combine

On the other hand, the which cannot be relied upon to furnish the nutrients needed an animal. The mineral of the straw will in all likelihood be in quantity. In addition, it carries a toxic material to pull the animal down. When and wheat straw can be coupled alfalfa hay or corn silage or any other good roughages, the best roughages are they injure the animal.

Rations made wholly from plant will be incomplete, and spring produced by the continuing of such a ration will be found. The straw is the disturbing furnishing in most cases a quite mineral mixture. Mix



Gano Faforit Brave B
He is owned by A. McNaughton
this winter is an excellent specimen
of good smooth type, and has
placid



Another Battle Won for Dairymen

FOR months we have been experimenting—investigating—testing—fighting, to find a way to make the Empire Milking Machine, already the unquestioned leader, still more efficient for the dairy farmer.

THE BATTLE IS WON.

We have given the milking machine a new heart—the pulsator is the heart of the milking machine—and the result of our experiment, the new Empire Super-Simple Pulsator, is the most wonderful development since the invention of the Empire—the competent milking machine.

To be successful a milking machine must have a perfectly acting pulsator to cause the alternating action of suction and massage on the teats (to imitate the calf's "suck and squeeze") to occur with absolute regularity; and to make the change from suction to massage and back again instantaneous.

The Empire Super-Simple Pulsator, the pulsator without a piston, does that and more. It really is Super-Simple—so simple that it can be taken apart and put together again in less than two minutes. It has but five moving parts; nothing to wear out or "get out of gear." It cannot jam, occur, so its action is perfect.

It places the Empire Milking Machine immeasurably in advance of all competition. Your cows should be bought out. Of course there are Empire Milking Machines with the new Super-Simple Pulsator.

milk them more rapidly than ever—it will solve your labor problem—it will increase milk production at a decreased cost; it will transform milking from drudgery into a pleasant chore.

Our factory is overtaxed by the increased demand for Empire Milking Machines, so go to your dealer at once, see the new Super-Simple Pulsator and tell him to order your Empire cows without delay; or write for Catalog. 2.

THE EMPIRE CREAM SEPARATOR CO. of Canada, Limited,
MONTREAL 25 TORONTO



150,000 Farmers are Using the "Z" Engine

They have bought it in demonstration proved it the greatest engine ever produced.

Fairbanks-Morse 3 and 6 h.p. "Z" Engines

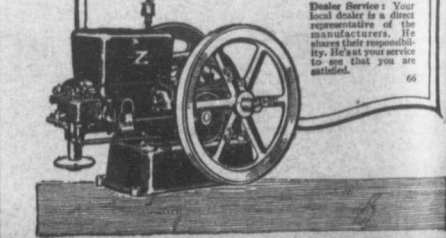
Use Coal Oil, Distillate or Gasoline—the most economical fuels burned in engines today. The "Z" performs all farm work for which an engine can be used. It is simple, durable, light in construction, and can be operated by anyone.

Fairbanks-Morse quality is built into every "Z" Engine. Its reliability is your constant assurance of reliability.

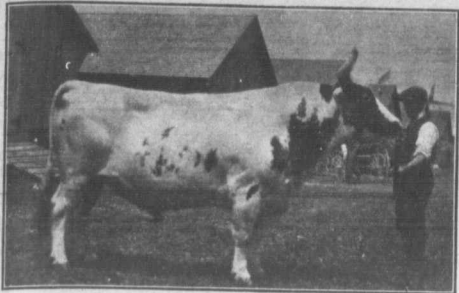
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Get full particulars today from our nearest branch.

The Canadian Fairbanks-Morse Company, Limited
St. John's, Quebec, Montreal, Ottawa, Toronto,
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Dealer Service: Your local dealer is a direct representative of the manufacturer. He of each company will be found. He's not your service to see that you are satisfied.



Senior Champion Ayrshire Bull at the Ormstown Spring Show.

Genhurst Torrs Mayor, owned by R. R. Ness, Howick, Que., represents the very best of the breed. From tip to tip he shows real Ayrshire quality; the deep, boned, strongly constituted kind, the kind that is being sought after nowadays.

A Balanced Unbalanced Ration

(Continued from page 5.)

what any natural feeding material will contribute to a ration will be in position to steer the breeder and feeder promptly and accurately to the paths of safety.

It was to pave the way for the acquisition of such definite information that these experiments were begun and they have returned us much fundamental knowledge.

Up to this time we are safe in concluding that a ration made from the corn plant will be found safe in every respect for a growing and reproducing heifer.

Wheat Safe in Combinations.

On the other hand, the wheat plant cannot be relied upon to furnish adequately the nutrients needed for such an animal. The mineral content of the straw will in all likelihood be too low in quantity. In addition, the grain carries a toxic material tending to pull the animal down. Wheat grain and wheat straw can be coupled with alfalfa hay or corn silage and probably other good roughages, such as clover hay, thereby supplying the mineral deficiency and at the same time aiding greatly in overcoming the toxic effect of the wheat grain. These investigations with whole wheat should cause no alarm concerning wheat bran and wheat middlings. They have been used with success on countless farms, and only when used too liberally or without the best roughages are they likely to injure the animal.

Rations made wholly from the oat plant will be incomplete, and the offspring produced by the continued use of such a ration will be dead or weak. The straw is the disturbing factor, furnishing in most cases an inadequate mineral mixture. Mixed with

some corn stover or legume hay the ration will be wholly sound for the production of strong calves. When half the roughage was alfalfa hay and half oat straw success was attained. While it is well known that considerable trouble from contagious abortion is often met in dairy districts it should also be recognized by breeders that it is possible to produce dead or weak premature calves from the improper selection of feeds. This idea, we think, is new, and the facts supporting this view are backed by numerous experiments. When such a condition, namely, the production of weak offspring through improper rations, exists, the remedy is comparatively simple. The use of good roughages solves the problem. The condition of the straw-stalk herd, without reference to what the calves may be, is direct evidence of poor nutrition.

Making a Poor Farm Productive

(Continued from page 4.)

to Borden's gathering station one hour earlier it put matters in a different light. They managed to get along till the hired man's wife took sick, and they were one hand short. This made them late on a few mornings, so earlier they decided to put in a machine. So far it has given good results. There are five neighbors right together who now milk with the machine, and they are apparently satisfied with the results.

Crops.

Mr. Campbell is a strictly dairy farmer. Apart from his flock of sheep, which he keeps chiefly for their wool destroying propensities and the poultry which are a valuable side line, the main income is from the milk. He farms by the "corn, cows and clover"

method. He feeds what he grows and as far as possible grows what he feeds. However, in the case of feeding his milk cows he believes that it pays to buy a certain amount of the concentrates to mix with the home grown grain.—"MAC."

P.S.—I do not know what Mr. Campbell will say when he reads this. Possibly he will not be pleased. If so, I apologize. When I called at his farm

it was not with the idea of making public property of his name. But I saw in the story of his success just the sort of reading that always acts as an inspiration to others of us who have the same problems to solve that confronted Mr. Campbell when he started a few years ago. And I have found that men who have been really successful are always glad to give others the benefit of their experience

Made in Canada
Tarvia
Preserves Roads
Prevents Dust—

A Tarvia Road to Market

What the steel rails are to trolley-traffic, the Tarvia road beside it is to horse and motor-traffic.

Over a Tarvia road, like that shown below, farm products can come to market in any sort of weather with full loads and at good speed.

The use of Tarvia makes a macadam road dustless, mudless, frost-proof, and automobile-proof, and costs so little additional that the savings in annual maintenance charges will more than make it up.

A coating of Tarvia in time will arrest the deterioration of plain macadam and add years to the life of a road at much less expense than any other method.

Many road engineers everywhere, in Canada and the States, have settled down to the regular use of Tarvia on their principal thoroughfares because they find it gives them better roads and at the same time materially reduces maintenance costs.

Booklet telling about the various Tarvia treatments free on request.

The **Barrett** Company

LIMITED
MONTREAL TORONTO WINNIPEG VANCOUVER
ST. JOHN, N. B. HALIFAX, N. S. SYDNEY, N. S.



This is Merriton Road in St. Catharines, an important thoroughfare running through the manufacturing district between St. Catharines and Merriton, resurfaced with "Tarvia-X," and with "Tarvia-B" seal coat in 1917.

Sending Money to Soldiers

Those who have friends or relatives at the front, may wish to send money, but possibly do not know the best way to do so.

If time permits, the safest and most convenient method of making remittances abroad is the Bank Money Order or Draft, as issued by The Merchants Bank.

If, however, it is necessary to send money without delay, the Bank will arrange this by Cable Transfer.



THE MERCHANTS BANK
Head Office: Montreal, OF CANADA Established 1864.
with its 102 Branches in Ontario, 12 Branches in Quebec, 19 Branches in Manitoba,
2 Branches in Saskatchewan, 11 Branches in Alberta, and 8 Branches in British
Columbia serves Rural Canada most effectively.

WRITE OR CALL AT NEAREST BRANCH.



Gano Favorit Brave Boy, Senior Champion at Ormstown.

He is owned by A. McNaughton, Dewittsville, Que. Though not a flashy animal, this winter is an excellent specimen of the breed. He weighs well over a ton, is of good smooth type, and has all kinds of energy. He is a bull worthy of a placings at any of the large shows.

—Photos by an editor of Farm and Dairy.

Farm and Dairy

Rural Home

"The Farm Paper for the farmer who milks cows"
Published every Thursday by
The Rural Publishing Company, Limited
Peterboro and Toronto.



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ADVERTISING RATES. 12 cents a line flat, \$1.68 an inch an insertion. One page 50 cents, one column 12½ cents. Copy received up to Saturday preceding the following week's issue.

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Extensive detailed statements of circulation of the paper, showing its distribution by counties and provinces, will be mailed free on request.

OUR GUARANTEE.
We guarantee that every advertiser in this issue is reliable. We are able to do this because the advertising columns of Farm and Dairy are as carefully edited as the reading columns, and because to protect our readers, we turn away all unscrupulous advertisers. Should any advertiser herein fail to show up with you as one of our paid-in-advance subscribers, we will make good the amount of your loss provided such transaction occurs within one month from date of this issue, that it is reported to us within a week of its occurrence, and that we find the facts. But should you attempt to adjust trifling disputes between subscribers and honorable business men who advertise, nor pay the debts of honest bankrupts.

The Rural Publishing Company, Ltd. PETERBORO AND TORONTO

"Read not to contradict and to confute nor to believe and take for granted, but to weigh and consider."
—Bacon.

A Look Ahead

"THE scarest thing I know of," wrote back a farmer's son from "over there," "is pasturage in France. If a cow found a blade of grass she's faint—but then, there aren't any cows."

Well, that is going a little strong. There are still cows in France, several hundred thousand of them in fact. That the cow population of France has been seriously reduced, however, the most conservative authorities agree. Even so responsible a person as Carl Vrooman, Assistant Secretary of Agriculture for the United States, after considering the world situation, penned the following:

"There is no type of farming that has so bright a future as dairying. Dairy herds of the old world are depleted to an appalling degree. There is not a country in Europe where the people have enough dairy products, and this process of depletion will continue on as long as the war lasts. When the war is finished we will find the world with a demand for dairy products two-fold, four-fold, ten-fold greater than the supply. Europe will come to us with outstretched hands, every country in Europe will say to us: 'We must have milk; give us canned milk; give us dry milk; give us butter; give us cheese; give us dairy cattle; give us animals to build up our dairy herds again.' And unless America has stimulated the production of dairy products, and has increased the supply of dairy animals far beyond anything in the past, we will be utterly unable to supply this demand."

This is merely another way of stating that the after war demand will be greater for the finished products of the farm than for the raw products and all signs point to the correctness of this conclusion. Probably Mr. Vrooman overestimates the future demand but he is headed in the right direction. Great Britain has always been the world's greatest importer of wheat and other grains. During the war grain production in Britain has made tremendous strides and it is estimated that this year the home grown grains will meet four-fifths of British requirements. This increased grain production will not cease with the conclusion of peace and the value of the British

market to grain exporting countries will have been seriously reduced. Other European nations, with population reduced by war and famine, will rapidly overtake their grain requirements.

But the re-establishment of the live stock industry and particularly of the dairy industry, will take years where the re-establishment of grain production on a normal scale will require but months. As we have stated many times before a long look ahead cannot but encourage the dairyman to maintain his breeding herd intact.

Representative Government

OUR so-called representative government does not always represent. A case in point is the way in which our Federal Government handled the question of titles. The great majority of Canadian people would like to see titles abolished, at least 90 per cent. of us are not anxious to have the insignias of anocracy distributed in our democratic land. Legislators at Ottawa evidently understood the sentiments of their constituents and were prepared to vote titles into oblivion. The Prime Minister interfered. He threatened to resign if the matter was passed. He gave the members no choice. Their decision is a matter of history.

Did we have direct legislation such an incident would not be likely to occur. A plank in favor of direct legislation it found in the platform of the organized farmers of Canada. Its instruments are the Initiative, Referendum and Recall. Had we Direct Legislation in Canada the people could settle this question of titles for themselves. They would take the initiative by circulating a petition which would demand that the Government either abolish titles or submit the question to the people themselves in the form of a referendum. We could circulate such a petition at present but the Government would not be under any obligation to submit the referendum. With Direct Legislation they would be obliged to. Under the Recall we could in a similar manner force representatives who are not satisfactory to us to resign and stand for re-election. This would make a big difference just now in reference to the Military Service Act.

Direct Legislation, once on the statute books, would need to be invoked but seldom. The knowledge that the people had the power of initiative and recall would make legislators more representative and legislation more democratic. We would never have such a spectacle as we had at Ottawa recently when the House of Commons acted in opposition to the well-known will of the Canadian people.

The Reconstruction Association

THE youngest child of the Canadian Manufacturers' Association and the natural successor of the Home Markets' League, the Canadian Industrial Reconstruction Association, has at last been launched with branches at Toronto and Montreal. Already the new organization has been under fire and in the discussion that has ensued, it has become more and more evident, as was intimated in Farm and Dairy when its prospectus was first issued, that it is the one and only object of the new association to defend the privileges of the manufacturers, particularly the protective tariff. The influence of the new association will also be felt in opposition to any attempt to place on the manufacturing industry any great proportion of that after war taxation that will have to be levied directly. Just where the manufacturers desire to see these direct taxes placed, is indicated by the utterances of their leading newspaper supporter, which is already educating its readers to believe that the farmers are not paying their fair share of federal taxation. Apparently, if the new organization is allowed to dictate our reconstruction policies, the farmers of Canada will not only have to struggle along under a greater tariff handicap than is now imposed, and which is heavy enough in all truth, but will be subjected to heavy direct taxation as well.

We know from past experience just how influential such an organization as the Canadian Industrial Reconstruction Association can be at Ottawa. The only safeguard of the farmer is further organization. Privilege has organized to attain all of the advantages

that have enabled privilege holders to fatten at the public expense for more years than we care to remember. If we would oppose their organization as earnestly we must enroll in the organized farmer movement, not 75,000 farmers, but hundreds of thousands. Not till then can we hope to wield the influence that will compel legislators to give just consideration to our demands. The activity of our opponents should be our greatest incentive to still greater organizing efforts than we have displayed even in the last three years.

The G.W.V.A. and the Y.M.C.A.

THE Great War Veterans' Association, during a recent convention, made serious charges as to abuses in the administration of Y.M.C.A. funds in France. Several returned veterans indignantly declared that they had never received any of the free drinks, food and tobacco which the association claims it distributes to the troops, and a motion of censure on the Y.M.C.A. was passed unanimously. As the Y.M.C.A. will be coming back to the Canadian people for further funds if the war continues for another year, it is essential that these misunderstandings be cleared up.

In judging the issue between the Great War Veterans' Association and the Young Men's Christian Association, the public should bear in mind that the growth of the war efforts of the latter association in its present dimensions has occurred within the past two years. Although the Y.M.C.A. has operated overseas from the very beginning of the war, its first activities were severely limited and wholly experimental. It is quite possible, therefore, that members of the G.W.V.A., who served during the early months of the war, did not receive free drinks or food. Last year, however, the cost of free drinks, writing material, free entertainment of all kinds, equipment, athletics, etc., was \$500,000. The cost of operations in England and France were in the same period about \$725,000, and this has since been increased to \$100,000 a month. Prices of articles purchased in Y.M.C.A. canteens are governed by the military authorities and the Y.M.C.A. is not allowed to undersell the regular army canteens. Any profits made in these canteens are absorbed in helping to meet the heavy deficits incurred by the free services already mentioned. Letters received from all of the one-time members of Farm and Dairy staff, who are now serving in France, speak highly of the work of the Y.M.C.A. Several branches of the G.W.V.A. have gone on record as disapproving of the Hamilton resolution. The public may rest assured that no error has been made in providing the means whereby the work of the Red Triangle amongst the soldiers may be continued and extended.

Dry Pastures

COWS in Eastern Canada are now wading, lots of them, knee deep in pasture. Frequent showers are keeping the grass growing and the prospect for pastures this summer seems bright. It is not wise, however, to become too enthusiastic over the outlook as a dry spell later in the summer might upset our calculations. We can remember several seasons when spring pastures promised excellently and the latter part of the season was characterized by severe drouth. It always pays to play safe and be prepared to supplement pastures if necessary.

It is not too late yet to seed a mixture of peas and oats for supplementary feeding, especially if the soil has been well worked earlier in the season and the moisture conserved. The early varieties of corn, if planted now, will make good fall feed; and seed of these early varieties may now be freely imported from the United States, the embargo having been lifted. Greystone turnips for fall feeding may be seeded from now on. Most fortunate of all, however, are the farmers who have a few feet of ensilage in the bottom of their silos reserved for summer feeding, or the more extensive dairyman who has a full summer silo reserved for the purpose. After all, doesn't it seem foolish to bend every effort toward filling our barns and silos for winter feeding, while allowing the cows to go on short rations in mid-summer and fall?

Letters to the

Machinery and Depo

EDITOR Farm and Dairy: In your issue of May 15 you ask the question "Our Folks think of it." I endeavor to explain what it is.

Machinery is beneficial any task that could be done by human labor, or where scarcity of labor, but where abundance of labor, the labor and drive the labor callings that are already lowers the standard of the laborer in every calling, cost must defeat itself, machinery reduces the cost of it at the same time ability of the people to be able at the reduced price, out of work has but little anything, and the more money more idle men I know it is, look at the money employed making the machinery. A number are employed, it is the number so employed factory such as Masssey—compared to the number that chimes displace on the farms—the villages? In proportion to the rural population in Europe and America fast country for the cities?

Of course I do not think making of machinery ever stopped, but I do think that it is the main reason for the of the socialist ideas. As will come what the people to own the machinery on earth. I would say to the if machinery makes a small business estate owners a small holders off the land, become a position, it is a proof of it in Scotland, in the loss of so places where the people driven off to make room farming on a large scale. "I fear that land to hasten grey,

Where wealth accumulates and decay."

—J. Parkin, Waukesha

Farm Drawback

EDITOR, Farm and Dairy: I make me feel very sad the least of it, your remarks from Lord S are as following:

"Farming should be made available by educational and financial and the social conditions of the country so improved that the men with natural inclination, will be attracted to and will succeed at it."

Who is to give us the financial aid? If any man more than another, it is the farmer, if it is the farmer, if he buys a farm, he pays high taxes for his money. The capitalist can loan great amount of money, and not pay taxes on it, but instead, high interest on his money are to be opened and made comes out of the farmer's pocket to be built, it comes farmer, while the moneyed travel and use the railroad, paying a cent, and the doesn't own a foot of land same.

If implements are to be held up by high prices of government-protected machinery, should they be made more than the struggling farmer. As to educational conditions, school equipments are only compared to the city only. Why should they be made more than the struggling farmer. As to educational conditions, school equipments are only compared to the city only. Why should they be made more than the struggling farmer.

Letters to the Editor

Machinery and Depopulation

EDITOR Farm and Dairy: I noticed in your issue of May 23rd that you ask the question: "What do Our Folks think of it," in reference to "The Machinery Age." I will endeavor to explain what I think of it.

Machinery is beneficial to accomplish any task that cannot be done by human labor, or where there is a scarcity of labor, but where there is abundance of labor, to displace that labor and drive the labor into other callings that are already overcrowded, lowers the standard of living of the laborer in every calling, and in the end must defeat itself, for if machinery reduces the cost of production it at the same time reduces the ability of the people to buy the article at the reduced price; for the man out of work has but little to buy of anything, and the more machinery the more idle men I know the old argument is, look at the numbers employed making the machinery. True, a number are so employed, but what is the number so employed, say in a factory such as Massey-Harris, compared to the number that their machines displace on the farms and in the villages? In proof of this, is not the rural population in all parts of Europe and America fast leaving the country for the cities?

Of course I do not think that the making of machinery can ever be stopped, but I do think that machinery is the main reason for the spread of the socialistic ideas. And the time will come when the people will have to own the machinery or get off the earth. I would say to the question, if machinery makes a small class of immense estate owners and drives small holders off the land, it then becomes a positive curse, and there is a proof of it in Scotland at this time, in the loss of soldiers from places where the people have been driven off to make room for sheep farms on a large scale.

"I fear that land to hastening till a prey,
Where wealth accumulates and men decay."

—J. Parkin, Wasing, Ont.

Farm Drawbacks

EDITOR, Farm and Dairy. — It makes me feel very hopeful, to say the least of it, when I read such remarks from Lord Shaughnessy as the following:

"Farming should be made so profitable by educational and financial aid, and the social conditions of rural life should be so improved, that thousands of men with natural inclinations that way, will be attracted to agriculture and will succeed at it."

Who is to give us the financial aid? If any man more than another is financially floored, it is the farmer. For instance, if he buys a farm he has to pay high taxes for his money invested. The capitalist can lose the same amount of money and not pay a cent of taxes on it, but instead, he receives high interest on his money. If roads are to be opened and maintained, it comes out of the farmer. If bridges are to be built, it comes out of the farmer, while the moneyed man can travel and use the railroads without paying a cent, and the man who doesn't own a foot of land can do the same.

If implements are to be bought, we are held up by high prices charged by government-protected manufacturers. Why should they be protected, any more than the struggling farmer?

As to educational conditions, our school equipments are only an apology compared to the city outfits. When children try for the entrance examinations, do the city children come to the country schools and pay train fare and

high board. No, it is vice versa. When the farmer needs an outfit of clothes, etc., can he go with his load of potatoes or hay to the merchant and exchange? No, he is tied up to the speculator or middleman, who takes the lion's share. Talk and write essays on how to keep the boys on the farm! You might as well try to make an impression on the moon by shooting balled peas at it. The boy says, "No thanks—I won't rise at daylight and do necessary chores, milk cows, feed calves and pigs, then follow the plow all the day and do the evening chores after dark," when he sees the city boy dressed up with collar and tie, and who does not need begin work till seven or eight a.m., and stops at 6 p.m. After supper the city boy can enjoy any amusement that goes on, while the country boy says, "I'm too tired to enjoy any sport."

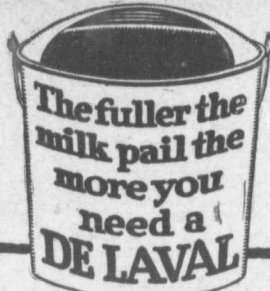
Although I am a farmer and a father of six sons, I don't encourage one of them to become a farmer, but to try with all their might to succeed at a more remunerative occupation. All honor to Lord Shaughnessy for his suggestion to emancipate the farmer's condition. When it materializes, you will not see any more essays entitled, "How to keep the boys on the farm."
—J. M. Munro, Thunder Bay District, Ont.

Mr. Archibald's Figures

EDITOR Farm and Dairy.—In Bulletin 21, Mr. E. S. Archibald, Dominion Animal Husbandman, endeavors to discuss "What Profit per Cow?" and by crediting the manure twice, even by crediting the manure twice, once as "chemical value \$23.50," and again as "humus value \$22.50," or a total for manure of \$46, and \$5 for a calf, making \$51 in addition to the milk products, he is able to show a profit. Crediting the cow with \$45 for her manure is ridiculous. Manure has no market value; its value is problematical. There are hundreds of farmers in the West (and some few in the East) who would not give a sou for the cow's manure. Can Mr. Archibald, or any other dairymen, sell or one ounce of manure for cow feed? Many milk men near the city place no value at all on the manure. Then, again, he has no warranty in crediting the cow with \$5 for the grade calf. If the calf has to be fed on the cow's milk for three weeks, and vealed, there is little profit in the calf. If the calf is given the dam's milk and reared, the cost of the calf is about equal to the value of the milk, perhaps more.

And \$52.21 for cost of feed for a whole year. It is such statements as these issued broadcast that keep down the price of milk and its products. Why, if its costing me 45 to 48 cents a day to feed my dairy cows these last six months, and the ration is not as costly and nourishing as it should be, I feed only nine pounds of mixed meal, but that nine pounds costs 31 cents. The balance is made up in costs of roots and hay. Like all other dairymen, I am, of course, working at a loss in labor income, interest and depreciation. How do dairymen exist in working in this way at a loss? Simply by doing the work themselves for nothing, getting no interest on investment, no depreciation allowances, and by growing most of the feed instead of purchasing it. In many cases our Experimental Farms are doing more harm than good, and this is a case in point.
—J. A. H. Kings Co., P. E. I.

"You don't despise, do you?" asked the physician sternly of the little, worried-looking man who was about to take an examination for life insurance. "You're not a fast liver or anything of that sort, are you?" The little man hesitated a moment, looked a bit frightened and then piped out: "Well, I sometimes chew little gum."



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DE LAVAL
CREAM SEPARATOR
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than ever before

These are the days of the full milk pail.

But if you are trying to get along without any cream separator, or with an inferior or half-worn-out machine, the more milk you get the more cream you lose.

And no farmer can afford to lose even a little cream when butter-fat is selling at from 40 to 50 cents a pound.

With butter-fat at present prices, and our country begging us to stop waste, "cream s/acker" methods of skimming milk must go.

Get a De Laval right away and put all the cream in the cream can.

There is no other cream separator that can compare with the De Laval in clean skimming, capacity, ease of operation, freedom from repairs and durability.

Order your De Laval now and let it begin saving cream for you right away. Remember that a De Laval may be bought for cash or on such liberal terms as to save its own cost. See the local De Laval agent, or, if you don't know him, write to the nearest De Laval office as below.

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PEERLESS PERFECTION

No matter how fast it comes, the most sturdy animal can't break through a Peerless Perfection Farm Fence—it springs back into shape. Made of heavy Open Heart galvanized wire with all the impurities taken out and all the strength and toughness left in. Every wire is estimated making the fence into one continuous spring. Top and bottom wires than ordinary fence. Absolutely guaranteed.

Don't buy a roll of fencing until you get our illustrated Catalog. Describe your big line of farm, poultry and ornamental fencing. Also Fences farm gates. Agencies almost everywhere. Agents wanted in all unassigned territory.

The Barwell-Hoxie Wire Fence Company, Ltd., Hamilton, Ont., Windsor, Man.



To thine own self be true, and it will follow as the night the day, thou can't not then be false to any man.—Shakespeare.

In the Spy Net

By Emel Parker in Farm and Fireside.

(Continued from last week.)

FORTUNATELY she knew that the path which he would take was straight. She ran to it, and could see that he was not within a quarter of a mile of the beach, at least. As soon as the boat was at sufficient distance she went immediately to the spot where the box was buried. Kneeling on the sand, her strong, slender fingers tore at the sand and then—the box.

It was an oblong, water-proof affair of ordinary exterior, but her hands trembled as she flung up its cover. Inside was a folded piece of paper. She drew it out eagerly and her eyes grew large as she read these words, written legibly, in English:

Carnations desire water for feeding sheep. Employ violets assistance with churning. Evict cattle rampart. Though nasturtiums unable. Hereafter,

"Gibberish!" she said aloud. Then suddenly she knew. "It's a code message!"

She had not thought what she should do with the contents of the box after she had seen them, but now she saw what her course must be.

By good fortune she had in her pocket a notebook and pencil which she had taken to the cottage in order to make a memorandum of necessary repairs. Still crouched in the sand she copied word for word the mysterious message. She put the box back into place, covered it carefully, and concealed her own footsteps as she retreated.

As soon as she reached her own room she rang for Liza. Having recounted the story of the old woman's granddaughter, Eugenia looked her servant squarely in the eyes.

"Liza, will you do something for me—just exactly as I tell you to?"

"Deed I will, Miss 'Gena. Reckon I'd do most anything in all the world for you."

"This is a strange thing to ask you to do, and you are to say nothing about it to another soul. No one is to know a word about it excepting you and I, not even Sam."

"Deed I don't tell that nigger everything," said the old woman, with a chuckle.

"You know that red leather book that Mr. Stackpole always carries in his coat pocket?"

"Deed I do. I reckon that's the book what's got his black magic in it. He seems to set a powerful store by that red book."

"Yes, that's the one I mean; only, of course, it hasn't black magic now, Liza, listen carefully. He doesn't keep that book in his pocket in the evening because he has no pocket in his dinner coat large enough to hold it. Therefore he probably leaves it in his day coat. Now, when we are at dinner I want you to get that book, take it into the pantry, and then call me out from the dining-room. Do you understand?"

"Yes'm, I understand 'ractly," she

repeated Eugenia's instructions accurately.

When Eugenia entered the dining-room a few minutes later she saw Stackpole standing in front of the open fire.

"It's comforting, isn't it?" he said, nodding toward the bright blaze. "But it is sad too. It reminds me so forcibly that summer is almost over, that nothing can last. Eugenia, I am sad



An Attractively Situated Farm Home.

On the brow of a hill commanding a good view, stands the attractive farm home of Mr. Wm. Fraser, Huron Co., Ont. As will be noted this house is constructed of cement, and is quite pleasing to the eye.

to-night. The thought of going away from here tears at my heart."

"You are going away?"

"I must."

"When? I thought you had promised Aunt Sarah to stay for a month."

"It is impossible. I do not know just when I shall go, but I think it must be soon. I am quite well now, thanks to your wonderful hospitality; and, besides, I have matters which demand my attention."

When Liza came in with the bag she gave her mistress a knowing wink.

"Scuse me, Miss 'Gena, but someone's out there and wants to see you mighty bad. I said you was at your dinner, but it didn't seem to make no difference what I said."

"That's all right. I'll go and see who it is. You'll excuse me?"

Stackpole rose as she rose, and she hoped that he could not see the trembling of her knees beneath the soft folds of her amber-colored gown.

When they were safe in the remote pantry, Liza whispered in great excitement:

"I see 'ot you, Miss 'Gena. Here it is."

With a proud flourish the old woman took from the ample pocket of her black skirt the red leather book. Eugenia's hand shook as she reached for it.

"Now you must serve the rest of the dinner," she said. "I'll tell you

know when I've finished with this, so that you can take it back again where you got it."

Liza looked as if she were reluctant to leave before the container of "black magic" had even been opened, but she obeyed at once.

Eugenia hastily turned the pages of the book. Her face whitened as she perceived that in it she really had found the key to the mysterious message. She withdrew from the bodice of her gown the small notebook in which she had written in the afternoon, and jotted down from the leather book the equivalent for each word of the message.

Before returning to her guest, Eugenia rubbed her cheeks vigorously with her fingers, and endeavored to assume a smile. Fortunately the room was lighted only by an open fire and shaded candles, so that she was sure he could read nothing from her face.

When they were settled in Miss Burr's room, Eugenia examined herself and went quickly into her own room and wrote the words which were to bring her affairs to a crisis, and which were vitally to affect her life and that of Carl Stackpole.

When at last she affixed her signature she felt as if she had signed away all of her youth, her chances for happiness, and her love.

one letter like this in the last six months we've got five hundred. Get on my nerves. Now the chief's gone I have to open all his mail."

"Let's see the letter."

"Help yourself."

After a moment Demling spoke.

"Well, you know I think there's something in this letter," he said.

Slater groaned.

"My son, my son!" he said.

"Well, do," Demling reassured. "I think this woman has got hold of something. She doesn't get hold of one of those hysterical women—sounds pretty sensible. Secondly, Slater, that secluded part of the Georgia coast where she lives would be a pretty likely hiding place for anyone interested in our naval secrets."

"Go on," said Slater. "You certainly are a bright boy."

"It's all right for you to laugh, but we know that there's something doing down there. Take the case of this destroyer, the *Stephens*. I notice the Navy Department lost no time in publishing the fact that the ship's fool letter about the mysterious way she has been wrecked—that letter—that some of the Southern papers got hold of and published."

He looked down again at the letter which he held in his hands. "Great Scott, her name is *Stepham*!"

"Sure it is. That's where you got the idea."

"It's not. I think she's got hold of something real."

"Well, what are you going to do—send her a policeman's badge and tell her to arrest the man?"

Demling's round cheeks grew pinker.

"I'd like to give it the once-over, anyway," he said.

"What! Go way down there on this wild-goose chase? I don't see how you could do that even if you wanted to. We don't even know where the chief is—you couldn't very well ask him."

"No, but I can take my vacation and go down on my own hook; and that's what I'm going to do." He looked anxiously at the telephone instrument on the desk. "I had planned to take Mr. D. to Atlantic City, and I'm afraid she won't like it. Suppose you just call her up, Slater, and tell her I was suddenly called out of town on important business."

"Well, personally I think you're crazy," Slater commented cheerfully. Then he added, with the arrogance of an inferior temporarily in a position of authority: "But don't forget that you said that you were going to do this on your own hook. Understand, the Department takes no responsibility."

"I understand," replied Demling. "Just don't forget to telephone Mrs. D."

On the evening after Eugenia had responded to a few notes to the village man by her letter she remained so long in her own room that her aunt finally sent Liza in to ask if she were ill.

This brought Eugenia back to the present with a painful jerk. She had determined upon her course of action in the future, but the present, with its undramatic round of meals and conversation, seemed even harder to bear than the definite crisis she knew was imminent.

She went into her aunt's room with an apology upon her lips, and with leaden sorrow in her heart. It was agony for her to look at Carl Stackpole, for as their moments together grew fewer and fewer he grew more and more dear to her. She bent her head over her knitting, pretending to be absorbed in it.

Aunt Sarah went on and on with her reminiscences, apparently interpreting her editor's silence as interest.

At last the man rose to say good night, and Eugenia, waiting only until he had gone down-stairs, prepared to leave.

(Continued next week.)

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Farm and Dairy, Peterboro, Ont.

The Upward Look

That You May Bear Much Fruit

"He that abideth in me, and I in him, the same bringeth forth much fruit. Herein is my Father glorified, that ye bear much fruit."—John xv. 5, 8.

We all know what fruit is. The produce of the branch, by which we are refreshed and nourished. The fruit is not for the branch, but for those who come to car it away. As soon as the fruit is ripe, the branch gives it off, to commence afresh its work of beneficence, and anew prepare its fruit for another season. A fruit-bearing tree lives not for itself, but wholly for those to whom its fruit brings refreshment and life. And so the branch exists only and entirely for the sake of the fruit. To make glad the heart of the husbandman is its object, its safety, and its glory. Learn, then, if thou wouldest bless others, to abide in Christ, and that if thou dost abide, thou shalt surely bless. As surely as the branch abiding in a fruitful vine bears fruit, so surely you, much more sure, will a soul abiding in Christ with His fulness of blessing be made a blessing.

The reason of this is easily understood. If Christ, the heavenly Vine, has taken the believer as a branch, then He has pledged Himself, in the very nature of things, to supply the sap and spirit, and nourishment to make it bring forth fruit. "From Me is thy fruit found;" these words derive new meaning from our parable. The soil need not have one care.—to abide closely, fully, wholly. He will give the fruit. He works all that is needed to make the believer a blessing.

Abiding in Him, you receive of His Spirit of love and compassion towards sinners, making you desirous to seek their good. By nature the heart is full of selfishness. Even in the believer, his own salvation and happiness are often too much his only object. But abiding in Jesus, you come into contact with His infinite love; its fire begins to burn within your heart; you see the beauty of love; you learn to look upon loving and serving and saving your fellow-men as the highest privilege a disciple of Jesus can have.

The desire to be a blessing is but the beginning. As you undertake to work, you speedily become conscious of your own weakness and the difficulties in your way. Souls are not saved at your bidding. You are ready to be discouraged, and to relax your efforts. But abiding in Christ, you receive new courage and strength for the work. Believing what Christ teaches, that it is He who through you will give His blessing to the world, you understand that you are not the feeble instrument through which the hidden power of Christ does its work. That His strength may be perfected and made glorious in your weakness. It is a great privilege the believer fully consents to his own weakness, and the abiding consciousness of it, and so works faithfully on, fully assured that His Lord is working through Him. He rejoices that the excellence of the power is of God, and not of us. Realizing his oneness with His Lord, he considers no longer his own weakness, but counts on the power of Him of whose living-creating within he is assured. It is this secret assurance that gives a brightness to his look, and a gentle firmness to his tone, and a perseverance to all his efforts, which of themselves are great means of influencing those he is seeking to win.

The great secret of abiding in Christ is the deep conviction that we are nothing, and He is everything. As this is learnt, it no longer seems strange to believe that our weakness need be no hindrance to His saving power. The believer who yields himself wholly up to Christ for service in the spirit of a

simple, childlike trust, will assuredly bring forth much fruit. He will not fear even to claim his share in the wonderful promise: "He that believeth on me, the works that I do shall he do also; and greater works than these shall he do, because I go to the Father." He no longer thinks that He cannot have a blessing, and must be kept unfruitful, that he may be kept humble. He sees that the most heavily laden branches bow to the lowest down. Abiding in Christ, he has yielded assent to the blessed agreement between the Vine and the branches, that of the fruit all the glory shall be to the Husbandman, the blessed Father.

Let us learn two reasons. If we are abiding in Jesus, let us begin to work. Let us first seek to influence those around us in daily life. Let us accept distinctly and joyfully our holy calling, that we are even now to live as the servants of the love of Jesus to our fellow-men. We are all to have for its object the making of an impression favorable to Jesus. When you look at the branch, you see at once the likeness to the Vine. We must live so that something of the holiness and the gentleness of Jesus may shine out in us. We must live with Him when on earth, the life must prepare the way for the teaching. What the Church and the world both need is this: men and women full of the Holy Ghost and of love, who, as the living embodiments of the grace and power of Christ, witness for Him, and for His power on behalf of those who believe in Him.

In Christ, let us work. Let us work, not like those who are content if they now follow the fashion, and take some share in religious work. No; let us work as those who are growing liker to Christ, because they are abiding in Him, and who, like Him, count the work of winning souls to the Father the very joy and glory of heaven begun on earth.

And the second reason is: If you work, abide in Christ. This is one of the blessings of work. If done in the right spirit—it will deepen, your union with your blessed Lord. It will discover your weakness, and throw you back on His strength. It will stir you to much prayer, and in prayer for others is the time when the soul, forgetful of itself, unconsciously grows deeper into Christ. It will make clearer to you the true nature of branch-life; its absolute dependence, and at the same time its glorious sufficiency,—independent of all else, because dependent on Jesus. Let a living faith in Christ working in you be the secret spring of all your work; this will inspire at once humility and courage. If Jesus Christ is really to work through us, it needs an entire consecration of ourselves to Him, daily renewed. But we understand now, just this is abiding in Him; just this it is that constitutes our highest privilege and happiness. To be a branch bearing much fruit,—nothing less, nothing more,—be this our only joy.

Note.—A selection from Rev. Andrew Murray's book, "Abide in Christ," a copy of which may be secured through Farm and Dairy by any of our readers for 6c cents.

Pleasure in Work

It is not the opportunity to do just what we like that makes life successful, but the resolve will to like what we have to do and get out of it the best that is possible. There have been wondrously beautiful lives made out of seemingly poor material; they are being made all the time and all around us. The good fortune of being able to do as we please is nothing compared to being able to find pleasure in what we have to do.

One of the most important things in the lives of boys and girls is the regular church services,—providing the minister remembers they are there.

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A FORTUNE IN POULTRY

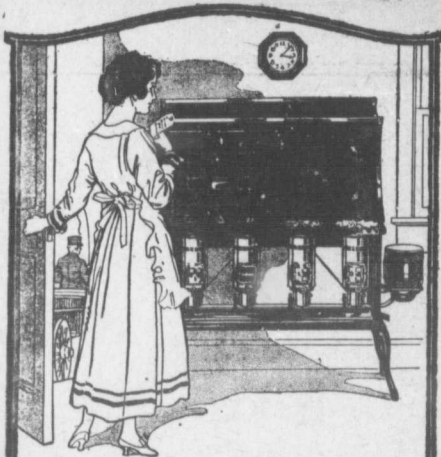
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Circulation Department FARM and DAIRY Peterboro, Ont.

HOME CLUB

One of the Girls Replies

SEVERAL weeks have passed since Sam Ray voted his complaint in the Home Club about the girls leaving the farms. So far the only response has been from one who signed himself "A Bachelor." Of course he sides with Sam Ray.

To be brief, the reason I went to the city was this: I had to earn my own living and the best I could do in the country was as a hired girl at \$10 per month. I decided to try a new profession and entered a hospital in one of the large cities in the United States, living there four years, doing private nursing after I graduated.

"A Bachelor" states that the girl he called on in Toronto was embarrassed because he was a farmer. I often wished that some of the farmers from home, even to Alphonse the hired man, would call. I am sure that there would not have been any embarrassment on my part. Personally I prefer a farmer to a city man any day; the majority of the latter possess too much self-confidence to suit me. I have never been ashamed that I was a farmer's daughter and I hope when "Mr. Right" appears he will be a farmer.

In conclusion I wish to thank the city for the opportunities it has given me. I think I am better fitted to be a farmer's wife and mother of his children because of my city experience.

I would like to see letters from some of the other girls on this subject and trust that "Sam Ray" and "A Bachelor," will soon be caught in Cupid's chains.—P.L.

Give Boys and Girls a Chance

IT is now the time when we have our house-cleaning nearly done and we begin to "let the sun in."

But, oh my, I am afraid we are chasing Sam Ray around considerably. To begin with, he has acknowledged that he is a bachelor. "That a pity!" It must be that the "one" he did fancy went off to the city. Did you read "The Heart of the Desert," Sam Ray? If so, to be honest, aren't you glad you were not in John De Witt's shoes? Or perhaps you thought Rhoda wouldn't make a very good farmer's wife.

Why the girls leave the farm is a question which may be answered in many ways. For example, why don't all our ministers' sons be clergymen, our doctors' sons physicians, etc.? Oh, it wouldn't do at all. The farmers and their sons would be in a class by themselves, and there would be plenty of farmers, which would certainly be a delight when help is scarce. But in every case we find farmers' sons who are smart enough to go into college, and taking degrees, and filling positions where doctors' or clergymen's sons have failed. Why? That will always be the question. In one of our colleges, in a class of 500, only 40 boys had money to back them. The remainder were farmers' sons and boys who were working their way through. When you read some eloquent speech made by "Birt" somebody, you may recall the time you went to school with him, both of you being barefooted. Great oaks from tiny acorns grow. "Every dog has his day." Let the boys and girls of the farmers have a chance to try something else if they want to do so. If it does not appeal to them they will be back on the farm.

I suppose I must not be too hard on Sam Ray, or readers will think the Home Club is not a very quiet circle. Cheer up, Sam Ray, you have a friend in "A Bachelor" to take your part. Over 120 girls are being sent to the farms this summer, so you may have an opportunity yet to make a

choice. I would like to hear from Sam Ray or other Home Club members regarding their opinion on this, helping with the outside work on the farm.—"Cousin Elsie."

Remuneration a Big Factor

I HAVE been watching for word from the girls concerned in Sam Ray's recent contribution to the Home Club, entitled "Whither Away?" I expected Sam Ray would have a dejection to answer his query as to why girls leave the farm. Surely the girls ought to be able to give us the desired information first-hand without any "I think" from us, who have not had experience for ourselves.

From observation, and putting myself in the average girl's place, I think that the prime reason for the first stage of discontent is insufficient remuneration. Speaking of the "middle" class, not the wealthy, you know, I do not believe there is one girl in a dozen who has a regular allowance handed her. And what girl with any spirit wants to go and ask dad or mother for every nickel she wants to spend? I often think that this money question is also the cause of a great deal of discontent among farmers' wives as well as their daughters. Of course this is only a "think" of mine, and if I am altogether wrong I do not want to be misjudged, because I have not my information first hand.

For myself, since I was 15 years of age I have earned my own spending money—and don't you think it would ever be an easy task for me to ask for a single dime after once tasting the joy of having my own spending money. I've seen farmers and their wives on their "day to town," and in about nine cases out of every ten or eleven, the wife carries the money and wife has to ask him for money, even if it's only a hair net she wants. Well, I'd want a hair net "awful" bad before it would come to me to ask for a single dime.

The women and girls on farms surely work hard enough to have a little money all their own that they can spend without questioning. Goodness knows, why carrying the money and wife has to ask him for money, even if it's only a hair net she wants. Well, I'd want a hair net "awful" bad before it would come to me to ask for a single dime after once tasting the joy of having my own spending money. I've seen farmers and their wives on their "day to town," and in about nine cases out of every ten or eleven, the wife carries the money and wife has to ask him for money, even if it's only a hair net she wants. Well, I'd want a hair net "awful" bad before it would come to me to ask for a single dime after once tasting the joy of having my own spending money. I've seen farmers and their wives on their "day to town," and in about nine cases out of every ten or eleven, the wife carries the money and wife has to ask him for money, even if it's only a hair net she wants. Well, I'd want a hair net "awful" bad before it would come to me to ask for a single dime after once tasting the joy of having my own spending money.

There! I don't know if that will touch the spot or not, but I do know that for myself I just could not bring myself to asking for every copper. It's humiliating, especially if you've ever earned money for yourself, and it does make me weary to see the farmer shake the money out of his pocket for "Birt" somebody, you know his purchases. I always feel "blazing mad" when I see it for it looks like he just can't trust her with his precious money, or is so stingy it just naturally sticks to him. If I were a farmer's wife who had to say right in front of a clerk, "John I got a pair of stockings for baby—they cost 25 cents," well, I'd just writ on the job, that's all—and I'd look as cross as I felt, too. If the farmer could see himself as others see him, he would give his wife a little money before leaving home. Now, I'm getting warmed up on the subject, so I'd better call a halt.—"Just Me."

Young People's Fun

Conducted by Marion Dall

A Rose Shower

WHAT so rare as a day in June? These it ever comes perturbed.

We instinctively think above lines during this month wonder girls choose June for wedding month. Nature is so full with the bright greens and colorings, one involuntarily grows and happiness. Surely it would object to a "Rose." They may be given for the 1st for some invalid or "shut-in" celebrate an anniversary. They have to do so to set the date, hour, invite your friends to do for a simple cup of tea, but with them roses, few or many all try to forget, or how they are some sort of roses before the end of the month.

To Literally Shower the Bride. Have a large ball made covered with moss and filled with petals, suspended in the room. It is made in halves. The halves are being said, and the doorway a ribbon which separates the halves. This releases the petals which upon the young bride is leaving the realm of single-ness for the now and unknown. This scattering of rose leaves, path of the bride is a very fun.

Rose Luncheon Contest. A hostess who wished to bride-elect gave this pretty affair centerpiece was of-bridge's table. Each guest had a rose at her feet, she sometimes talk personal things best untold, a hair net was suspended over the dinner. Of course every one asked and the hostess expressed a rose is the Greek emblem of and in olden days it was placed on the table when guests were seated, in token that what was around the table was to be preserved. That is where we get the phrase "Sub rosa." After the hostess gave out cards of good wishes the following questions answers being the name of the rose:

Rose Contest.

1. What rose is never seen on a tree? Moss rose.
 2. What rose blooms in the cheek? Maiden's blush.
 3. What rose can you drink from? Rose.
 4. What is the aspirin of flowers? White rose.
 5. What is the wanderer of flowers? Rambler.
 6. What rose is like a poplar? Red.
 7. What rose would you avoid who burn your fingers? Black rose.
 8. Which rose is the prince of weddings? Bride rose.
 9. Which rose is the voice of the sea? Beach rose.
 10. Which two roses were the best? Red rose and white rose.
 11. Which rose should a lover? American beauty.
 12. Which rose bears the name of a famous person? Blush rose.
 13. Which rose is a perfume rose.
 14. Which rose is a beautiful? Damask rose.
 15. Which rose bears the name of a country? La France rose.
- A Miscellaneous Show. The hostess in this case had several yards of cheesecloth taweling, bits of lace or ribbon, buttons, and old hair brushes, etc. She asked the girls to bring in some of these and about two dozen girls came for a "Sewing contest" all had arrived they were given choices of materials, and told that as articles to be given to the

Young People's Forum
Conducted by Marion Dallas.

A Rose Shower

WHAT so rare as a day in June? Then it ever come perfect days.

We instinctively think of the above lines during this month. No wonder girls choose June for their wedding month. Nature is so beautiful with the bright greens and delicate colorings one involuntarily thinks of roses and happiness. Surely no one would object to a "Rose Shower." They may be given for the bride, or for some invalid or "shut-in," or to celebrate an anniversary. All you have to do is to set the date and hour, invite your friends to "drop in" for a simple cup of tea, but to bring with them roses, few or many. Let us all try to forget our gloom and have some sort of a "rose shower" before the end of the month.

To Literally Shower the Bride. Have a large ball made of wire, covered with moss and filled with rose petals, suspended in a doorway. The ball is made in halves. When farewells are being said, the hostess pulls a ribbon which separates the two halves. This releases the petals which fall upon the young woman who is leaving the realm of single blessedness for the new and unknown path. The scattering of rose leaves on the path of the bride is a very old custom.

Rose Luncheon Contest.

A hostess who wished to honor a bride-elect gave this pretty affair. The centerpiece was of-bridal roses and each guest had a rose at her place. As girls sometimes talk personalities and tell things best untold, a huge rose was suspended over the dining table. Of course every one asked "Why?" and the hostess explained that the rose is the Greek emblem of secrecy and in olden days it was placed over the table when guests were entertained, in token that what was heard around the table was not to be repeated. That is where we got the expression "Sub rosa." After luncheon the hostess gave out cards on which were written the following questions, the answers being the name of a rose:

Rose Contest.

1. What rose is never seen on a rolling stone? Moss rose.
2. What rose blooms in a girl's cheek? Maiden's blush.
3. What rose can you drink? Tea rose.
4. What is the aspiring rose? Climber.
5. What is the wandering rose? Rambler.
6. What rose is like a popular book? Red.
7. What rose would you mention should you burn your finger? Yellow.
8. Which rose is the principal feature of weddings? Bride rose.
9. Which rose is the vegetable? Cobane.
10. Which two roses were famed in history? Red rose and white rose.
11. Which rose should Americans honor? American beauty.
12. Which rose bears the name of a spice? Cinnamon.
13. Which rose is a perfume? Musk rose.
14. Which rose is a beautiful linen? Damask rose.
15. Which rose bears the name of a country? La France rose.

A Miscellaneous Shower.

The hostess in this case had provided several yards of cheesecloth and tea toweling, bits of lace and insertions material for bags, straps for holders, etc. She asked the bride-to-be and about two dozen girl friends to come for a "Sewing contest." When all had arrived they were given their shares of material and told to make an article to be given to the guest of

honor. The invitations said "Bring your thimbles," (but what girl goes anywhere nowadays without either thimble or a fitting needles). A most happy afternoon was spent and the bride carried home many pretty little souvenirs of the good will and wishes of her girl friends.

Wedding Anniversaries.

Some of our readers have asked the question, "What are the wedding anniversaries." I recall this old rhyme which is capable of attaching itself to the memory like the immortal "Thirty days hath September," etc., of our school days:

Gifts of paper, choice, not dear,
Mark the bride's and groom's first year.

Five years brings substantial wood—
Type of wedlock strong and good.
Ten years homely gifts bring in
Wares of shining useful tin.

When the years have reached a score,
China will be prized the more.

Silver if the couple thrive,
Tells the years are twenty-five.
Half a hundred, slowly told
Brings the wedding day of gold.
So few live to see arrive
That diamond date at seventy-five,
But custom says threescore may be
The diamond anniversary.

School Closing.

There is another class of young people very happy in June, especially in the latter part of the month. Need-

Home Wanted

In recent issues of Farm and Dairy have appeared announcements in connection with children for whom homes were desired. This week we have been advised of another child looking for a good home. This time it is a little baby boy one month old. This baby is of good parentage and healthy parents, and a Protestant home is desired for him. Anyone who wishes to secure further information concerning this baby boy may do so by writing Dr. D. C. King, 290 Charlotte St., Peterboro, Ont.

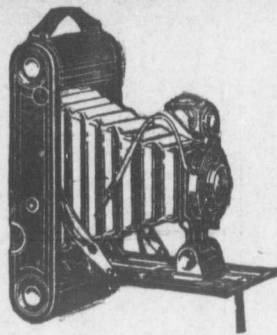
less to say it is the school children. Previous to the closing, however, there is always a good deal of anxiety regarding the form to be closing will take. Recently I came across a list of patriotic plays and drill which require very little preparation. These might be of some assistance to the teacher who is perplexed.

1. Miss Canada's Reception. 15 take part.
2. The Wooling of Miss Canada. 25 or 30 take part.
3. Britannia. For 19 players.
4. Canada Our Homeland. For 12 boys and girls.
5. We'll fight for the Grand Old Flag. Arranged for 16 or 24 girls.
6. Saluting the Canadian Flag. Arranged for about 25 or more.
7. Rule Britannia. A drill calling for 8 little girls.

A Canada Party.

This is a very simple little affair which the teacher in a small school might use. Decorate the room as far as possible with Union Jacks and red, white and blue bunting or cheesecloth. The decorations are worth while for the pupils. The idea of the party is to see how many of the pupils will be able to recognize the provinces of the Dominion by their shape. To prepare the nameless maps, put a piece of carbon over the large school map and take off the impression. Paste this on light weight card board and cut out. Give each pupil ten minutes trial, then see who has correctly named the most.

Note.—If any of our folks wish to secure some of the drills mentioned above, we can supply them with the information necessary to secure same.



2^c Kodak Jr.

The pictures are of the pleasing panel shape, giving the high, narrow proportions that are so well suited to portraits—and when the camera is held horizontally, for landscapes and the like, it gives a long, narrow picture that is almost panoramic in effect.

And this long, narrow picture makes possible a thin, slim camera that fits the pocket—a detail that is often important, and always convenient.

The 2^c Jr. loads for ten exposures, is fully-equipped for hand or tripod work. For snap-shots the shutter has speeds of 1-25, 1-50 and 1-100 of a second, and it has, of course, the usual "time exposure" releases. Well made and well finished in every detail—autographic, of course. All folding Kodaks now provide for autographically dating and titling each negative at the time of exposure.

The lenses are the best of their respective types, are adapted to this particular camera and each one is *individually tested*.

THE PRICE

- No. 22 Autographic Kodak, Jr., with meniscus achromatic lens \$15.50
- Do., with Rapid Rectilinear lens 17.50
- Do., with Kodak Anastigmat, f.7.7 lens 28.50

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CANADIAN KODAK CO., Limited

TORONTO, CANADA



BRINGING IN THE CASH

One way to do this is to increase your output by better methods of production—another is to conserve the feeding stuffs you now produce, making them go farther by carefully balancing the feeds. Study out this problem now. The one best book of which we know on this subject is "DAIRY FARMING," by Eckles & Warren. You can secure it from our Book Department. The price is but \$1.50, neatly bound in linen.

Book Dept. **FARM and DAIRY** Peterboro

A Women's Section of the U.F.O. Proposed

Farm Women Meet in Toronto—Keen for Organization on U.F.O. Lines



Save Precious Moments

In Haying Time

by using a PETER HAMILTON MOWER. Its great strength, absence of side draft, clean cutting and ease of handling enables you to cut sure and quickly the heaviest crops you grow.

An extremely flexible cutter bar guarantees smooth and close cutting under all conditions.

The wheels are high and wide apart making the draft very light, the frame is strong and all bearings are in perfect alignment and fitted with renewable boxes or roller bearings.

Write now and save time and worry in getting your crops cut.

The Peter Hamilton Company, Limited
Peterborough Ontario

CREAM WANTED

For better service and higher market prices, ship your cream to us. Cans supplied free. Watch this space for prices. Our price next week 46c per lb. fat. A card brings particulars.

MUTUAL DAIRY AND CREAMERY CO.
743 King St., W. Toronto

PUZZLE ?

Does the problem of feeding your stock for a few cents more cause you any doubt? If so, most convenient for you, when in doubt, to have a handy book on all feed problems relating to all kinds of farm stock, to which you could turn and settle the problem in a way that would be economical, satisfactory and practical? We can suggest you get such a book in "FEBUS AND FEEDING" by W. A. Henry, a hand-book for the student and stockman.

You can better your system of feeding with this book and the results of its advice will be evident in your saving of feed. NOW is the time to get this highly recommended book and begin studying it.

The price is only 25c. We will send it postpaid—this well-bound, 626 page volume on "FEBUS AND FEEDING".

Don't miss this opportunity.
Book Department
Farm and Dairy, Peterboro, Ont.

At the recent farmers' convention held in Toronto, several delegates urged that something should be done to lead the women to take a greater interest in the work of the U.F.O. As a result, it was arranged that a meeting of farm women should be held in Toronto on Monday of this week, at which Mrs. McNaughton, secretary of the Women's Section of the Ontario Grains Growers' Association, should be present to impart information concerning organization work. Although the gathering at this meeting was not large, there being between 15 and 20 present, what was lacking in numbers was more than made up by enthusiasm and the practical way in which the big problems of the farm were discussed.

Mrs. McNaughton explained the movement which the Women's Section of the S.G.G.A. is carrying out through their organization work, the opposition which they had to overcome and the power which the organized women of the province are having in dealing with the tremendous problems of the farm to-day. She also joined in the discussion afterwards and offered a great many practical suggestions for the organizing of a women's section of the United Farmers of Ontario.

Before the meeting was thrown open for discussion, Mr. W. L. Smith, of Orono, also spoke very earnestly, and in a broadminded way of the need of organization from a national standpoint.

The Need for Organization.

In opening the discussion Miss Griesbach, of Collingwood said: "We must have unity, provincial unity to get this is to get into touch with the organization which now exists. Every lady present is an enthusiastic believer of the U.F.O., and if we can work together in the various provinces to take that attitude and to follow along, there is hope for making the rural population a great big force. And if it isn't going to be a great big force, I don't want to have anything to do with it. I value my time and energy too much. I want to make everything sell. The rural movement is the biggest point in the country at the present time, and we have to make it a force with the Government. That force has to be exerted for our own uplift and for the uplift of every man, woman and child of the country. Our platform is big enough for anybody as long as they work along those lines."

Mrs. Brodie, of Newmarket, who was one of the women present at the conference of farm women held in Ottawa some time ago, said that the people of Ontario had an idea that the East and the West were different. "We had a Western woman and an Eastern woman on our Board of Agriculture at that conference," she said, "and when we had a committee meeting we were unanimous in everything. The only person who took exception to our report was a town woman. I told the delegates that conference that I thought farm women had a perfect right to have their own opinions. Our only trouble as farm women has been that we have overlooked the town and city women to talk for us too long. I am out to uphold the principles of the farm in every particular. We have to get up an inkling for ourselves. What is good for the West is good for the East."

"We have women in our U.F.O. branch at Newmarket," continued Mrs. Brodie, "and when they started to open to the town and city women was doubted. The men in the country are different to the men in town. Farmers do like to have their wives with them at a meeting. In speaking of organizing a women's section of the U.F.O. Mrs. Brodie said that she did not approve of a separate organization to start with. In her opinion it would be better to work

the women into the U.F.O. local in a social way at first. "In our club the women look after the social part, such as preparing programmes. Our own young people give the programmes. We simply will not have town talent come out and get nothing for us. We want to develop the farm boys and girls. I am very anxious to see this movement go forward."

Mrs. Meade, secretary of the United Farmers of Ontario, who was chairman of the meeting, pointed out the necessity of organization of rural communities to the fullest extent, when he stated that the farm population of Canada has fallen off 18 per cent. in 30 years, and that the urban population in the same length of time has increased 135 per cent. "It is impossible for any country to stand under that condition," said Mr. Morrison. "These conditions must be changed and you are the ladies who can change them." We could not have had these conventions in Ottawa and Toronto if we had not had the U.F.O., because we would not have had any centres. The U.F.O. was thrown open for the expression of opinion of our rural people."

Mrs. Meade, of Blenheim, in Kent County, expressed the opinion that there were a number of men who attended the conventions in Ottawa and Toronto from selfish motives, and that the women of Ontario did not want to enter into anything of that sort. "I want to go back to my county," she said, "and tell the people that we are going to fight this thing squarely, and even supply the men if necessary. But when food is so badly needed we want to feel that we are having a square deal. I believe that the Government started in the wrong way—that we should have had conscription from the start. Instead of that a great many of our boys enlisted from the farms and now the draft is taking the only one that is left." Mrs. Meade was very anxious to see something done which would put more power into the hands of the rural communities.

Women Must Organize.

Mrs. G. Webster, of Newmarket, in Victoria County, spoke at some length of the "wall of indifference" as she termed it, between the town and country people. Town and city people are of the opinion that farmers are getting rich at the expense of the consumer. As an example of this confirmed belief of the majority of town people, Mrs. Webster related some of her experiences at the recent annual meeting of the Women's Institutes and Boards of Agriculture of East and West Victoria County. During the meeting the Mayor of Lindsay and Mrs. Webster had quite a lively argument regarding the prices being received by farmers, Mrs. Webster pointing out especially that while it is the general impression among consumers that farmers are getting rich out of pork, in reality it costs 23 cents a lb. or good feed for a hog until it is of marketable age, to say nothing of skim-milk, feeding the mother pig, labor, etc. Mrs. Webster is of the opinion that this misunderstanding between consumers and producers cannot be overcome until rural communities are thoroughly organized.

"In thinking over the subject of organizing the U.F.O.," said Mrs. Webster, "I cannot help to feel that we must organize if we are going to do our part. The men are more interested when the women are working. Our work has made great progress through the Women's Institute. While the Institute has done us a world of good, it is governed by the Department of Agriculture. When

it comes to organizing with something that is outside of the Women's Institute, let us organize for the betterment of farmers and the uplift of the rural community."

Miss Currie, of Springville, in Wellington County, pointing out the discussion most enthusiastically by saying that she could not remain silent as she appreciated what had been said very much, said: "Mrs. Brodie has said that what thousands of us feel through out Ontario," said Mrs. Currie. "I have been in the Women's Institute for a number of years, and I think that it has brought the women together to help home problems in a splendid manner. We could not have done all the patriotic work which we have, had it not been for our institutes. I had not attended a Women's Institute convention for four years until last fall. At that convention I could feel the desire for expression along certain lines which was not allowed. I would not want to have anything to do with this new organization if partisanship had been a factor to crop up. I think that we women have been given the right. We must study the problems of the day and not be carried away by party, graft, etc. We cannot do enough for the boys overseas. The U.F.O. and the farmers are willing to sacrifice to the last man if need be, but it is necessary. I have been told that about 50 per cent. of the farmers reported at Ottawa have sons at the front, so they cannot be called up readily. It's the greatest good to the greatest number that we are after."

"In regard to the viewpoint of the city people regarding the farmer, I have a great many friends in the city and I never miss an opportunity to stick up for the farmer. Some city people think if a farmer has too much money, he is making too much money. The men think the U.F.O. is a good thing, but the opinion is that way, and the organization is going to go forward."

A representative from Halton County, remarked that she did not believe it was the opinion of the women as a whole on the question of organizing a women's section of the U.F.O. "I need only refer you to Mr. Morrison, of Peterborough, who has been running after him for a long time trying to be a U.F.O. woman."

Considerable discussion took place concerning the difficulty of reaching women, and getting women organized who lived in some of the outlying districts of the various counties. Several of the women expressed the opinion that the best way in which these people could be reached was by getting a farm paper into their hands dealing with U.F.O. work.

One of the women who showed a great deal of interest in the organization was Mrs. Sheehan, of Simcoe County. She had come to the meeting on her own responsibility, as she considered Mrs. Webster and the other women interested, and advised some of those present who would undertake to go to her community and address a meeting, she would entertain them to the best of her ability. Arrangements were made for two of the ladies present to visit Mrs. Sheehan's district in the near future.

Mrs. McNaughton pointed out that in connection with the women's section of the S.G.G.A., the thing that they were most proud of was that they started their organization with but one object in view, to say nothing of the best possible way. "We started with great distances and low finances," she said, "and we sometimes had to do drastic things. Where finances are limited, great distances are great, yet must have the utmost faith, because your executive may have to do things about which they will not have an opinion. You must feel that this spirit is the reason of our success to-day."

No interference with Women's Institutes.

All who took part in the discussion were very anxious that if a women's section of the U.F.O. were organized

(Continued on page 23.)

Rail Fences for Wire

NEVER before in the memory of living men has fuel been so scarce as in recent months. The prices everywhere offer the eager buyers given many farm a chance to cut in on the profit and men are making. In fact, with enough enterprise could through Canada and clean up a fortune by offering to trade wire fences for hundreds of cords of wood and wood fences that did the landscape, on every hand. However, he could afford to pay labor to haul the rails, log skidders to the freight stations to erect the wire fencing.

Here is presented to the farmers of many sections a splendid opportunity to get rid of unsightly, cluttered and uneconomical wood fences at a profit far in excess of



A Rail Fence Nowadays is Worth in Dollars and Cents than Was

the cost of the best kind of fence designed. "The wire undoubtedly will wait until the prices for lumber dropped to the old figures, but seize the chance to increase the value of his farm, to extend his acreage and planting over every bit of land and to protect his fruit crops and his stock as the not be protected by clumsy fences."

I am not going to explain the importance or value of good fence, or even to point out the superiority of modern wire fence, but I must have, remark that a great many need more fencing than has placed upon them.

A farm inadequately equipped with fencing is much like a drug store with only a half stock of shelving upon which to arrange stock. The operation of such a



A Cup Winning Cheese Made Above may be seen the likeness of Hamilton, cheese and butter made by the Hamilton Butter Co. and in that time has helped to win the \$27,187.10 of cheese and butter. He has been very successful in the large exhibitions of all of the large exhibitions in Toronto, Ottawa and London, and secured the cup in the dairy exhibition. Woodstock for the best cheese exhibition.

Rail Fences for Wire

NEVER before in the memory of living men has fad been so scarce as in recent months, and the prices everywhere offered by eager buyers give many farm owners a chance to cut in on the profits that men are making. In fact, a man with enough enterprise could travel through Canada and clean up a quick fortune by offering to trade modern wire fences for hundreds of miles of rail and wood fences that disfigure the landscape on every hand. Moreover, he could afford to pay for all labor to haul the rails, logs and beams to the freight stations and to erect the wire fencing.

Here is presented to the farmers of many sections a splendid opportunity to get rid of unsightly, inefficient and uneconomical wood fences at a profit far in excess of the en-

tails as much unnecessary labor as the running of such a store.

Not to safeguard the poultry yard against prowling dogs and other marauders, the cornfield against straying cattle and hogs, or the garden against invaders, is to invite losses several times greater than the cost of good fencing.

Offer your old wooden fences for sale and ask for bids. Get prices on wire fencing to take their place, choosing for each purpose the style especially designed for it. Then figure how much profit you can make by an exchange that will modernize your farm and relieve you of all worry over the safety of your herds and crops.—C. H. F.



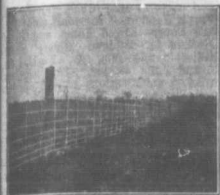
Would you accept this fence and \$300.00 to look in exchange for the wire one?

The Optimism of France

“A LESSON in the height of optimism is handed to us, unconsciously perhaps, by the

French peasant,” writes M. G. Hardill, a former member of Farm and Dairy staff, but now in France for going on three years. “I have actually seen them tilling their soil within easy range of and sometimes subject to hostile shell fire, realizing at the same time the possibility of perhaps before another 25 hours, their all being in the hands of the Boche. Would our people at home act the same way under such circumstances? When we read the facts of their petty grievances about which such a holler and wailer is made, it makes me wonder. And who wouldn’t?”

Millet, Hungarian grass and buckwheat may still be sown if desired.



A Rail Fence Nowadays is Worth More in Dollars and Cents than Wire.

tire cost of the best kind of fence yet designed. The wire landowner will set sail until the prices for rail have dropped to the old figures, but will seize the chance to increase the value of his farm, to extend his plowing and planting over every foot of his fields and to protect his property, his crops and his stock as they cannot be protected by clumsy wood fences.

I am not going to explain the importance or value of good fencing, or even to point out the superiority of modern wire fence, but I may, perhaps, remark that a great many farms need more fencing than has been placed upon them.

A farm inadequately equipped with fencing is much like a drug store or grocery store with only half enough shelving upon which to arrange its stock. The operation of such a farm



A Cup Winning Cheese Maker.

Above may be seen the likeness of H. W. Hamilton, cheese and buttermaker of Milton, Ont. Mr. Hamilton has been making cheese and butter for 30 years and in that time has helped to manufacture \$272,887 line of cheese and \$1,257,704 of butter. He has been very successful as an exhibitor taking prizes at all of the large exhibitions such as Toronto, Ottawa and London, and in 1917 secured the cup in the dairy exhibit at Woodstock for the best cheese on exhibition.

Maud Muller—Past and Present

“Maud Muller, on a Summer’s Day,
Raked the Meadow, sweet with Hay.”



WHEN Whittier wrote these familiar words, the picture called to mind was that of the girl in the upper picture, with rake in hand, busily engaged in raking the hay.

At that time Horse Hay Rakes were hardly known, and the few in use were clumsy affairs and the handling of one was a job for a big husky man.

Time has made great changes, however, and a modern Maud Muller is very much at home on a

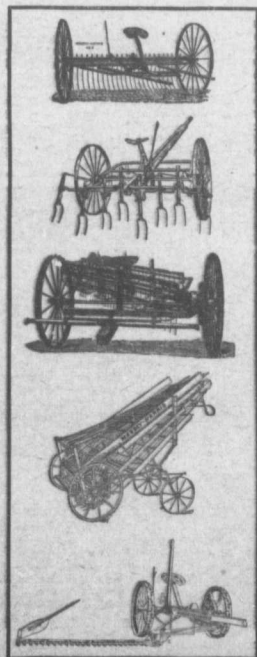
Massey-Harris Steel Rake

accomplishing infinitely more with much less exertion than the original Maud.

Raking is a pleasure with one of these Rakes, as a slight pressure of the foot dumps the hay in a neat, easily-handled windrow, and is noted for its clean raking. Your girl or boy can do the raking just as well as you could do it, thus giving you time for other work.

And not only the raking, but all the operations from cutting to loading can be most satisfactorily carried on by means of Massey-Harris Hay-Making Machinery—Mowers, Tedders, Rakes, Combined Side Rake and Tedders, Loaders, etc.

They are all described in a folder “Modern Helps for Hay-Making,” which is free for the asking from any Massey-Harris Agent or by writing nearest Branch.



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 Vancouver, Kamloops.
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 Everywhere

In Union There is Strength

Many Farmers Obtain Leave

THAT the stand taken by farmers against the conscription of essential farm labor between 19 and 22, and the recent mass meeting of protest in Toronto have not been without their effect on the minds of the powers that be is seen in the change that has taken place in the situation since the meeting on June 7 and 8. Since then men whose cases had not previously been considered on the hardship list have since been allowed to return to their homes for 30 days with the prospect of having their leave extended if they are really needed to help with the harvest. Commenting on the changed situation one of the big Toronto dailies says:

"The position of young farmers under the Military Service Act appears to be rapidly improving, as there is a marked disposition on the part of the authorities to allow them leave of absence from the ranks much more easily than they were obtained some weeks ago, and the indications are that a large percentage of them will not be asked to go overseas until the harvest season is over. At the same time, the farmers are appreciating that it is only in the cases of hardship that leave of absence can be obtained, and as a result there are few applications being received from those who have no chance of getting freedom from service. For the meantime, the big call for men for overseas appears to be over, and it is evident from the attitude of the authorities that all men who can be spared from the ranks are to be allowed to go back to help out on the farms until the next big call comes. This is doubtless partly due to the transportation situation, and it is felt that men who need not be sent overseas may in many instances be more useful to the country while working on the farms than they would be in the ranks.

Many Claims Received.

"Applications for this leave of absence are still piling into the office of Mr. E. H. Stonehouse, the Dominion agricultural representative for this district, and yesterday he had at least fifty personal applications in addition to those who sent in their claims by mail. Mr. Stonehouse reports that a much larger percentage of the claims are genuine cases of

hardship than were received at first, and for that reason he is able to give his approval to a higher proportion. One matter which still has to be cleared up is the disposition of the 'extraordinary cases of extreme hardship,' and Mr. Stonehouse will go to Ottawa early in the week to see what arrangements can be made for handling them. In the meantime these men are being granted a thirty-day leave. As it is absolutely necessary for the authorities to keep track of all such cases, it is suggested that the men be required to report at regularly fixed intervals, and that the officials have the right to investigate all cases again at any time. Another point to be taken up is the harvest leave. Within a month the early harvesting will be upon the farmer, and the agricultural representative states that for a couple of months there will be a great demand for men on the farms."

Roderick Mackenzie Addresses C. M. A.

AN unexpected turn was given to a recent meeting of the C. M. A. when, departing from the set program the president called to the platform Mr. Roderick Mackenzie, Secretary of the National Council of Agriculture, of Winnipeg. Mr. Mackenzie is a farmer who knows the farmer's viewpoint and the problems that confront him. He was given a big reception.

"We have here a country with vast possibilities," said he, "and we must all do our united best for the proper development of the country." (Cheers.) "We cannot do without manufacturers, neither can we do without the farmers; a diversity of interests and business is necessary for the proper development of this country, and the proper relationships must be maintained. These cannot be maintained if one industrial interest thinks that it is made to suffer and is suffering by privileges being bestowed on the other industrial interest. If such is so, then development is being impaired and retarded. The future development of this country depends upon the further utilization of fertile lands, and this must go on."

"Let Us Discuss It Out."

He then spoke of the gradual depopulation of the rural communities and the increase of the urban population, "which is imposing still heavier burdens on the farmers." "Naturally, we cannot get along without manufacturers," he continued, "but we have got to be shown where the industries need protection, and we have got to be also shown that we cannot do without an industry that needs protection. (Laughter.) What we want is a conference of the representatives of farmers and manufacturers with all the cards on the table, and let us discuss it out, not fight it out—and great good will result."

Inspector Kennedy's Threats

IN connection with the threat of Inspector Geo. Kennedy that he would have closed down the recent farmers' convention in Toronto have he known the nature of its proceedings, and will take such action in future, the Toronto Globe says editorially:

"Canada is not Germany, where the police or the military authorities prohibit public meetings at their pleasure. The Massey Hall meeting was an effort to persuade the Government to interpret the new military regulations so as to exempt farm workers from military service under certain conditions. The resolutions passed were moderately worded and in no sense could they be construed as illegal."

"A few of the speeches at Massey Hall were intemperate, and some expressions were dropped, such as proposals to buy no more Victory Bonds and to resist the Military Service Act, which invited the attention of the police, but these cases were highly exceptional, and contrary to the prevailing spirit of the addresses. The closing of the convention because of two or three hotheads would have been an act of Prussianism which would have stirred farmers everywhere to wrath and created an amount of bitterness that would have been a national misfortune. Sufficient harm has been done by Inspector Kennedy's unwise language. He is arrogating to himself too much authority when he says he would prevent the holding of another such meeting. Free speech and the right of assembly, so long as they are not used as incitements to disobedience of the law, have not been abrogated in this country, and the Government is not so sacred that public criticism is not a form of lese majeste."

New Brunswick Activities

AT a meeting of the directors of the United Farmers Cooperative Co., of New Brunswick, C. L. Smith was made president of the company, Rennie Tracy, vice-president, and C. Gordon Sharpe, treasurer. Committees were appointed to arrange for the purchase of fertilizers and feed and to arrange to start a cooperative store in Woodstock in the near future.

At an executive meeting of the United Farmers of N.B., held in Woodstock on May 31st, arrangements were made to carry on an extensive organizing programme throughout the province. Committees to arrange for organizing new branches were appointed as follows: John Young and A. C. Chapman for York Co.; Thos. Caldwell, John Papp and Rennie Tracy for the upper end of Carleton Co.; Sterling Sharp, Frank Everett, and C. Gordon Sharpe for the lower end of Carleton and Victoria Co.; Chas. Dumas and Frank Henderson for south end; John Corey, Alfred Dunn and George Hafford for Tobique River; Frank Gillespie and Wm. G. Portras for Grand Falls section. The secretary of the Dairyman's Association, J. Letourneau and others, all offering their services to help with organizing programme. There are requests coming from all parts of the province for the services of an organizer. A letter from R. McKenzie, Secretary of Canadian Council of Agriculture, was read, in which the Council offers to send a man to assist in organizing in the province. This was received with enthusiasm.

A New Club Organized

ANOTHER new farmers' club sprang into existence on Thursday, May 20, 1918, when a large new club was organized at Doura, in Doura township, Peterboro county. The principal speaker was H. B. Cowan, Editor-in-Chief of Farm and Dairy, who described the cause which led to the launching of the farmers' movement as it sprang up in the west some years ago and which is now extending throughout the east. Mr. Anderson, of the West saw Farmers' Club, told about the work of the farmers' delegation at Ottawa. The meeting was unanimously to organize. The President is Mr. M. D. Sullivan, of Lakeside, and the Secretary, Joseph Garvey, of R. R. No. 9, Peterboro.

Official Organ

Following up the desire expressed at the recent far convention in Toronto that an organ should be established to represent the farmers' views, a committee of five to take that direction. An application was sent out to all farmers who in the Ottawa delegation attended the recent convention to find how much the willing to subscribe for the of such a paper.

The appeal states that if the committee knows how much money is available it will be able to decide whether or not it should be a daily or a weekly money subscribed will be put trust fund and will be used for other purpose than that of an official organ. If it is found later that it is not possible to start a paper the money refunded to those who contributed. This is an opportunity for farmers to show how much they are interested in this matter. There are many men who may be interested and who may not read of these notices. They will assist the movement, should desire, by writing direct to Kersthan, the chairman of resolutions committee, at Godfrey St. Mr. J. Morrison, Secretary of United Farmers of Ontario, Street, Toronto, Ontario.

Echoes of the Toronto Convention

So many interesting things said at the big convention of held in Toronto, June 7 and 8, impossible to report them all last week's issue of Farm and Dairy. The following added notes should be of interest:

Mr. C. W. Gurney, of Paris, that an attempt had been



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WOOL



A part of the large gathering of farmers at the recent convention in Massey Hall, Toronto. At the extreme left of the picture, next the platform, is Mr. J. Morrison, Secretary of the U. F. O., and on the platform, facing the camera, is Mr. H. B. Cowan, of Farm and Dairy.

Official Organ

Following up the desire so strongly expressed at the recent farmers' convention in Toronto that an official organ should be established to represent the farmers' views, the Directors of the U.F.O. have appointed a committee of five to take steps in that direction. An appeal is to be sent out to all farmers who took part in the Ottawa delegation and who attended the recent convention in Toronto to find how much they will be willing to subscribe for the starting of such a paper.

The appeal states that as soon as the committee knows how much money is available it will be possible to decide whether or not the paper should be a daily or a weekly. The money subscribed will be put in a trust fund and will be used for no other purpose than for the starting of an official organ. It should be found later that it is not practicable to start a paper the money will be refunded to those who contributed it. This is an opportunity for farmers to show how much they are in earnest in this matter. There are many farmers who may be interested in this question and who may not receive one of these notices. They will be able to assist the movement, should they so desire, by writing direct to Mr. J. N. Kerathan, the chairman of the publications committee, at Goderich, or to Mr. J. J. Morrison, Secretary of the United Farmers of Toronto, 2 Francis Street, Toronto, Ontario.

Echoes of the Toronto Convention.

So many interesting things were said at the big convention of farmers held in Toronto, last week, that it was impossible to report them all fully in last week's issue of Farm and Dairy. The following added notes thereto should be of interest:

Mr. C. W. Gurney, of Paris, declared that an attempt had been made to

mislead the farmers in regard to the relative importance of securing moor-ens as against more food. The members of the farmers' committee, who remained in Ottawa to consult with the Government, were repeatedly informed that Premier Lloyd George in his cablegram to the Government had used the words, "For God's sake send us men and more men, even at the expense of production." Later the committee was informed that the cablegram did not contain the words, "even at the expense of production." Sir Wilfrid Laurier challenged the Government to substantiate the claim that the words in question appeared in the cablegram. No one attempted to do so. The result was, in Mr. Gurney's opinion, that it showed it was all a piece of stage play.

A great impression was made on the Ontario farmers who went to Ottawa and there came in contact with the several thousand farmers from the province of Quebec, who were present on the same ground. The belief was freely expressed that whereas the farmers in these two provinces have been kept separate in the past largely through the efforts of selfish interests it should be possible for them hereafter to have a better understanding of each other's problems and to work together more closely. The presence of several leaders in the farmers' movement in Quebec at the Toronto meeting tended to strengthen the desire for a better understanding between the farmers of the two provinces.

The question was asked in Toronto if it was true that the farmers of Quebec were not doing their duty in the matter of supplying soldiers for the front. It was answered by Jean Masson, of Montreal. "The farmers of Quebec," said Mr. Masson, "have done all that has been required of them. The Military Service Act gave them

permission to apply for the exemption of their sons, which they did, just as did many Ontario farmers. Possibly they were not so misled as Ontario farmers by the promises of the politicians at the time of the last election not to conscript farm labor. Therefore they may have less to regret now because they refused to believe these promises. When the Government said that no more exemptions would be allowed to farmers or any other class the boys from the farms of Quebec and from the cities as well enlisted quickly and readily, so much so in fact that some of the very papers that were formerly accusing them of being disloyal have since been led to remark on how splendidly the young men from Quebec were enlisting."

"While our committee was at Ottawa," said Mr. J. J. Morrison, "we saw some peculiar things. There was a cabinet of 23 men behind whom were some 130 old members of the House who supported them from the Government benches. Across from them sat the members of the Opposition. The 23 members of the Cabinet practically did as they liked by means of Orders-in-Council and in other similar ways. Many of their 130 or more supporters complained over their actions but always voted to support them. Apparently, the only means of reaching the 23 members of the Cabinet is by bringing such pressure to bear in the rural constituencies on the Government supporters in the House that they will compel the Government to change its policy where this is like-

ly to be disastrous to agriculture. What needs to be done is for you men to go home and get busy on your local members. You must organize on the back concessions and not expect us to do it for you. You have got plenty of material for this work in your hand centres if you will only realize it and use it."

A Women's Section of the U.F.O. Proposed

(Continued from page 20.)

that it should not in any way interfere with the work of the Women's Institute. As Mrs. McNaughton pointed out, the work of the institutes would go on in the same way while in the U.F.O. organization; the women would have an opportunity to take part in the bigger and broader problems of the day.

After considerable more discussion it was decided to appoint a provisional committee of the proposed U.F.W.O., consisting of the following officers: President, Mrs. Brodie, Newmarket; Vice-President, Mrs. Poole, Newmarket, and Miss Griesbach, secretary. All the ladies present were also placed on the executive. The object of this standing committee is to do all they can to familiarize the women in their various communities with the work of the U.F.O. and what it stands for. When the annual meeting of the U.F.O. is held in December therefore, and the constitution is changed so as to allow the women to become a section of the United Farmers of Ontario, they will be unanimous in their support of the movement.

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It costs nothing to write and means money in your pocket if you do.

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Start the spraying early. Kill off the first crop. It will save trouble later. Remember too, that it is the last 50 or 100 bus. per acre that gives you the profits. You can save this by thorough spraying with ACCO—from a hand, a knapsack or a field power-sprayer. Acco is also the finest spray for cut-worms, slugs, grass-hoppers, etc. It stands all tests.

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Never Mind About Paris Green

Plater's Lella De Kol, 1925, Niagara Falls Farm, her male calf, \$300, R. Holtby; Lella Segis Walker, \$2,500, R. Cooper, Avondale, Ont.; her male calf, W. S. Elliott, Unionville, Ont.; Lella Jaka Walker, \$270, L. M. Kennedy, Hamilton, Ont.; her male calf, \$185, Quinton Bros., Pickering, Ont.; Lella Walker, \$1,000, J. Williams, Ont.; Lella De Kol Walker, \$480, A. C. Hardy; Lella Segis Walker, \$255, R. Cooper; Orma-sega Segis, \$1,000, H. Carport; Echo Segis Galsche Segis, \$1,500, W. L. Shaw, Newmarket; Pietie Parer, \$1,000, R. M. Holtby; her male calf, \$310, R. Holtby; Ladoga Freeman Wood-ward, \$200, J. W. Innis, Woodstock, Ont.; Payne Segis, \$385, J. W. Innis; Lella Segis, \$1,000, J. W. Innis; Lella Segis, Ont.; Susie Segis Walker, \$700, F. Elliott; Segis Lyons Walker, \$200, J. Caron; Mollie Beets Korndyke, \$170, H. Caron.

Holstein News

OFFICIAL RECORDS OF HOLSTEIN-FRIESIAN COWS FROM MAY 1 TO 31, 1918.

Mature Class.
1. Pontiac Jessie, 15018, 8y. 3rd; 629.9 lbs. butter, 27.56 lbs. fat, 24.46 lbs. butter.
2. McLow, Oxford, Ont.; 6y. 2nd; 625.6 lbs. fat, 14.8 lbs. milk, 21.45 lbs. butter.
3. Princess Segis Walker, 18093, 6y. 10th; 625.2 lbs. fat, 14.8 lbs. milk, 21.45 lbs. butter.
4. Pairview Korndyke Boon Johanna, 1901, 7y. 10th; 623.2 lbs. milk, 23.13 lbs. fat, 21.1 lbs. butter. W. L. Shaw.
5. Abbecker Beets Korndyke, 42903, 8y.

Senior Four-year Class.
1. Princess Segis Pouch, 28793, 4y. 6th; 164.3 lbs. milk, 26.98 lbs. fat, 32.41 lbs. butter.
14-day record, 1,151.1 lbs. milk, 62.85 lbs. fat, 61.06 lbs. butter. E. B. Purte-lett, Bloomfield.
2. Fed. Pontiac Totilla, 4974, 4y. 10th; 141.1; 436.0 lbs. milk, 35.52 lbs. fat, 23.15 lbs. butter. J. M. Leach, Chipawa.
3. Island Angie DaKol, 29846, 4y. 11th; 134.1; 578.5 lbs. milk, 15.49 lbs. fat, 19.61 lbs. butter. W. Walker, Lea, Victoria, B.C.
4. Sunnybrook Pride Wayne, 25568, 4y. 7th; 224.1; 481.3 lbs. milk, 14.12 lbs. fat, 17.65 lbs. butter. Joseph Kilgour.

Junior Four-Year Class.
1. Avondale Pontiac Pauline, 32773, 4y. 2nd; 234.1; 454.7 lbs. milk, 23.96 lbs. fat, 28.31 lbs. butter.
30-day record, 1,937.0 lbs. milk, 91.93 lbs. fat, 115.79 lbs. butter. A. C. Hardy.
2. Fietta Manda Glad, 22601, 4y. 2nd; 234.1; 572.0 lbs. milk, 22.44 lbs. fat, 28.05 lbs. butter.
30-day record, 2,042.5 lbs. milk, 88.96 lbs. fat, 111.21 lbs. butter. A. C. Hardy.
3. Fietta Korndyke Queen 2nd, 30674, 4y. 2nd; 234.1; 474.2 lbs. milk, 22.84 lbs. fat, 28.18 lbs. butter.
30-day record, 2,042.5 lbs. milk, 88.96 lbs. fat, 111.21 lbs. butter. A. C. Hardy.
4. Low Banks Lady Korndyke, 39774, 4y. 1d; 162.9 lbs. milk, 22.28 lbs. fat, 27.82 lbs. butter.
30-day record, 2,278.5 lbs. milk, 82.35 lbs. fat, 102.93 lbs. butter. K. M. Dale-leish, Kenmore.
5. Hot Leo Wayne, 32729, 4y. 1m. 12d; 483.7 lbs. milk, 21.63 lbs. fat, 27.04 lbs. butter. W. L. Shaw.
6. Korndyke Ophelia, 23303, 4y. 3m. 27d; 651.4 lbs. milk, 21.22 lbs. fat, 26.53 lbs. butter.

LAKEVIEW HOLSTEINS AT AUCTION ON THE Jockey Club Grounds HAMILTON, ONT., JUNE 25th.



LAKEVIEW RATTLER
Canadian Champion 30 day Mature Cow 8 months after calving
61.20, Milk 1409.7

Milk - - - - 724.
Butter - - - - 37.54

She will be included in my consignment, also her two daughters, one grand daughter and her two daughters

We are also including two daughters of the 45-lb. cow, Lakeview Dutchland Artis (see photo on this page) one full sister, Lakeview Dutchland Artis 2nd and her two-year-old daughter in calf to Dutchland Colantha Sir Mona. We are also offering a son of Lakeview Lestrage, 7413 lbs. milk, 38.06 lbs. butter. Sired by Dutchland Colantha Sir Mona, sire of Lakeview Dutchland Artis, 43.06, and Lakeview D. C. Rose, 31.71 lbs. world's cham-pion 2-year-old with first calf. This is the first time in the history of Canada that daughters of a 45-lb. cow have been offered to the public at auction. Come and buy them at your own price.

BRONTE, ONT. Major E. F. Oaler, Prop. T. A. Dawson, Mgr.



"Lakeview Dutchland Artis," sire Dutchland Col. Sir Mona, dam Lakeview Artis. Just completed record in mature class of 65-4.5 lbs. milk, and 43.06 lbs. butter in 7 days. Owned by Lakeview Stock Farm, Bronte, Ont.

4y. 3rd; 621.4 lbs. milk, 24.42 lbs. fat, 28.53 lbs. butter. W. L. Shaw.
5. Woodcrest Butterfly Pietie, 47391, 5y. 2nd; 621.4 lbs. milk, 20.95 lbs. fat, 24.18 lbs. butter. A. C. Hardy, Brockville.
6. Mabel Walker, 28796, 5y. 1st; 612.9 lbs. milk, 20.78 lbs. fat, 24.34 lbs. butter.
21-day record, 1,700.00 lbs. milk, 59.16 lbs. fat, 61.75 lbs. butter. Wm. H. Gough, Southfield.
7. Inka Sylvia Madia, 16621, 7y. 3m. 15d; 612.9 lbs. milk, 20.32 lbs. fat, 24.14 lbs. butter. Joseph Kilgour, Hamilton.
8. Rose Donalda, 18319, 5y. 11m. 22d; 613 lbs. milk, 19.7 lbs. fat, 24.74 lbs. butter. David Coughell, St. Thomas.
9. Netherland Pieterie Wayne, 27998, 5y. 1d; 611.1 lbs. milk, 19.44 lbs. fat, 24.18 lbs. butter. Gri-bach Bros., Colerwood.
10. Tidy DeKol Callanby, 12601, 8y. 2nd; 609.2 lbs. milk, 17.61 lbs. fat, 23.38 lbs. butter. W. L. Shaw, Newmar-ket.
11. May Belle W. Lass, 18770, 6y. 5m; 609 lbs. milk, 17.16 lbs. fat, 21.46 lbs. butter. Joseph Kilgour.
12. Mercena Sherwood, 17100, 7y. 2m. 21; 608.7 lbs. milk, 16.52 lbs. fat, 20.96 lbs. butter. Chas. W. Gane, Vandorf.
13. Pauline Gerben 3rd, 27998, 6y. 7m. 21; 608.7 lbs. milk, 16.52 lbs. fat, 20.96 lbs. butter. Chas. W. Gane, Vandorf.
14. Lilla Pouch Callanby, 17747, 6y. 7m. 21; 602.2 lbs. milk, 15.46 lbs. fat, 19.39 lbs. butter. W. Fred Patis, Milsbrook.
15. Maud DaKol Abbecker, 21160, 6y. 5m. 21; 602.2 lbs. milk, 15.93 lbs. fat, 18.79 lbs. butter.
14-day record, 804.7 lbs. milk, 29.54 lbs. fat, 29.28 lbs. butter. Elias Sayer, Bur-serville.

Senior Three-Year Class.
1. Johanna Pontiac Segis, 25510, 3y. 10m. 23d; 437.7 lbs. milk, 20.61 lbs. fat, 25.64 lbs. butter.
30-day record, 2,312.2 lbs. milk, 82.68 lbs. fat, 109.35 lbs. butter. J. W. Stew-arts.
2. Sunnybrook Inka Mercedes, 30990, 3y. 8m. 10d; 439.4 lbs. milk, 18.83 lbs. fat, 23.54 lbs. butter. Joseph Kilgour.
3. Korndyke Paula, 23303, 3y. 11m. 25d; 431.1 lbs. milk, 18.48 lbs. fat, 23.11 lbs. butter.
14-day record, 1,056.5 lbs. milk, 35.56 lbs. fat, 44.45 lbs. butter. A. C. Hardy.
4. Villa View Klia Abbecker, 23877, 3y. 11m. 25d; 497.6 lbs. milk, 17.86 lbs. fat, 22.32 lbs. butter. W. G. Bailey, Paris.
5. Sarah Colantha Mercedes, 35177, 3y.

May Echo Sylvia's Son AT SERVICE

Avondale Farm is prepared to book a few approved cows for service to CHAMPION ECHO SYLVIA PONTIAC.

His first daughter to be sold brought \$2,900 public auction six months old. His sire's daughters are now coming on, making a grand showing, three over 30 lbs. this season. His dam is in a class of her own in many respects.

CHAMPION is a faultless individual—his stock is equally good. We have some grand bull calves for sale.

Write for pedigree and terms.
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I am open to engage an experienced herdsmen to handle my well-known Holstein herd. I want a man experienced in R.C.M. work, to develop a most promising lot of young cows and heifers. We have five 20-lb. cows now and want five more next winter.
First-class house and pleasant surroundings, near Toronto. Apply by letter first.
R. W. E. BURNABY - - - - - JEFFERSON, ONT.

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Boars and sows, all ages, from best prize-winning strains—a few good bred sows, also younger stock. S. C. White Leghorn eggs for hatching—Bar-ron's 255-egg strain. S. S. Brown Leghorns, Barred Rocks, R. I. Reds, 3y. 15; \$10 per 100. Fawns and White I. R. Duck eggs, \$3 per 10. Chinese geese eggs, 50c each.
T. A. KING - - - - - MILTON, ONTARIO.

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For the Big Sale

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CANADA

June 25th, 1918

Fellow Breeders, do not overlook this great consignment sale of High Producing Holsteins, where more High record cows and sons and daughters of such will be offered to you at your own price, than Sale Ring in Canada, including Canadian Champion Cow, a full-daughters, 1 grand-daughter a nearly 38 lb. Canadian Cham-38 lb. cow, and the most select sires of the breed, with some shape. Practically every animal offered for sale is either a Canadian Champion, or a son or a daughter of such, from such noted herds as:—



ever before were put into a 2 daughters of the 43 lb. Cansister and her daughter; 2 and 2 great granddaughters of pion Cow, as well as a son of a daughters of some of the best show ring winners in show

Lakeview Stock Farms	-	Bronte
Manor Farms	- - -	Clarkson
Oak Park Stock Farm	-	Paris
Avondale Stock Farms	-	Brockville
Ridgedale Stock Farm	-	Palermo
Riverside Farms	- - -	Caledonia
Mr. W. C. Cox	- - -	Winona
Mr. Hiram Dymont	- -	Dundas

Remember the date, June 25th, and be with us at Hamilton.

Write to-night for a catalogue to Sales Managers,

T. A. Dawson, Bronte, Ontario
Gordon S. Gooderham, Clarkson