

FARM AND DAIRY

RURAL HOME

DEVOTED TO
BETTER FARMING
AND CANADIAN
COUNTRY LIFE

Toronto, Ont., May 2, 1918



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It's a big Diversified Farm. (Page 3.)

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His Best Investment, He Says. (Page 4.)

Pure Breds a Good Investment

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That we would like to sell in the house of every dairy farmer in Canada. It covers every subject in dairying, from growing the feed—to testing your herd. The price of the book could be saved in two weeks' time from the economical feeding methods outlined in it. "DAIRY FARMING," by Eckles & Warren, tells how to balance the feed—what feeds to buy when prices are high—the cheapest feeds to grow on your own farm—and a score of other subjects. It is a very readable book for the practical farmer. Well bound in linen.

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FARM & DAIRY

Peterboro, Ont.

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In 1912, the first year of its introduction into Ontario, 230 tons were used on Fall Wheat. In 1917, the consumption was 6,242 tons, and would have been still greater had we been able to supply the goods. We want agents in districts where we are not already represented. To get big crops you must use fertilizer and Sydney Basic Slag has proven itself the ideal and most economical article on Fall Wheat. You will need some yourself this season. Why not take a carload of 20 tons and distribute the balance among your neighbors? Drop us a line and let our general Representative call on you. He will help you to place the carload. Write us now. It may seem early, but in these war times arrangements for supplies must be made some time ahead.

The Cross Fertilizer Company, Limited
SYDNEY, NOVA SCOTIA

The Food Production Campaign in Canada

The Necessities of the Case Explained by Hon. C. A. Dunning

HON. C. A. DUNNING, of Regina, one of the outstanding leaders in the farmers' movement in Canada, who was appointed by Hon. T. A. Crerar as Director of Food Production for Canada, made a most telling speech at the recent meeting of the Joint Committee of Commerce and Agriculture held in Regina, at which Ontario farmers were represented. Hon. Mr. Dunning made an earnest plea to the members of the committee for free agricultural implements claiming that such action on the part of the government would go far towards increasing production by making it easier for farmers to obtain the supplies and equipment that they need.

"The world is on fire," said Mr. Dunning. In his opening remarks, and "famine is approaching. Can't we get together and by submerging our personal interests agree on a broad platform that we will do what is possible to save the situation?"

"The decrease in grain production in the Allied countries since the war commenced amounted to 2,000,000 bushels. The number of meat animals in the Allied countries of Europe had decreased up to last June by 115,000,000 head. Surely these figures show where we are drifting? We are interested in the situation not only from the standpoint of our allies, but because of our own needs.

"From now on the situation is going to be in favor of Germany. Owing to the failure of Russia to do her part Germany now has the edge on us as she will be able to draw her food supplies from close at hand, whereas the allies will be compelled to draw theirs from all over the world. Unless America can produce enough to supply the needs of our European allies for concentrated food, such as wheat, we will have to substitute bulkier foods with the result that greater tonnage will be required to transport this food, and as most of it will be carried from more distant countries. This threatens to cause such a shortage of transportation facilities as to seriously interfere with the transportation of troops from the United States to Europe.

"250,000,000 Bushels of Wheat.

"In order to maintain the present reduced crop ration of England, France and Italy this continent will have to send 250 million bushels of wheat to them this year than we sent last year. Reports show that the American wheat crop this year is likely to be the poorest in years. It will be only about the same in size as the crop of last year. Allowing, however, for an average yield in the United States and Canada we must give 160,000,000 bushels extra to make up for the decreased production in Europe. Reducing this down to the responsibility that rests upon the average farmer it means that the farmer who raised seven bushels last year must produce 10 bushels this year if the situation is to be saved. Cultivation methods under these conditions must not be allowed to go slack.

"In western Canada it is already too late for most of our farmers to do much to improve the situation. Matters of this kind must be prepared for a long time in advance. In eastern Canada the situation is somewhat different. Outside of Ontario eastern Canada has never grown enough wheat to feed its own population. In Quebec 4,000,000 bushels were raised last year. To grow enough for their own needs Quebec should produce 11,000,000 bushels this year.

"The outlook for 1918 is still darker. Owing to the lack of fertilizer, which is essential in France, her production of wheat has decreased since the outbreak of the war from 115,000,000 bushels in 1914 to 144,000,000 bushels

last year. The land of France has become dead without fertilizer as far as cereals are concerned.

"England so far has been able to maintain her production of wheat. She has done this by increasing the area under cultivation through breaking up new land including some of her large estates. Only the breaking up of this new land has enabled her to maintain her yield. She has much more land that she can break up and a decline is consequently threatened in her production.

"The Farmers' Difficulties.

"As farmers we are placed in a difficult position. The cost of our equipment since the outbreak of war has increased 50 to 100 per cent. It is harder for us to secure capital because of the great demands made on our banks by the Government.

"In addition to these difficulties we have a Bolshevik sentiment in Canada which, I am afraid, is growing. We might easily spend this criticism on the Government, but that will not enable us to increase production. Our Dominion Government has carried and is carrying a load which no other Government ever had to face. All we ask of the Government is to do something that time may not be lost and that the situation may be saved. As farmers, we know that when we strive to increase production

Report of any Offender

Who insists on Purchase of Flour for Shipment of Feed.

The Canada Food Board has issued a request that farmers or others having definite information that any dealer in feeding-stuffs has been insisting on the purchase of flour as a condition for the shipment of bran and shorts, should notify the Food Board at once, giving as much detail as possible. The request adds that all such cases will be thoroughly investigated, and if the information is found to be authentic the guilty dealer's license will be called.

our expenditures start immediately, while our crop returns are not received until months later. Standard values are disappearing. Great efforts are being made to maintain the standard value of the dollar. All these problems are crowding upon us.

"If production is to be increased we must make it easy for men to increase production. This means that we must give them the things they need on the easiest possible terms. In advocating free admission of agricultural implements to Canada I have no thought of our own interests as a question. This is not the time for any of us to play politics. This measure is not intended to benefit any class, party or individual. I would like to see the Government implement admitted to Canada free as a war measure and until the termination of the war only. As a second measure I would like to see a minimum price set as far as possible for the 1919 production. This will enable farmers to know where they are at, and will give them more courage to extend their farming operations. In the west there are possibilities that we will suffer from hail, drouth, frost and rust. Should we hold off on that account? Let each of us understand the significance of the 100 bushel bushel determination to do all in our power to produce the food which the world so absolutely needs."

Boiling water used in liberal quantities will drive away the germs that thrive in the cracks and crevices of dairy utensils and which are responsible for spoiled milk and cream in hot weather.

We Welcome
Trade Increase
VOL. XXXVII

WHILE the struggle goes on among other agriculturists and I call for great it will do a great future for as the most acre of all domestic poultry third and there is every reason that we are dairy animals on earth, dairy cow returns food as the beef portion becomes a feed and animal to a large products are being part of the human found that vegetable animal fats for products is one of extracting of all density and a star is destined.

The war and its man are other agricultural man are altogether keeper is the one from high prices, to be forced onto dairymen is standing holding his own going along and just confronted with a prices increasing the increase of us the milk prices cease in price of However, there and that is where increase in price, due on at a high price ability to compensate low prices. There's any should not be managing their herds actually adjust themselves business can but that, and thereby solves to be real deal they have a bright This war is going to know dairying, property and follow supplies just enough poor grade to keep up.

When Reduction The Food Control Needless to say, even in one year or another shortage of feed are destined this call down on the amount of the waste, or on the dairy business the amount of feed ton, while other decreased the amount cut down on the group, those who had the cow, I will say if they thought that down on the ration. Rather than saving

AND & RURAL HOME

We Welcome Practical Progressive Ideas.

The Recognized Exponent of Dairying in Canada

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., MAY 2, 1918

No.

War Time Savings in the Herd

Considerations in Economical Feeding of the Dairy Cow—By M. O. Maughan

WHILE the great war now raging is directly a struggle for democracy, it is indirectly, among other things, a struggle for better agriculture and live stock farming. Hearing the great call for food conservation and the using of it where it will do the most good, there is evidently a great future for dairying. With the dairy cow as the most economical producer of human food of all domesticated animals, with the best second, poultry third and the bee coming along in the rear, there is every reason to be optimistic and happy that we are dairymen, and dealing with the best animals on earth. For a given amount of feed the dairy cow returns nearly four times as much human food as the beef animal. It is true that as competition becomes more keen and the prices of land and feed advance, the dairy cow replaces the beef animal to a large extent. Milk and other dairy products are being found to be an indispensable part of the human diet and must be used. It is found that vegetable fats can not take the place of animal fats for promoting growth, and particularly is this true of oleomargarine. The call for dairy products is one of the most insistent, universal and exacting of all demands of trade. An infant necessity, and a standard food, is the milk of the dairy cow.

The war is destined to revolutionize dairying, as well as other agricultural pursuits. Men are just beginning to realize that a cow keeper and a dairy-busines are altogether two different people. The cow keeper is the one who is now suffering decidedly from high prices, and he is the one who is going to be forced out of the business. The so-called dairyman is standing the pressure fairly well and holding his own. The cow keeper who has been going along and just barely breaking even is now confronted with a serious problem, due to feed prices increasing more than milk prices. A study of the increase of prices for various foods shows us the milk prices have not kept pace with the increase in price of other staple foods.

However, there is one thing to be considered, and that is when the other products begin to decrease in price, dairy foods will continue or increase at a high price fully long enough in all probability to compensate for the present relatively high price. Therefore, the men in the dairy business should not become discouraged if they are managing their herds properly, for prices will eventually adjust themselves. If the men in the dairy business can but tide over the present critical period, and thereby stand the test and prove themselves to be real dairymen rather than cow keepers, they have a bright future.

This war is going to eliminate the man who does not know dairying, and who falls to feed and breed properly and follow other proper methods, and who supplies just enough dairy products of more or less poor grade to keep the prices down.

When Reducing Rations Is Unprofitable.

The Food Controller has made a call to save. Needless to say, every dairymen is attempting this in one way or another. The high prices and the shortage of feed are demanding it. Many have understood this call to mean that they are to cut down on the amount eaten rather than to cut down on the dairy business here, therefore, cut down on the amount of feed furnished the cow for production, while other men in the business have not decreased the amount eaten by the cow, but have cut down on the amount wasted. To the first group, those who have reduced the amount supplied to the cow, I will say that they are making a mistake. If they thought that they were saving by cutting down on the ration given the cow, they are wrong. Rather than saving they are wasting. A few deli-

cate facts will illustrate this. An average cow giving about 20 lbs. of milk per day will use practically one-half of her feed for maintaining her body, keeping herself alive, and the other half will be used for milk production. The cow first uses a part of her feed to supply the maintenance requirement, and then all above this goes to production.

Let us assume the average cow just mentioned costs \$100 for feed. As stated, she gives 20 lbs. of milk per day. Out of this \$100 worth of feed, \$50 worth goes for maintenance, and the other \$50 for milk. Let us further assume we attempt to save by cutting down on the feed supplied her, and stated, the first supplies the maintenance requirement, and will, therefore, turn \$50 worth of feed toward keeping herself alive. Only \$25 worth will, as much milk, or 10 lbs. per day, unless she takes flesh from her body, and this is not the proper method. For \$75 worth of feed, she will, therefore, give only one-half as much milk as for \$100 worth of feed. In one case, 10 lbs. of milk per day will cost \$75, and 10 lbs. more, or the second 10 lbs., will cost \$25, or only one-third as much. From these figures it is plainly shown that it is quite necessary to feed a full ration rather than little more than enough to maintain life.

Of course, one can feed too much. When this is done the animal begins to turn the extra milk into flesh and will show quite plainly, especially when weighed. But it is very plain that one must not try to save by depriving the cow of her full ration. We can not afford to reduce her feed. However, saving can be perfected by various other methods.

Cutting the Roughage.

First, by cutting the roughage, as well as grinding the grain, it is possible to eliminate waste due to coarse stems being left by the cow and indigested grain passing from the cow in the manure. This question has often been asked in the past, "Does it pay to grind the hay?" Now it is no question with

feed prices as they now are. It is a fact that it does pay, and pay well. Not only does it pay to grind the hay, but also the straw, and often mix them together or pour over the straw molasses, etc., which will make it quite palatable.

Cutting the roughage not only makes it easier to handle on the part of the cow, but it also affords a chance to add other hays and straws not so valuable, to which I will refer later. The cost of cutting hay is often figured at 75 cents per ton.

Trials have also shown the advantage of grinding grain. No whole grains should be fed. All should be rolled or ground, and preferably ground. Many localities have rollers which are wonderfully inefficiently used, and on examination find that they were never broken by the rollers. The dealers in small localities find good rollers too expensive.

Utilization of Straw.

A second method of saving is by utilizing the various straws which have heretofore been wasted. They can be fed alone, but are better when given with some other feed which is highly palatable. Pea straw, I find, is a very excellent roughage, being far superior to other straws, and comparing rather favorably with alfalfa hay in total digestible matter, but being, however, somewhat lower in protein, containing only a little more than one-half as much protein. This is very successfully fed with alfalfa hay when chopped. Several farmers feed it half and half.

Oat straw may be mentioned here. It is the most valuable of the cereal straws, but not so valuable as field pea straw, as it is much lower in protein. Oat straw may be cut and mixed with some other feed which is more palatable, possibly molasses. Molasses is considered to have about the same feeding value as corn, pound for pound. It is not found wise, however, to feed over four pounds of molasses per day per cow, as it induces laxative results. An Experiment Station has outlined a process of utilizing straw with other feeds, as follows:

Spread on the mixing floor the following: 1st, a layer of cut straw; 2d, a layer of silage; 3d, a layer of cut hay, each about two or three inches deep, and then repeat until about five feet deep. Dampen with water and cover with gunnybags and allow to stand twenty-four hours and then feed. They supplied a mixture of 150 lbs. of cut alfalfa, 750 lbs. of silage and 200 lbs. of cut straw, to be supplied twenty-five cows for one day, together with a grain mixture.

Next to oat straw of the cereals in feeding value comes barley, then wheat straw and then rye. The last named straw is rather unpalatable and is seldom used.

Feed Good Ration.

A third way to help solve the feed problem is to feed a balanced ration and a good ration. Just as the working man needs something besides meat or bread alone, so similarly does the dairy cow need different foods in good proportions. A ration for a dairy cow must have a fair amount of protein, in the form of soy bean meal, oil meal, alfalfa hay, straw, etc., along with such feeds as silage, roots, oat hay and others, the proper proportion to feed depending upon the size of the cow and the amount of milk and fat, which she gives. Herein lies the value of records, it assists one to feed a balanced ration and thereby save. When a ration is continually fed that is not balanced, its digestibility is decreased, and hence increased waste results.

Too many people feed their dairy cows on production alone, and forget that many of their dairy (Continued on page 6.)

A Message to Farmers

By Hon. T. A. Grear.

HON. T. A. GREAR, Minister of Agriculture, has sent out the following message to Canadian farmers, asking them in order to avert famine to plant every possible acre in wheat. "Let me again draw the attention of the farmers of Canada to the great need there is of planting every acre of land in wheat that seems favorable to growing it. The news that comes daily of that awful, grim struggle now being fought in France and Flanders brings home to us clearly and unmistakably this fact—that, after almost four years of war, human liberty is still in the balance. The call for men is urgent, and they must, to the full limit of our power, be sent. Their places at home must be taken by those who remain. Despite the difficulties, we must produce more food than we have ever done before, and get apart all your land fit for growing crops and plant as much wheat as you can. Plan to bring as much new land on your farm under cultivation as possible, and thus increase your acreage for next year. It will be needed then just as much as now."

Why Keep and Feed Live Stock?

A New Ontario Reader Gets an Answer

"**W**HILE farmers get plenty of advice through the farm papers and government bulletins telling us to feed the crops that we grow on the farm and sell the finished products," writes a subscriber in the Slato River Valley of New Ontario. "What I question is, does it pay, in a climate where stock raising and feeding on garnered feeds for seven months in the year, and where it is out of the question to grow corn on account of summer frosts? Would we not be further ahead to sell our crops?"

As a general principle, the editors of Farm and Dairy might have answered that a permanent agriculture can be built only on a live stock basis. Instead we wrote to the district representative at Fort William, who was thoroughly familiar with conditions in the Slato River Valley, and asked him to reply in detail to our reader's query. Mr. Collins writes as follows:—

"In answer to this enquiry I would say that a profit can be made from either dairying or beef raising in this district, providing good cows or real beef producing animals are kept. It is my opinion that dairying will be found more profitable than beef raising; and while clover hay, roots and green feed (oats and peas) can be grown abundantly; and where the pasture remains green until covered with snow, as is the case in this district, it is not necessary to grow corn in order to feed cows. A mixture of oats, peas and vetches will yield abundantly, and will take the place of corn in the silo for winter feeding. Plenty of good clover hay, however, with a liberal amount of roots and some concentrates will keep up the flow of milk if the cow is inclined to be a producer. Three years ago A. Folker, of Murillo (about eight miles from Slato River), had a cow which received this kind of feed during the winter and which produced 14,000 lbs. of milk in one year. The profit from this cow for the year was about \$200. Hence the determining factors in this district are the cow and her care and not the climatic conditions.

"With regard to beef I would say that one of the best breeds—Aberdeen-Angus, Short-horn or Hereford—should be kept. The calves should be dropped in the fall and fed well through the following winter and summer, and sold at a profit one year as a baby beef. Animals which are not thrifty should be kept over the second winter on rough feed and fattened on the pasture the following summer, and sold when two years old. I would not advise feeding beef animals through our long winter after they are two years of age, as the gain in weight will be in proportion to the value of the feed consumed."

A Double Unit Milker

It Gives Complete Satisfaction

Geo. S. Wallbridge, Prince Edward Co., Ont.

"**A**NY farmer who will use a little good common sense and use his cows as he would like to be used himself, will save himself a lot of hard work and extra labor by having a milking machine. From my own experience I would advise a man to have a milker if he had only 10 cows. Of course it depends a lot on the man's circumstances, how much help he has to milk and how much land he has to work. If you have a milker, the more cows the better. You don't get any milking, and you can use a gas engine for lots of work besides milking. The cost of new repairs does not amount to much. Gas is high but it does not take much when running about an hour night and morning.

If you want to make time when you cannot leave the milker on every cow until she is dry. Some cows have had shaped udders, high in front and low behind and difficult for any milker to stay on. Other cows that have been used to hand milking, sometimes will not milk any more than two-thirds out with the machine. We have weeded out such cows.

Our milker has not had any bad effects on the cows. We may have one double pail, milking two cows at a time and holding 60 lbs. of milk. We have one set of teat cups that fit any cow's teats and no girls. One pail is enough for one man to handle. It will keep him as busy as he wants to

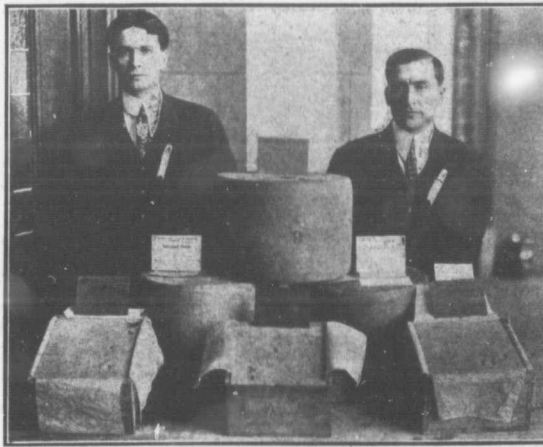
be to change it from one pair of cows to another, brush the udders ahead of the milker and strip behind the milker.

Peter McGregor's Tile Drains

The Best Paying Investment on His Farm

"**T**HE farm of Mr. Peter McGregor, of Ilxaville, in Gienary County, is one of the best in the district. It comprises 200 acres of level, clay land, well watered by a creek that runs along the line fence without cutting the farm, well built upon and well stocked with 40 milkers and a nice showing of young cattle. But the part of the farm that gives most satisfaction for the outlay in cash is the system of tile under drainage. Practically all the farm is now under drained. Some of the lower fields have a whole net work of drains installed according to the plans of a drainage expert. Other fields in which the drainage was fairly good except in the lower parts, have had these parts drained first as being most in need. In all over three miles of tile have been laid.

"One of the ways in which tile under drainage pays for itself quickly is in the saving of time," said Mr. McGregor, when I visited him recently. "They let us get on to our land one week earlier in the



Two Champion Makers of the Western Provinces.

A feature of the dairy exhibit in connection with the last annual meeting of the Manitoba Dairymen's Association, was the interprovincial competition in butter and cheese, makers from the three prairie provinces competing. To the left is J. E. Keboe, buttermaker of the Crescent Creamery, Winnipeg, and on the right is Albert Carrriere, cheese-maker of Les Des Chenes, Man. The rapid improvement in the quality of prairie dairy produce speaks well for the dairy manufacturers of the West.

spring than we formerly could, and the value of this is very difficult to estimate. In the same way we can get to work more quickly after a heavy rain. On this level farm, water would formerly lie for a week on top of the ground. Now it will drain away in two hours. The physical texture of the clay soil has been greatly improved also. Where formerly some of the heavier clay parts of the farm would be like putty at plowing time, either by the plow or the moldboard, and dragging it in so deeply that it would stick the team, now the land turns up like ashes."

While Mr. McGregor has no figures available to show the increase in the crop he says he can notice considerably larger yields off the field since drainage, and that he gets a better sample of grain. In a dry season, it is noticeable that in those fields where drains have only been placed where absolute necessity needed, that the best corn and grain grows in the section along the drains. In the same way the ground along the drain warms up quicker in the spring and the grain gets started there first. "The greatest need of this country," concluded Mr. McGregor, "is the drainage. It would double the crops and more"—S. R. N. H.

And he gave it as his opinion, that whoever could make two ears of corn, or two blades of grass to grow upon a spot of ground where only one grew before, would deserve better of mankind, and do more essential service to his country than the whole race of politicians put together.—Dean Swift.

Pure Breds a Good Investment

Three Instances of Financial Success—By Mac

"**W**ITHIN the past month or so there have come under my observation three many examples of the value of pure-bred stock as an investment. The following three cases are taken at random:

The first case is that of the Hillcrest dispersal. When Mr. Brethen started breeding Holsteins he did not pay fabulous prices for his foundation stock. Possibly the highest-priced animal at his recent sale would cover the initial cost of his foundation cows; yet at the end of the year retaining his two foundation cows, his present herd of eight calves, he turns over the remainder of his stock for the round sum of \$25,000. This is not all. During that period he has had the continuous revenue from milk sales, and has become from sale of stock amounting to several thousands of dollars in a year.

Another instance on a somewhat smaller scale is that of Mr. Carman Baker, of Brighton. A year ago Mr. Baker paid \$300 for a cow. He utilized her for a year, she had a bull calf, and at the recent Belleville consignment sale, after she had made a test of 32 lbs. of butts. In a week, he sold the calf for the price which he had paid for the cow, and the cow for \$1,125—pretty good interest on the money invested, considering the fact that he has a year's milk thrown into the bargain.

The other case is that of Mr. George Gregg, of Ingersoll. Several years ago Mr. Gregg laid his foundation for a herd of Holsteins. He bought cattle of good breeding, and while he paid good round figures, he kept well within the bounds of economy. While he did no official testing, he had a good feeder, and the reputation of his herd for producing large quantities of milk was well established in his local neighborhood. This herd, after bringing in good income for a few years, during which they increased in number to over 60 head, were recently dispersed and thanks to extensive advertising, combined with their local reputation, they brought in a total of over \$11,000.

These cases, picked at random was roughly as follows: First, that while the income per year of the farmer with pure-bred stock may not be in proportion to his investment, yet with careful management his capital increases at a wonderful rate, and when he comes to turn off his capital, in other words, his herd of cows, he is usually surprised at the results. The above results could be doubtless be duplicated in the experience of many of our readers who are breeders of pure-bred stock and should prove an incentive to many a young beginner in the pure-bred business.

Buy Feeds or Grow Them?

The Opinion and Practice of R. M. Holtby

"**I**T is my belief that the best farm practice is to grow your own feeds, give the concentrates," says R. M. Holtby, of Ontario Co., Ont. "You can then keep more stock on a given number of acres and feed as you like. Even when you do grow your own feeds, you must give them a properly balanced ration. I consider cottonseed the cheapest feed, oil cake next, then bran, then gluten feed. I would feed bran especially if feeding heavily, as it lightens the ration. I would grow coarse feeds and corn concentrates, as they are fine for young stock up to a year old. I would not think, however, of attempting to grow enough grain to form the basis of my ration. By buying concentrates I have saved my acreage and the land becomes more fertile. We just enough grain to keep the land seeded down and produce all the milk we can, for we have to go to the station with it anyway and we might as well make enough to make the trip worth while."

Mr. Holtby makes an additional comment on his experience in feeding cottonseed. "A few years ago I bought a ton of cottonseed," said he. "I was afraid to feed it at first, but I gave it a handful at a time. In our immediate neighborhood we now feed two or three carloads of cottonseed where we used to feed two or three tons. We feed it along with oil cake and uran, and it is safer when fed in such a mixture."

This Dairy Barn

"**T**HREE years ago the Prison Farm at that time the institution was to restore self-reliance to the inmates of this institution, known as the Millit, remodelled, refitted and erected for the accommodation of convicts from the United States and Belgium. I took the building, looked into it as comfortable as a man's equipment which made and finally combined the big farm that is institution.

In all there is about 100 acres in connection with all the way from a Dairy is the main sideline to the dairy, set in orchard and is set apart as a military hospital is required, and large quantities of pasture. The rest of the land is managed diversified province. In 1917 the government institution, green feed for cows, 30 acres, and beans, of the cash crops of the pasture, but as a pasture, and as pasture brought in for the pasture to put the stock on the pasture. This, however, will be cleared.

The grain grown last year mixture—Alaska, as recommended by the Alaskan oat mixture has proven to be a mixture of five varieties were tested in the fall and winter, Siberian, Siberian and Banner. The O. A. C. 72 mixture was probably due to the mixture of the previous year.

"With a dairy herd of 100 cows, great feed is placed on the corn crop as a result of the big corn last year no hay was bought this year. It is something new in the history of this farm. The silos, 20 x 35 feet, in the fall and winter, they were re-filled, 10 or 12 acres of corn had been stocked. Plans call for 100 acres, and perhaps 150.

The Dairy Herd My chief interest was a dairy herd, which has known for several years of the best grade of milk. It was a fine place. At the time, there were 68 cows in the dairy pro-



This Dairy Barn Accommodates 70 Cows and a Large Number of Young Stock. In the Creamery the Milk is Cared for and the Surplus Made into Butter.

Farming at the Military Hospital, Guelph

The Well Managed Diversified Farm Maintains a Productive Dairy Herd of Grade Cows—By F. E. Ellis, B.S.A.

THREE years ago I visited the Prison Farm at Guelph. At that time the object of the institution was to reform and restore self-respect to fallen men. Last December I again visited the same institution, but it is now known as the Military Hospital, remodelled, refitted and with three new buildings erected for the accommodation of returned soldiers coming from the wounds received in France and Belgium. I took a run through the administration building, looked into the one time cells, now fitted as comfortable bed rooms for the returned men, explored even so far as the kitchen with its equipment which made it look like a machine shop and foundry combined, and then went out to explore the big farm that is run in connection with the institution.

In all there is about one square mile of land owned in connection with the institution and running all the way from a medium clay to a light gravel. Dairying is the main line, with pigs an important sideline to the dairy. Twenty acres have been set out in orchard and bush fruits. Another 30 acres is set apart as a garden and from this area the military hospital is supplied with all the vegetables required, and large quantities are shipped to other government institutions throughout Ontario. The rest of the land is cropped as would be any well managed diversified farm of the same size in the province. In 1917 the acreage in various crops was roughly as follows:—Hay, 135 acres; grain, 140 acres; mangels and turnips, 25 acres; corn, 65 acres; green feed for cows and pigs, 15 acres; potatoes, 30 acres, and beans, five acres. The latter two are the cash crops of the farm. There is a fair acreage of pasture, but as part of the pasture land is very rough, and as pasturage is required for the stock brought in for the abattoir, there is hardly enough pasture to put the stock through, and some of the heifers have to be pastured out during the summer. This, however, will be remedied as more of the land is cleared.

The Grains Grown.

The grain grown last year was mostly an oat and barley mixture—Alaskan oats and O. A. C. 71 barley as recommended by Dr. Zavitz. It was found that the Alaskan oat matures evenly with the barley, and the mixture has proven very satisfactory. Oats are also grown for seed for the other institutions and five varieties were tested last year—Alaskan, O. A. C. 71, Banner, Siberian and Industrial. The Alaskan, Siberian and Banner were the most satisfactory. The O. A. C. 72 showed a tendency to lodge, which was probably due to the ground having been heavily manured the previous season. The Industrial lodged badly.

With a dairy herd of 70 cows and a large number of young stock, great dependence is placed on the corn crop, and as a result of the big acreage in corn last year no hay is being bought this winter, which is something new in the history of this farm. The two silos, 20 x 38 feet, were filled to the full and sloped in January they were re-filled from the 10 or 12 acres of corn that had been stocked. Present plans call for 70 acres next year, and perhaps another silo.

The Dairy Herd.

My chief interest was in the dairy herd, which has been known for several years as one of the best grade Holstein herds of its size in the province. At the time of my visit there were 68 cows milking and the daily production

ran around 1,600 lbs. Some months previous, 71 cows had hit the 2,000 mark. They are bred to freshen, as much as possible, the year round to ensure a uniform supply of whole milk. What is not used as whole milk in the hospital is made into butter in the model creamery, which is one of the features of the farm equipment, the farm herdsman, Mr. McCallum, being an expert in the handling of dairy cows.

In the first place this herd was collected from private herds all over the province. Good sires have been used and practically all cows required to replenish the herd are now being raised, the total number of live stock being 129 head; and a more promising bunch of grade heifers it would be hard to find. Last year, heifers and all, the herd average was 9,000 lbs. of milk, the mature cows averaging about 11,000 lbs. Some of the heifers coming in with first calf promise to establish a new standard of production for the herd. One heifer produced 60 lbs. of milk testing 3.3 per cent. fat in one day. Two more went over the 50-lb. mark and two more beat 45 lbs., these heifers testing from 3.3 to 3.8 per cent. fat.

No force feeding is done; in fact, many good dairy farmers would consider that the herd is under-fed rather than over-fed, so far as meat is concerned. Cows that are milking well get 40 lbs. of ensilage, 15 to 20 lbs. of roots, six to seven pounds of hay and six pounds of the grain mixture daily. An extra good producer may get seven pounds of grain per day.

In The Swine Department.

The old barns which did service on one of the farms purchased when the government farm was established have been rearranged as headquarters of the swine department. These quarters are somewhat rough, perhaps a little hard to keep clean, but it is the intention to erect a new piggery as soon as the present war conditions will allow. Large Yorkshires is the breed favored. The sucklings are started off with skim milk and middlings and then a bit of choice kitchen swill. As they get old enough to stand it, oat and barley chop finely ground is added and the proportion of middlings gradually decreased until when turned off they are getting practically no middlings at all. The object here is to feed most largely of farm grown grains. The sows, except when with litters, get nothing more than kitchen swill, an economical source of feeding stuffs not available to the majority of pork producers.

The farm end of the Military Hospital is under the efficient management of a returned soldier, B. H. C. Blanchard, B.S.A., a graduate of the Ontario Agricultural College, at one time associate editor of Farm and Dairy, severely wounded in France and now thoroughly in the management of a good big dairy farm. So far, other returned men have not figured largely in the working of the farm. Several have been employed and more will be as they return from the front. Plans are now complete and under way for giving returned men, who desire instruction in the theory and practice of agriculture. Vocational training is given also in connection with the several factories which form a part of the institution. As yet, the classes are small, but it is only a matter of time till the numbers will be greatly increased. The military hospital at Guelph may yet prove an important connecting link between returned men and the land.

Advantage of Tile Drainage

In One Instance the Crop Increased 108%

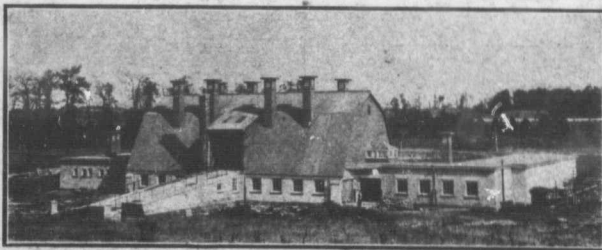
AT the Experimental Station, Ste. Anne de la Pocatiere, Que., an experiment on drainage has been conducted, the results of which should be of great interest to farmers, as they teach an eloquent lesson in favor of good soil drainage, a practice which should be encouraged as much as possible in these days when maximum production is the duty of every farmer.

A certain area of level land was taken for the experiment and divided into two fields, A and B, absolutely similar in every way. Field A was under-drained by means of three-inch tile placed at a depth of four feet and 30 feet apart. Field B was not tile drained, but had perfect surface drainage. These two fields were cultivated and treated exactly alike; rotation, cultural methods, manure, choice and quality of seed, etc., being the same in each case.

Close observation has shown that larger yields were obtained on the tile drained area each year than on that which was only surface drained. The difference was rather small the year following the laying of the tile, was larger the following year, and became quite marked the third year. It was most marked among crops like corn which require more warmth. In 1917 the crop of corn on the tile drained area was more than twice as great as on the undrained field, the exact difference being 108 per cent., wheat yielding 72 per cent. more and hay 20 per cent. It might, however, be noted that the fact that the season of 1917 was exceptionally late and damp gave a special advantage to the drained area, and the results might not be so marked in a normal year.

The difference in crop yields, however, is not the only point in favor of the drainage. There are other good effects also. After three years the experiment has proved that the soil on the tile drained area has become much more porous and more mellow, than the soil which was only surface drained. It can be cultivated more easily, and can be worked and sown earlier in the spring. It will be readily seen that this is of great importance in Eastern Quebec where the springs are often late and the growing season relatively short.

The cow on half rations is never as profitable as the one that is getting plenty to eat.



The Horse Barn at the Military Hospital. It accommodates 32 Horses and was not Completed when the Photo was Secured.

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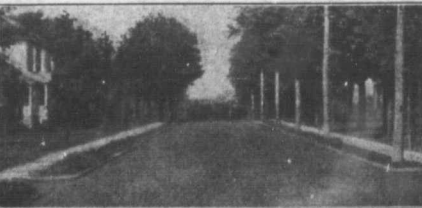
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The Barrett Company

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ST. JOHN, N. B. HALIFAX, N. S. SYDNEY, N. S.



Winnett Street, Woodstock, Ontario, treated with "Tarvia-B" in 1917

War Time Savings in the Field

(Continued from page 3.)

cows are still young and immature, and they fail to feed a certain amount for growth. The following incident illustrates this point: A short time ago I went into a dairy barn where good methods were supposed to be practiced. They told me they were feeding on the basis of production. In the barn were young heifers which were possibly only two-thirds grown, and yet they were being fed on production alone, thereby getting nothing for growth. It is needless to say that all the animals were undersized.

The question may here be raised concerning the feeding of a herd of cows. Should they be fed separately, each according to its own weight and production? No. Ordinarily this is quite impossible. One would have to big a bill for labor. However, one can get an idea of what his cows average in weight, and can find out quite definitely what the individual production is, and also what the average production is, and then figure out a balanced ration for the herd, knowing the average weight, the average test and the average yield of milk. He can then feed as much hay and straw and root and silage as the animals will clean up, and then can feed his grain according to their individual yields, feeding for Jerseys approximately one pound for each three and a half pounds of milk, a high-testing cow receiving a little more than a low-testing one giving the same amount of milk.

What is "A Good Ration?"

By a good ration I not only mean a balanced ration, but one more than that. A ration may be balanced and then not be the best. We like, besides a balanced ration, one with variety, bulkiness or lightness, palatability and good mineral matter or ash content. The failure of many high-testing cows to breed is often attributed to lack of mineral matter. Mineral matter is especially good in the legumes such as clover or alfalfa, but is rather poor in the grains.

Of course, we must mention among the essentials of a good ration, the point of low cost. Naturally this is one of importance and one most often considered of first importance. With the present shortage it appears that many of our grains that we have been feeding to our cattle, and yet which can be used for human consumption, will have to be replaced by products and by-products not used for human consumption.

Too much emphasis can not be laid on studying the feed market. Farmers should club together and buy in large quantities and hence save in this manner.

Take Good Care of Cows.

A fourth way to save is to study each individual cow and give her the best possible care. No two cows are the same. They are just as different as people. Some cows are very delicate; others are good feeders and eaters; to the extent to which one can cater to the individual wants of the cow depends largely upon the kind of business conducted by the dairyman, whether he is attempting to feed for records or feed only for fair yield.

We can generally save by grooming her occasionally. It is often said that a curry-comb and brush on a horse are worth half a feed of oats. This is applicable to the dairy cow and will generally pay. Warm and comfortable quarters during the cold weather will also pay. There is no need, however, of providing elaborate and costly quarters for the cow. Too many men over-estimate the value of fancy equipment, and underestimate the value of proper methods in the production of milk. Recent findings show no direct connection between the score of a dairy

farm and the quality and cleanliness of the milk.

It is being found that too much emphasis is being laid on equipment, even in the score-card.

Another item which may be mentioned here is regarding water supply. One will find that it will pay to devise some method for heating the drinking water through the winter months, rather than forcing the cows to drink water that is ice cold.

Build a Summer Silo.

A fifth way to save is to build a silo. They are exceedingly valuable both summer and winter and will very soon pay for themselves. Experience has shown several feeds make good silage besides corn, among which are oats and pease together, winter wheat, vetch and many others. Of course, corn still seems to be king. If the silo, or siloes, are filled with corn in the fall, and one is emptied during the winter, the remaining silage is available, they can be cut and placed in the silo with plenty of water added and good silage will result.

Many dairymen now assert that silage is not so good as winter wheat, but this is a problem that winter feeding, because pastures are too often short, and succulent feed, therefore, not available. It is now a common practice to grow a spring crop for silage in the spring, and then fill the silo with the remainder, thereby providing succulent feed for the rest of the summer in the form of silage. Oats and peas are especially good for this. In the dry country the silage system is employed whereby they have several green succulent feeds coming on in rapid succession throughout the summer, and when the silage is ready to feed. They sometimes feed ten to twenty different crops during the summer months. Their labor is not too heavy, cheap. Here it is especially worthy to believe that this system will work here for the reason of the expense making it almost impossible. The summer silo will offer us a good substitute for such a system.

Rations for Young Stock and Bulls.

A sixth way to save is to carefully feed throughout the winter the dry stock and the young calves and heifers. Too many people try to keep their growing heifers in what we may call show condition. To do this requires unnecessary feed. In a feeding experiment which I recently conducted, I fed three groups of heifers various rations for six months in winter, and then turned them all to pasture in the spring. One group of ten dry heifers was fed a ration which allowed of but limited growth, namely, one-fourth pound per day. Their ration was timothy or wild hay and silage. Some cows in this group had and had to receive some little grain. Group two was liberally fed roughage and only given two pounds of grain per day. Group three was heavily fed, receiving all the alfalfa and silage and grain they could eat. Some consumed as much as eight to ten pounds of grain per day. I may here say I was not afraid of them losing their dairy characteristics, and proven for milk production by becoming fat as some people believe. The results showed that they all grew about the same in height, which was rather surprising, while the gains were one-fourth pound per day for group one, one pound for group two, and one and one-half pounds per day for group three. The interesting part came when they were all placed on pasture. Group three, the fat ones, lost and lost heavily, the medium fed ones lost a little, the first month, but gained well thereafter. Group one, the low feds, gained very rapidly. At the end of six months, after six and six months summer, making the one year

the area under-fed it far below the others. The medium fed ones were retarded in the fat ones were no further advanced than the excess grazers. The excess grazers were thrown away.

The baby calves (calf special attention) started out on whole milk and then gradually changed to separate by three weeks of skim-milk enteral. Two of the calves were able to suckle any attention is three part ground out, three part ground out, three part bran and one part linseed meal. Attention must be given. Bulls. They will do feed only liberally. 10 to 15 pounds of ground grain per



On Book

BOOSTERS IN CON-
tario are rare in this "extinct species" only examples of this couple of stuffed will collect dust in the museums. This will change for the boosters. They have us. But they are. —though their special one's hard-earned gold saying, however, in a firming communities. One of the silage silo, stantial buildings. T handled down to us fr one and how high with what we feel that. So why raise it.

And the boosters the strength of our was when wild cat crayon portrait and the building of the classes on the com-tario. Then we had it well we remember his face, ornamented, with at an angle of 45 degrees. hat set back over his head, and the smart seems but yesterday it came into our unwilling of unseasoned green and. But nothing like mine a memory. like the morning mist, accents offer their war actually. Yes, the boosters has gone to so much to make good pro-

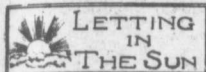
But last summer I tario. And the first my old friend of it was. He was driving the station to the town in which I stop bel—not exactly the know. But boosters advised like Ford.

"What do you grow?" I asked him. It traces to the country growth through the stretching from North-bury, had not less mention, finding very wonderful farming lands. Irishman-like he gave question, full of fine was you rose?" On receiving my question that I had spent No outside of New Or-

the ones underfed in the winter were far below the others. They surely had been retarded in their growth. The fat ones were no further ahead than the medium fed ones. Evidently, then, the excess grain fed to the fat ones was thrown away or wasted.

The baby calves likewise must receive special attention. They can be started out on whole milk, and at the end of ten days or two weeks gradually changed to separated milk, so that by three weeks of age they will be on skim-milk entirely. When they are two or three weeks old, they will be getting a nibble hay and straw. A good ration is three parts by weight of ground oats, three parts by weight of ground corn, three parts by weight of bran and one part linnseed oil meal.

Mention must here be made of the bulks. They will do better work if fed only liberally. A good ration is 10 to 15 pounds of hay, eight to 15 pounds of silage with possibly two pounds of grain per day.



On Boosters

BOOSTERS in conservative old Ontario are rare birds. Soon the only examples we will have of this "extinct species" of animal will be a couple of stuffed specimens that will collect dust in some of our city museums. This will indeed be a change for the boosters—to be stuffed. They have usually done the stuffing. But they will be right at home in the matter of collecting dust—though their speciality was someone's hard-earned gold dust. As I was saying, however, in the older settled farming communities we have learned to sit tight. Our farms have substantial buildings. They have been handed down to us from our forefathers and now with high prices fixed on wheat, we feel that we have a sure thing. So why reach for the moon?

And the boosters seem to realize the strength of our position. Time was when wild cat mining shares, crayon portrait enlargements and Western building lots found eager purchasers on the concessions of old Ontario. Then we had the booster. How well we remember his round, smooth face, ornamented with a cigar tipped at an angle of 45 degrees, the derby hat set rakishly on the back of his head, and the smart checked suit. It seems but yesterday that he was pressing into our unwilling hand a bundle of embossed green and gold stock certificates. But nothing now remains of him save a memory. He has vanished like the morning mist. The very book agents offer their wares almost apologetically. Yes, the booster in old Ontario has gone to seed. We're too snug to make good prospects.

But last summer I visited New Ontario. And the first chap I met was my old friend of the button-holing days. He was driving a stage from the station to the hotel at the first town in which I stopped in the clay belt—not exactly the same man you know. But boosters are now standardized like Ford's.

"What do you grow in this country?" I asked him. It was my first entrance to the country and the long approach through the rough country, stretching from North Bay to Halleybury, had not led me to expect anything very wonderful in the line of farming lands.

Irishman-like he answered by a question, full of fine scorn, "Where was you rose?"

On receiving my shamfaced confession that I had spent most of my life outside of New Ontario, he began

with my education. He informed me that the farmers in the clay belt can grow "every doggone grain or vegetable ever attempted in Old Ontario and beat Old Ontario all to mush and molasses at its own game. Where will you see a garden like that in the old settlement?" he asked as he pointed to a rather fine plot that we were passing. "You're out into the open now, man. You've struck a real farming country."

I found the people throughout this new district all boosters, or if there were a few who could see the drawbacks to their own country they were looked upon with suspicion. When such an one passed down the street, the neighbors might be observed tapping their foreheads significantly, or mak-

ing circular motions with their hands in the vicinity of their ears.

The typical posture of the citizen of this as of any new country, is that of the Barker at a circus—left thumb in armpit, extended, however, of saying, "Here, ladies and gentlemen, we have —" he steps back and allowing the visitor to gaze his fill at the field of clover or peas under surveillance, he asks, "What do you think of that?" And one can only murmur over and over again, "Wonderful! Wonderful!"

We in the East, particularly in the older settled communities, are often looked upon by our fellow countrymen of the newer opened districts as being more or less atrophied. They think because we do not try to sei-

them, by mail, town lots in our back pasture, that we have lost the slip of youth. In reality I believe, however, that we enjoy our own district as much or probably more than those who make such a fuss about it. Like Job, Trotter, we consider our enjoyment too precious to let any of it escape in a chuckle or a boast. Our farms are not for sale, so it would not pay us to advertise. But we believe in old Ontario yet, even as our booster friends persuade themselves that they believe in their newly found districts. As the old proverb hath it, "Every cock is proud of his own dung-hill."

Sam Ray



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POULTRY

The Last Chance

THIS week and the early part of next, the farmer or his wife, whichever takes charge of the poultry, will have a last opportunity of setting eggs that will hatch profitable layers for next winter. The most profitable chicks of all are hatched out around April 15. These early chicks will lay in October and will be profitable in every winter month. Every effort should be made to have all of the chicks out by the 24th of May, although Leghorns may be hatched up to the middle of June with prospects of a fair egg yield before Christmas. Prof. F. C. Elford, of Ottawa, makes the statement that at least 90 per cent. of the pullets in Canada were not laying during November and December of the past winter because they were hatched too late. Prof. Graham of Guelph, states that pullets hatched in the middle of May will not start laying until six weeks later than those hatched the middle of April, but that those hatched two or three days late are apt to be four months later in getting started laying. These statements are in line with the experience of all good poultrymen and emphasize the importance of making the last settings immediately.

The greatest difficulty in getting early chicks under farm conditions is that hens are slow in becoming broody early in the season. This difficulty may be gotten around by the purchase of a small incubator, say a 16-egg size, by getting someone who has extra incubator capacity to hatch for their neighbors, or to purchase day-old chicks. The latter is the plan which seems to be commending itself to the majority of farmers who realize the advantage of early chicks, and the day-old chick business is growing apace. In fact, many commercial poultrymen are now making no pens and hatching no chicks. They depend altogether on day-old chicks for renewing their flocks. Late hatches are always a mistake and will involve more financial loss this year than in any year in the past.—J. B. L.

Incubation Pointers

THE keynote to successful winter egg production is "early hatching." It matters not whether the natural or the artificial method of incubation be used, the chicks must be hatched early, if the best results are to be obtained. If it is impossible to secure enough broody hens early in the season to hatch the number of chicks required, purchase an incubator.

In buying a machine, it should be borne in mind that at the most only three hatches can be taken off in the proper hatching period. The incubator, therefore, should be of sufficient capacity to produce at each hatch at least one-third the number of chicks required.

There are a lot of good incubators on the market. Do not be deluded into buying a machine just because it is low in price. The low-priced incubator is very often the most expensive in the end.

The incubator should be placed in a room that is fairly even in temperature, has a good, solid floor, and that can be well ventilated without draughts.

In running any incubator, the manufacturer's general directions should be carefully followed, as he is the one that should know best what his machine requires.

At the same time, a little variation in the handling will often greatly improve results. Climatic conditions sometimes alter requirements. A machine that does not require added moisture in one locality may in another. A relative humidity of between 60 and 65 inside the egg chamber gives the most satisfactory results; if a machine is not giving these

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conditions, moisture. This may best be tray of wet sand either or above it, depending on the machine is heated. In starting this in several days until it is able to put out two kinds of them, usually used are the should register above hanging, which is a should register 100. It is slow in coming off, sure in succeeding versa.

From the second begin to pip, they twice a day. The cooled, the length of depending on climate the temperature at is being run.

It is advisable to during the hatching day, when and "blood rings" and again about the all dead forms about little practice will what it is safe to take leave in.

As soon as the which will usually be tenth day, close up leave it until the hat the temperature rises don't get excited, expected at this time sign. It is due to by the chicks struck away from the shell, hatching is over and becomes thoroughly lag the machine. Farms Note.

Brooding M

IN our poultry exper come up all the v or two of chicks mothered by hens, commercial flock with the equipment for artificial brooding.

We have with many of the pipe brooders of poultryman, and are advice on brooding when we still under the light of our own would advise that w or under are hatched, method of brooding, ever 100 chicks are would be better to n sideline a worth which plan on 300 chicks or number, proper equip good investment, and can be handled at cost trouble than 100 chicks.

If the natural method to be followed, birds breeds, such as Rhode setter, will make both will Leghorns or Anco planned to have the several broods at a time 15 to 18 chicks to each selecting those that are the best mothers. They gotten back into the For each brood we pro similar "A" coops, w frequently to fresh gro were kept housed wh were small, and alwa morning while the dew on the grass. At pres rar only one or two u using eggs purchas ed from, with the id cockers to make with the following spring.

Practically all of brooded artificially, once is for the coal l. One of these brooder from 200 to 500 brooder is set in the c the chicks brooded the larger mass of artificial is or is then taken out the summer, the cool moved to fattening pens are reared in this which they were bro house eight feet square 450 300 chicks.—F. E.

conditions, moisture should be added. This may best be done by placing a tray of wet sand either under the egg tray or above it, depending on how the machine is heated.

In starting the machine, run it for several days until it is perfectly regulated before putting in the eggs. The two kinds of thermometer most commonly used are the standing, which should register about 102, and the hanging, which is usually hung and should register 105. If the barometer is slow in coming off, raise the temperature in succeeding hatches and vice versa.

From the second day until the eggs begin to pip, they should be turned twice a day. They should also be cooled, the length of time for cooling depending on climatic conditions and the temperature at which the machine is being run.

It is advisable to test the eggs twice during the hatch—once about the seventh day, when the infertile eggs and "blood rings" should be removed, and again about the fourteenth, when all dead germs should be taken out. A little practice will soon teach just what it is safe to take out and what to leave in.

As soon as the eggs begin to pip, which will usually be about the eighth day, close up the machine and leave it until the hatch is over. When the temperature rises a degree or two, don't get excited, as the rise is to be expected at this time, and is a good sign. It is due to the heat generated by the chicks struggling to free themselves from the shells. Wait until the hatching is over and the chicks have become thoroughly dried before opening the machine.—Experimental Farms Note.

Brooding Methods

IN our poultry experience we have come up all the way from a hatch of two or three chickens, hatched and reared by hand, to a fair sized commercial flock with the latest and best equipment for artificial incubation and brooding. We have had experience with all systems of brooding, except the pipe brooders of the extensive poultryman, and are often asked for advice on brooding by farmers to whom we sell eggs for hatching. In the light of our own experience, we would advise that where 100 chicks or under are hatched, that the natural method of brooding be followed. If over 100 chicks are planned for, it would be better to make the poultry sideline a worth while business and plan 300 chicks or more. With this number, proper equipment would be a good investment, and 300 to 500 chicks can be handled actually with less trouble than 100 chicks with hens.

If the natural method of brooding is to be followed, birds of the heavier breeds, such as Rocks and Wyandottes, will make better mothers than will Leghorns or Anconas. We always planned to have the chicks come out several broods at a time and then give 15 to 18 chicks to each hen, carefully selecting those that promise to make the best mothers. The others were rotten back into the producing flock. For each brood we provided one of the familiar "A" coops, which were moved frequently to fresh ground. The hens were kept housed while the chicks were small, and always early in the morning while the dew was still heavy on the grass. At present, however, we rear only one or two broods naturally, using eggs purchased from other poultrymen, with the idea of raising cockerels to mate with our own birds the following spring.

Practically all of our chicks are brooded artificially, and our preference is for the coal burning brooder. One of these brooders will accommodate from 200 to 500 chickens. The brooder is set in the colony house and the chicks brooded there until they no longer need artificial heat. The brooder is then taken out and stored for the summer, the cockerels are removed to fattening pens, and the pullets are reared in the same house in which they were brooded. A colony house eight feet square will accommodate 300 chicks.—E. E. E.

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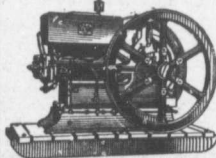
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T. B. Bissell Co., Ltd.,
Elora, Ont.

Dear Sirs—

Your Disk, which I have used for two years has given me satisfaction. I have only got one grain on my rotunda repairs till now, and I think my new ball leaves a fine surface. I shall run another ten. It has been over some of the roughest ground in Southern Ontario as our land is mostly scrub and some heavy timber, but I have a fine crop, and it is a wonder it is not all in pieces by now on that on the day it was mowed, and I think it was really and light draft. I remain, Yours truly,
George Spenser.

The particular impressive feature of "Bissell" implements is their durability. Words of Praise encourage us to make "Bissell and Service" greater than ever.

The same Bissell is the confidence of all farmers because of the assurance they have in the service and guarantee that backs up the implement bearing the name. Recognition of this fact is the foundation Stone of Bissell's Service.

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Does not blister or remove the hair and can be worked. Pleasant to use. \$2.50 a bottle, delivered. Describe your case for special instructions and Book S R Free.

ABSORBINE, J.R., proprietary business for marketing, care London, England, Canada, Sweden, Yuma, Colorado—only a few drops required on an application. Price 15¢ per bottle at dealer or delivered.

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Absorbine and Absorbine, Jr., are made in Canada.

HORTICULTURE

Orchard and Garden Notes

PLANET peas, onions, radishes and lettuce now.

Don't let the hotbeds and cold frames get too warm. Ventilate well when the sun gets high.

Plant parsnips, carrots and Swiss chard.

Be sure the fruit trees are thoroughly sprayed this spring. Wormy fruit is not profitable.

It is usually a safe plan not to be in a hurry to uncover fruits or perennial plants in the spring until warm settled weather.

A small kitchen garden near the house is worth more than a large one half-mile away, and will be more often used.

Children should be taught to care for a part of the garden. If properly directed, they may be interested in plant life very early in life and really can do much useful work.

Uncover strawberries before the foliage becomes bleached white. Leave the covering on as long as possible. It may prevent their blossoming in time to be struck by a late frost.

Mice or Rabbit Injury

AS mice or rabbits have, doubtless, injured many trees in Canada during the past winter, the following information is given regarding the treatment of the trees in order to save them.

The injury is usually inflicted by mice or rabbits, it usually dies if left untreated. If, as soon as the wound is noticed, it is cleaned and covered with grafting wax or some paste, such as asphalt, covering and clay, and wrapped with cloth to exclude air and prevent the wood from drying out, there is a possibility of saving the tree if the girdle is a small one, so soon as the wood begins to grow the wood will continue to do so, and returning through the inner bark in an elaborated condition will cause growth to be made all around the upper part of the wound, and if the latter be not too large there is a chance of its healing over. If, however, the wood becomes dry before the wound is put on, the tree will die, and the wood should be headed back considerably to lessen the amount of transpiration of moisture, as there will not be as much sap rise as if the tree were uninjured, and the wood will thus dry out sooner than if it were headed back. If the girdle is not on the ground, in addition to covering the injured part with wax or cow dung and clay, it is advisable to mound up the soil about the tree to cover the wound and thus help to prevent the wood from drying out. The mound should be up about six inches above the wound and be about two feet across at the base.

Bridge Grafting.

Girdled trees are frequently saved, and more surely saved than by the above method, by connecting the upper and lower edges of the girdle with scions, which are inserted about an inch apart all around the trunk. This is known as bridge grafting. The more scions that are used the more quickly they will grow together and form a new trunk, but two or three scions successfully grafted on a small tree will carry enough sap to keep the tree alive. A slanting cut is made at each end of the wound in the uninjured wood, in which the ends of the scions are to be inserted. Strong, plump scions of the previous season's growth—not necessarily from the same tree, nor even the same variety, cut a little longer than the distance between the slanting cut and the wound, and inserted at each end. They are made a little longer than the distance between the cuts in order that when inserting the

ends into the cuts it will be necessary to bend them, and thus have them under pressure, which helps to keep them in position. After inserting, some of the inside bark of the stock should remain in contact with the inside bark of the scion, as it is here, or at the cambium layer, where union takes place. As soon as the scions are all placed, the wound, especially about the ends of the scions where inserted in the stock, is covered with grafting wax. The ends are also at the same time bandaged with a piece of sack or around the trunk to aid in keeping the scions in place and to exclude the air. The tree should then be well headed back. The scions, if properly made and inserted, should soon unite with the stock and then carry the sap to the top of the tree.

One of the most satisfactory methods of utilizing the badly girdled tree is to cut it off close to the ground and insert a scion of some good variety. This graft should grow at least three feet in height the first season and make a nice young tree.

A young tree may sometimes be saved when the girdling is well above the graft by cutting the tree back so as to remove all of the injured part. Under such conditions, young trees will usually make new growth, and the strongest shoot may be selected to form a new trunk and top for the tree. This method is not usually very satisfactory if the injury occurs more than two years after the tree has been planted.

Treating Potatoes for Scab

SCABBY potatoes are worth much less than good clean potatoes for cooking purposes because a considerable portion has to be pared off and the parings as a general rule contain the best part of the potato. Potato growers should therefore guard against scab when sowing their seed. Scabby seed may be treated by soaking for two hours in a solution of formalin, one pint of formalin to 40 gallons of water in a barrel. I change the water every day as its loss strength after a certain number of potatoes have been soaked in it.

Potatoes should not be treated with formalin unless they are scabby enough to warrant treatment. The formalin treatment will put back the growth of potatoes 10 days, because all the buds that have started will be killed by the same agent that kills the scab and growth will have to begin all over again.—Douglas Maynard, Leamington, Ont.

Windbreaks for Comfort

A GROVE on a farm greatly improves its sale value. Trees thus arranged in nice shape around a farm-house and buildings will raise a farm in the estimation of a buyer, who wants an attractive home; a good many times the value of the time and money put into the planting of the trees.

Windbreaks are a great protection from the hot, dry winds of the summer and the cold, chilling winds of the winter. They are especially beneficial to orchards, preventing the winds from blowing off the blossoms in the spring and shaking off the fruit in the fall. Windbreaks also protect fruit trees from blight and winter killing.

A well arranged strip of trees is a great protection against drifting snow. Clover and winter crops, such as winter wheat and rye, protected by a belt of trees which prevents the snow from blowing off, will produce much better and be less subject to winter killing. In summer and spring a tree well protects from hot, scorching winds, which cook the grain before it is ripe or blow the seed out of the ground before it sprouts.

The protection which good windbreaks will give to stock in winter will pay in a short time for the cost of establishing the windbreak.—W. H. Kenety.

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Increase your egg yield by purchasing hatching eggs from our high-record hatching to-lay Rocks, Wyandottes, Redgs. 1913, Buff Orpingtons, and other breeds. Our list, containing a full description of stock and buildings, Free and simple formulas free.

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After 15 years' careful breeding, we feel that we can supply you with the best day-old chicks procurable in Canada, at very handsome prices.

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Pr. Horses, 3 Cows
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THREE CENTS A WORD, CASH WITH ORDER

WHITE and COLUMBIA WYANDOTTES, WHITE LEGHORNS, & C. O. D. WHITE LEGHORNS.
Michael K. Boyer, Box 23, Hammonds,

FARMER'S STATIONERY—100 stick heads, 5 x 11; 100 envelopes, good stock printed name, address, etc., anywhere in Ontario. 15¢ each with Farmer's Printery, Beaverton, Ontario.

FOR SALE—3 Unit Sharps Mechanical Miler, has been in use about 3 years. In good working order. Reasonable. Do not need it, as I have sold my farm. Phone or write. JOHN McNAY, Box 367, Ont.

IMPERIAL REGISTER BARRED PLYMOUTH ROCKS—Winners, Bab and Mrs. W. J. H. Parsons, Castle, Ont. WYANDOTTES, Martin's Dresden White, 1st prize 15.

LADIES WANTED—To do plain and light sewing at home, whole or spare time, good pay, work sent by advertisement. National Sewing Co., 150-160 St. Paul St. Send stamp for particulars.

DUCKS—America's greatest winter heavy egg-producing (300 strain) Fans and White Indian Runner Ducks for sale. Buy your eggs at 15¢ per 15. Breeds to lay more eggs than hens on less feed. Large new white fertile eggs. \$1.00 doz. Special price on 1000 lots. Apply L. Murray, Harrow, Ont.

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With an Overland, the farmer's family has a quick market for produce and livestock by easy accessibility to city stores.



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Complete Satisfaction Cannot Be Bought For Less

There are thousands of ways every day and every season in which Overlands are saving time for the farmers, multiplying their efficiency and adding to their families' comfort and happiness.

Thousands of farmers in Canada drive Overlands and recommend them to their friends.

The result is that more than half of our vast production is now taken by farmers.

Improved methods of building cars, that build them better and save millions of dollars to the public is one of the substantial advantages you get in this Model 90.

Select this Model 90 and you save money in the first cost

and in the maintenance cost. You can not get complete satisfaction from less advantages than it gives—

And you cannot get as much value in any other car for the low price of this Model 90.

It has a powerful, fuel-saving motor; narrow turning radius; rear cantilever springs; 106" wheelbase; 31x4 tires, non-skid rear; Auto-Litestarting and lighting and vacuum fuel system.

Because this Overland Model 90 gives every essential for complete satisfaction, the farmer's family can enjoy it as much as the farmer can employ it.

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Appearance, Performance,
Comfort, Service and Price

Light Four Model 90 Touring Car

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Willys-Knight and Overland Motor Cars and Light Commercial Wagons
Head Office and Works, West Toronto, Ontario
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Farmers the



BOYS

Are Ready for You

They left the Schools, Monday, April 22, and are awaiting your calls for them

Wages \$15 to \$30 a Month with Board

If you want some of these boys send in your application at once. First come best served. Don't wait till last minute and be disappointed.

Address Applications to your Nearest

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139 Queen St., Ottawa Phone Queen 2027

Issued by Organization of Resources Committee in Co-operation With Canada Food Board

Farm Management

About Sweet Clover

I HAVE purchased a large farm that has been cropped almost to death, but it is a good farm if gotten into clover and well worked. I have a 15-acre field that I thought of seeding into sweet clover. How many pounds of seed could I use? How many should I be sown without timothy and with oats? How high should I leave the stubble the first year? Is the yellow sweet clover or white the best?—J. M. Postico Co., Que.

Sweet clover is our first choice of all the clovers as a soil improver. It will make a stand and a fair growth on soils so poor that other clovers could not succeed and there are well authenticated instances of where the wornout soil of whole communities has been restored through the use of sweet clover, accompanied of course, by an improvement in general farming methods. We have visited farms in Ontario on which wornout fields were improved to the point where they could grow any crop through cropping with sweet clover.

The amount of seed per acre recommended varies from 12 to 30 pounds. It is seeded along with spring grains as in red clover, but as the first crop of sweet clover is cut so early in the spring, it would be a waste of good seed to include timothy. In cutting the grain crop an ordinary amount of stubble is left. It is in the cutting of the first year's hay crop that the stand is frequently killed. It will be found necessary to show the cutter bar of the mowder, and some growers advise leaving a clover stubble of as much as eight inches, although such a long stubble is not usually considered necessary. It should not be forgotten that sweet clover, like red clover, is a biennial, and can be cut for hay only for one season. If not pastured too closely it will reseed itself and some growers are using it as a permanent pasture. In choosing varieties, white sweet clover is usually recommended, although one strain of yellow clover, the Albrotes, has given excellent results on many farms in Canada.—F. E. H.

Satisfied With Stump Puller

Chas. Hutchings, Leeds Co., Ont.

YOU know and I know that stump fields are costly investments. You are paying interest, taxes, upkeep on something which is absolutely a burden to you. But the question is, "How shall I clear it?" There are several ways, some of which I will mention here.

As an owner of this country where wood and stumps have always been plentiful, I have had some experiences at pulling stumps and clearing land. The laborious method (when time and labor was hardly considered), was to remove the stumps with axe and saw and dig them out. Nowadays time is money, and before any attempt at pulling of stumps, they should have the quickest and best method.

I did my good work blowing them out, but on firing up the dynamite bill and help, found it too expensive and decided to give up the clearing proposition unless some cheaper method was available. Before giving up, however, I answered an advertisement in Farm and Dairy of a stumping machine known as the Kirstin one-man stump puller and after a short time received their catalogue and guarantee. I decided to give it a trial, and to my entire satisfaction, have found it the cheapest and most convenient device I have ever seen. My stumps which at present are elm, ash, maple, but chiefly pine, are in clay loam. They average from 12 to 36 inches in diameter, and I have pulled stumps 10 inches in diameter in less than 10 minutes. They were good, solid ones, too, and only required one man at the handle. A number of people have stopped to see the machine in operation, and have expressed surprise at such a little machine doing the work.

Besides pulling stumps it can be used for other work or on anything that needs to be moved.

I have also tried to pull with horses and double block, but with poor success, and besides, I nearly ruined some of my valuable horses, so I have laid the old methods aside, and will now pull with the Kirstin. I truly think that the Kirstin way is the only modern way of clearing land, and would advise any one having stumps to get rid of them this spring and turn your stump field into a crop producing one by investing in a Kirstin stumping machine.

Eradication of Bladder Campion

Prof. F. E. Howitt, O.A.C., Quelp, Ont.

A METHOD of cultivation for the eradication of bladder campion or cow ball is as follows: Badly infested fields should be plowed deeply and then thoroughly cultivated and cross cultivated with a broad-sharped cultivator in order to break up and weaken the other ground surface. This cultivation should be given frequently enough to prevent the plants making any growth above ground until it is time to put in a crop, which must be kept thoroughly clean in order to be effective. A well cared for crop of corn has been found to give excellent results.

Special attention must be given to hoeing out any patches of bladder campion which may appear in the corn crop, and which are not destroyed by cultivation. If in the fall there is any bladder campion in the field, it will be necessary to plow fairly deeply and cultivate thoroughly, and the following spring repeat the frequent cultivation until it is time to put in a good crop. This second hoeed crop should not be necessary under ordinary conditions. One spring's thorough cultivation, followed by a well cared for hoeed crop should destroy practically all the bladder campion.

Cut Grants to Fall Fair

IN reply to a deputation to Unioist members of Parliament, including W. F. Mackay of South York, who waited upon him to protest against the proposed reduction of the Dominion Government's grants to agriculture fairs and exhibitions, Hon. T. A. Cramer, Minister of Agriculture, clearly stated the policy and position of the Government.

The Government, he said, recognized the great importance of agriculture fairs and exhibitions and desired to encourage the same. Owing, however, to the heavy commitments of the Government in respect to the war it was found necessary to reduce the grants this year by 25 per cent. In view of the present policy, however, the minister stated that the Government expected in the future to increase rather than curtail its financial grants to these local exhibitions. Should the other country, recognizing as it should their educational value and the stimulus they gave to farming and the live stock industry.

National Live Stock Council

THE various live stock organizations represented in the National Live Stock Council of Canada, have appointed their representatives. The five Western men are: Dr. Toimie, Victoria, B.C.; J. E. Walters, Clive, B.C.; H. Allen, Kamloops, B.C.; Andrew Graham, Roland, Man.; and Dr. J. G. Rutherford, Calgary, Alta. The Eastern representatives are: W. E. Fryden, Brooklin, I. B. Dray, Hildreth, Ont.; J. C. Papp, Toronto. The National Record Book will be represented by Robt. Mings, Stouffville, W. F. Stephen, Hamilton, and Wm. Burt, Columbia, who will act as chairman of the council.

Questions of national scope will be considered by the members of this live stock council, and will act as an advisory capacity for the live stock industry, as does the Canadian Manufacturers' Association for the manufacturers.

PEERLESS PERFECTION

A RUNAWAY HORSE

can't break a Peerless Fence. No fiery bull can make a dent in it, hogs can't push through the spaces.

It holds them all securely. Ask your nearest dealer to show you the Peerless farm fencing. See the heavy, crimped horizontal wires that allow for all expansion or contraction in extremes of temperature. See the famous Peerless lock that holds the intersections in a firm, non-slippery grip. See the Peerless farm gate. Your dealer guarantees the Peerless to give satisfaction and we stand back of him unconditionally.

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Dear Sir: I am writing a testimonial as to the quality of your fencing. I have just finished a 100 foot run of your Peerless No. 10 wire fence high. It holds the fence in place, and is very strong. I have had some very heavy winds blowing from the west, and the fence has not moved an inch. The result was that they turned a corner with the fence, and the fence held them in their tracks, and the fence held them in their tracks, and the fence held them in their tracks.

The Fence That Saves Expense

It saves expense by being so strong, and by being so long lasting. It is the only fence that will hold up under the most severe conditions. It is the only fence that will hold up under the most severe conditions. It is the only fence that will hold up under the most severe conditions.

THE NEWELL-HOYLE WIRE FENCE COMPANY, LTD.

Halifax, Canada



Ontario

Some of our own farmers were urged to send wheat and other products to overseas.

For this who has land is because the wheat and other products should be sent to the people, and other

Why Some food much space

Lack



ONTARIO

Upon the 1918 crop from Canada and the United States depends the fate of the democratic peoples of the world-

If that crop is sufficient the Allies can be fed.

If that crop is not sufficient, the Allies may have to accept a German peace.

Ontario's Wheat Crop Does not Support Ontario's People

It may astonish you to learn that in 1917 Ontario did not grow enough wheat for its own needs. Consequently, every Ontario farmer whose land is suitable has been urged to sow five acres more spring wheat this year so that Ontario's demand for wheat shall not be met at the expense of that portion of the Western crop that should more rightfully be shipped overseas.

For this same reason every householder who has a garden or a piece of vacant land is being urged to grow vegetables, because the more vegetables that are grown and eaten in Ontario, the less wheat and meat there will be consumed; and, that being so, the Ontario wheat crop should then be sufficient to feed our own people, and leave more Western wheat and other foods available for export.

Why Substitutes for Wheat Cannot be Sent

Some foods, such as potatoes, occupy too much space in proportion to their nourish-

ment. But people often ask: Why not send corn instead of wheat? The chief reason, at present is because for two months after the first of April corn will not keep during shipment abroad, for that is the germinating season. Wheat, on the contrary is a durable grain.

And, though some do not realize it, the Allies have been using much corn in their bread, as high as 30 per cent, a far larger admixture than we have adopted.

In Appreciation of the Farmer's Part

We are not unmindful of the magnificent results of your work last year. We recognize the difficulties that you have to contend with, but we know that your heart is in the Cause.

This year, we are glad to say, the labour shortage is not as great as it was last year, and if you need help, communicate with your County Agricultural Representative, or the Public Employment Bureau in Toronto, Hamilton, London or Ottawa, and help will be forthcoming.

Lack of Food—threatens the Battle Line

Farm and Dairy

AND
Rural Home

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

Subscription Price, \$1.00 a year, Great Britain,
\$1.50 a year. For all countries, except Canada and Great
Britain, add 50c for postage.

ADVERTISING RATES: One cent a line, \$1.68 an
inch an insertion. One page 50 inches, one column 12 1/2
inches. Copy received up to Saturday preceding the
following week's issue.

Peterboro Office—Jannet and Water Streets.
Toronto Office—17 McCall Street.

United States Representatives:
Stockwell's Special Agency,
Chicago Office—People's Gas Building,
New York Office—Tribune Building.

CIRCULATION STATEMENT.

The paid subscriptions to Farm and Dairy approximate
20,000. The actual circulation of each issue including
copies of the paper sent to subscribers, who are but
slightly in arrears, and single copies, varies from 18,000
to 20,000 papers. No subscriptions are accepted at less
than the full subscription price.

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

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 we endeavor to protect our readers,
our paid-up and unscrupulous advertisers. Should any
advertiser have dealt dishonestly with you as one of
our subscribers, we will make good to you the amount of
your loss, provided such transaction occurs within one
month of the date of this issue, that it is by this contract
we find the facts to be as stated. It is a condition of
"I saw your advertisement in Farm and Dairy."

Regrets shall not be their trade at the expense of our
subscribers, who are our friends, through the medium
of these columns; but we shall not attempt to adjust
trifling disputes between subscribers and honorable busi-
ness men who advertise, nor pay the debts of honest
bankrupts.

The Rural Publishing Company, Ltd.,
PETERBORO AND TORONTO

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

The Genorship

FARM AND DAIRY has received a letter from one of
Ontario's leading dairy farmers protesting
most vigorously against the Government's re-
cent conscription measure. Our friend attacks the
measure as a violation of pre-election promises, a
slap at production, and asks Farm and Dairy to
champion the side of the farmers. Because many
farmers are greatly aroused over this measure we
would point out that in the first place no time was
given for public discussion of the measure, either in
the press or on the platform. The measure was an-
nounced and made law in less time than elapses
between two issues of Farm and Dairy. In the second
place, for the benefit of those of our readers who
may wonder at the silence that we may be obliged to
preserve when measures of similar import come up
in the future, we can only inform Our Folks of the
restraints now imposed on the press. According to
an Order-in-Council of recent date it shall hereafter
be an offence punishable by a fine not exceeding
\$5,000 or by imprisonment for a term not exceeding
five years or by both fine and imprisonment, to print,
publish or publicly express:

- Unfavorable statements, reports or opinions concerning the causes of the war or the motives of Canada or any of the allied nations;
- Adverse or unfavorable statements, reports or opinions respecting the action of any of the Entente Allies;
- False statements or reports respecting the activities of any department or officer, including any Canadian military or naval officer, which may tend to inflame public opinion, hamper the Government, or prejudicially affect the prosecution of the war;
- Any statement, report or opinion (either true or false, we presume), which may tend to weaken or in any way detract from the united effort of the people of Canada in the prosecution of the war;
- Any report of a secret session of the House of Commons not communicated through the Director of Public Information;

(f) The contents of any confidential public docu-
ment.

Members of Parliament alone are permitted free-
dom of speech and they only when in the House.
Even this freedom is qualified, as the Speaker may
suspend publication of Hansard while the chief cen-
sor determines what portions of any address to which
he objects must be deleted. The net result of the
new order will be that the public will receive only
such information as the Government deems it wis-
e to give them, and criticism of public affairs can be
indulged in only under danger of fine and impris-
onment. Thus it is declared necessary to suspend
freedom of debate under authority of the Defence of
the Realm Act for military purposes.

The Duty on Implements

THE farmers of Canada contributed \$2,119,267
to the federal treasury during the fiscal year
1916-17 in customs taxes on agricultural im-
plements and farm machinery. These figures were
supplied to the House of Commons at Ottawa in
reply to a question by one of the Western members.
The customs taxation for the year on threshing
machinery and outfits totalled \$477,895, on traction
engines and portable engines, for farm power,
\$896,256, on harvesters, reapers and similar equip-
ment, \$39,257, on plows and parts thereof, \$373,504,
and on other farm machinery, \$320,255.

These figures are of special significance in view
of the demand of the Government's Director of
Production, Hon. Chas. A. Dunning, for the removal
of all duties on agricultural machinery. On the sur-
face this does not seem sufficient to justify
the importance that Mr. Dunning and the organized
farmers place on the reform of the customs sched-
ules. A trifle over two million dollars is not a
large sum when divided among Canada's agricul-
tural population. The factor that the protected in-
terests would gladly have us overlook, however, is
that whether implements are purchased at home or
abroad, we pay the duty just the same. In the case
of imported equipment the duty is paid into the
coffers of the Government. In the case of equip-
ment manufactured at home, a similar amount is
exacte by the manufacturer. In any case the pay-
ment of the enhanced price is a tax on production,
and as there is from three to six times as much
equipment purchased at home as abroad, the amount
taken out of the pockets of Canadian farmers an-
nually by the direct and indirect influence of the
protective tariff, will be from six to twelve million
dollars, too great a sum to be passed over lightly.
We understand that a motion is soon to be in-
troduced into the Dominion House, asking for the
removal of all duties on farm implements. In accept-
ing this motion, the Government will, in a measure,
declare whether their interest in greater production
is real or simulated; whether they are with the
farmers, who ask nothing but a square deal, or with
the interests who demand a continuation of their
special privileges.

The Ontario Dairy Council

AT a meeting held in Guelph the early part of
last month, representatives of all the dairy
interests of Ontario approved of the formation
of a Provincial Dairy Council. It was decided that
such a council would be useful as a clearing house
for all the present existing dairy organizations, but
as none of the present organizations were officially
represented it was decided that a future meeting
should be held, composed of two official representa-
tives of each organization and two delegates from
the Department of Agriculture. This committee,
when it meets, will formulate a definite basis of
organization. The appointment of the Department's
representatives and the calling of the committee to-
gether, was left with the Minister of Agriculture,
who is also the Premier of Ontario.

Farm and Dairy can readily understand why
definite organization was not possible at the Guelph
meeting called by Prof. Dean. If the Provincial
Dairy Council is to be composed of representatives
of existing organizations, then these organizations
must act officially through their executives. But
why could not the Guelph meeting have appointed a

convener, or a convening committee, that could
have gotten in touch with the officers of the various
organizations interested and called the committee
together independent of departmental control? As
it is, the initiative is left altogether with the Pro-
vincial Premier, a situation not to be desired by the
dairyman, and an awkward one for the Minister.
As we see it, the duties of the dairy council will be
largely legislative. Two suggestions as to its pos-
sible avenues of usefulness, made by Messrs. Dean
and Riddick, both had to do with the legislative
side of its functions. In other words, Premier
Hoar is asked to be instrumental in organizing an
association whose influence, it is very easy to com-
ceive, might be marshalled in opposition to some
of his own schemes, or, more frequently, used to
draw concessions from him for the advantage of the
dairy industry. He cannot be expected to use his
influence to promote the organization of a strong,
independent Dairy Council, and his representatives
from the Department may take much the same pos-
ition. Nothing would more surely neutralize the
usefulness of the proposed Ontario Dairy Council
than to have it tied up in government red tape, and
the first duty of the committee, when it meets, will
be to defeat its independence by means of govern-
ment political control. We say this with full knowl-
edge of the present Minister's whole-hearted interest in
agriculture, but we believe that sturdy independence
is a necessary attribute of every worth-while farmers'
organization. In no case, however, should the move-
ment be allowed to lapse.

When the U.F.O. Met Labor

ONE of our contemporaries is quite worked up
over the action of the executive of the United
Farmers of Ontario, in allowing that associa-
tion to be represented at the meeting of a Canadian
Labor Party. The avowed socialistic ambitions of
the English Labor Party and the socialistic ideas
of many Canadian labor leaders, does not commu-
tate itself to our contemporary any more than it will
to the more individualistic spirit of the farmers who
compose the membership of the U.F.O. Many of
these members are now asking if the action of this
executive has committed their association in any
way to the platform that may be adopted by the
proposed labor party. It will be good news to those
that the U.F.O. is in no way committed either to
the policy of forming a labor party or to any plat-
form that may be adopted. Both matters will be
submitted to the United Farmers in convention as-
sembled, and they will then take what action they
deem best. Just why they should do that action they
do not seem to understand. The executive that it will
be represented at the organization meeting in
question, is well summed up in the following para-
graph from a recent letter by W. C. Good, one
of the U.F.O. representatives in attendance:

"Just as it has been in the selfish interests of Special
Privilege to keep farmers divided into Grits and
Tories, and thus nullify their power at the polls, so it
is also in the selfish interests of Special Privilege to
prevent any trifling misunderstanding between city
and country workers so that they may be prevented
from combining to overthrow a common enemy. Ne-
ver as Grit and Tory farmers should get together
and discuss their common problems, so, also, should
city and country workers get together. Thus and thus
only will they find that their interests are identical,
and thus will they learn to unite for a common pur-
pose."

Farm and Dairy commends Mr. Good on his rea-
soning. In the old days when farmers were the
great majority of the population, the professional
politicians set farmer against farmer and retained
control for themselves. With almost equal success
they set working man against working man. Farmers
as a class, however, are now getting together.
The city working classes are doing the same. What
a capital stroke it would be if the professional
politicians, who are often the representatives of
wealthy interests that prey on both classes, could
set these two great groups of citizens against each
other and retain the control that seems slipping
from their grasp. It was against just such a danger
that the U.F.O. executive was guarding, when it
sent its representatives to the organization meet-
ing of the Canadian Labor Party. The move was a
wise one.

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Disputes Over
Gordon Waldron, U. F.

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In Union There is Strength

A New Club Formed

A MEETING of a number of the farmers living in the township of Otonabee and Douro, adjoining the east side of the city of Peterboro, was held in Peterboro on April 23rd, at which a branch was formed of the United Farmers of Ontario. The principal speaker was Mr. H. B. Cowan, Editor-in-Chief of Farm and Dairy, who made a comparison of farm conditions in Canada 75 years ago, when farmers formed a great majority of the population and were influential in its government, with conditions today, when the farming and urban populations are about equal and where the control of the great organizations of the country has largely passed into the hands of urban people, including that of the banks, the great daily newspapers, manufacturing industries and others of the same character. The result has been that business interests have obtained control of the legislatures and of the House of Commons in which the farmers have a very small representation. The effect has been to transfer the burden of concealed taxation largely to the people living in the rural districts with the result that the farming population of Ontario in Canada has been declining for years and is smaller to-day than it was forty years ago. The influences which led to the starting of the farm movement were explained and its development described, as well as the prospects for the future of the movement.

A discussion was held as to the advisability of becoming identified with the movement with the result that a resolution was carried deciding to form a local branch. The following officers were elected: President, R. B. Rogers; Vice-President, Jos. O'Reilly; Secretary, M. S. Burnham; Directors, Wm. H. Reid, H. A. Wilson, Wm. Roberts, Alex. Hewson, C. Brown, and Jos. Coughlin, all of Peterboro. The executive will select the place of meeting and make arrangements for the next meeting. An invitation may be sent to the officers of some of the local farmers' clubs that have been organized for some time to address the next meeting. Every farmer present became a member.

Disputes Over Contracts

Gorden Waldron, Solicitor for the U. F. O.

A FEW disputes have arisen between the Co-operative Company and the Farmers' Clubs, due mainly to misunderstanding as to the contracts made. There was in some cases a loose or ambiguous statement of the contract. A contract is an agreement or a meeting of the minds of the contracting parties. In other words, it is an offer and acceptance. In the simplest form one says to the other, I offer, and the other answers, I accept. Business is embarrassed and the courts are busy with wrangles which result from departure from this simple form. The maker of an offer ought to state his offer precisely, and the acceptor ought to note carefully the meaning of the offer, and he ought to say I accept or I do not accept, so that there may be no misunderstanding.

In some cases, we find clubs insisting on a contract which is not enforceable. The law has often for centuries held that no contract for the sale of goods for the price of \$40 or upwards shall be allowed to be good unless, 1. The buyers shall accept and receive part of the goods; or, 2. Give something in earnest to bind the bargain, or in part payment; or, 3. That some note or memorandum in writing of the bargain be made and signed by the parties to be charged by such contract.

It is over this memorandum consisting usually of letters and telegrams that trouble arises. It must contain the terms of the contract, that is, a

description of the thing contracted for, the price, time of delivery, and so on, and it ought to contain the terms of payment.

Zeal was added last year to these disputes by the great rise in the prices of commodities between December, 1916, for example, and June, 1917. Contracts in some cases made in November or December were not precise as to the time of delivery, or if the time of delivery was at first precise as in ten days, it was afterwards altered inadvertently by correspondence. Consequently a car of corn bought in December might have increased by the time of actual delivery in June by \$500 or more, and with the benefit of that in view men were prompted to make claims and disputes, which otherwise they would not have made. But, considering the magnitude of your transactions and the transportation difficulties of the past year, your troubles have been small.

You ought to consider carefully your credit methods. If you accept an order from a club, payment to be made on delivery, and you order from a dealer and pay at once, you may lose heavily in your bank interest account, if delivery is delayed. In such cases, you ought to add interest to the price payable by the club, if you would escape loss.

Another point to which I would draw your attention, and in so far as practicable, you ought to act as a mere go-between, and stipulate that your duty to the club is performed by placing its order promptly and precisely with a reputable manufacturer or dealer.

The United Farmers of New Brunswick

A N important forward stride in the "United Farmers' movement was made when over 200 farmers met in the opera house on April 23rd at Woodstock, N.B., and organized the United Farmers of New Brunswick and the United Farmers' Co-operative Co., Ltd.

The delegates present represented 26 clubs and 818 members, the work of two months. Three counties are partially organized. The officers and directors of the new organization are men of exceptional ability and standing in the province, and their has been secured for the United Farmers' Co-operative Co., Ltd., of New Brunswick. Thirty-four shares of stock have been subscribed by the three provisional directors, and a great future should be assured to the movement in New Brunswick.

J. J. Morrison, secretary of the U.F.O., and representing the Canadian Council of Agriculture, was present to assist in the organization. He is also going to Quebec for a few days.

Farmers should devote more attention to finding and keeping records of their cost of production. When men representing business industries approach the Government for assistance, they are able to show by their cost system wherein their costs have been increased, and why they should receive the assistance for which they ask. The Government is being urged to regulate the prices of food products and, therefore, information of this character, if the farmers had it, would be very valuable. Farmers are at a disadvantage compared with other industries through not receiving and supplying such information.—T. A. Crerar, Minister of Agriculture, Ottawa.

"We are making a desperate drive at spring work," iterated D. Foster, of Bloomfield, Ont., in a recent letter to Farm and Dairy. "We are cutting down on part of our corn crop, and will use alfalfa clover and rye in the silo instead."

There's no use crying over lost milk

If you had had an Ideal Green Feed Silo this last winter, your cows would have given 25 per cent more milk and your feed bills would have been 20 per cent less, in the bargain.

From this you can figure how much bigger your profits would have been, with milk at such high prices.

You can't remedy your oversight now, but you can prepare now to get all the milk you are entitled to, next winter.

NOW is the time to install an

IDEAL GREEN FEED SILO

Summer will soon be here, and the first thing you know another winter will come around and you'll have no silo.

Write today for our catalogue, which not only shows why the Ideal is the best silo you can buy, but contains much valuable information about silos and silage.

THE DE LAVAL CO., Ltd.

LARGEST MANUFACTURERS OF DAIRY SUPPLIES IN CANADA

Sole manufacturers in Canada of the famous De Laval Cream Separators and Ideal Green Feed Silos. Alpha-Los Ensilage, Alpha Churns and Butterworkers. Catalogues of any of our lines mailed upon request.

MONTREAL PETERBORO WINNIPEG
VANCOUVER
60,000 BRANCHES AND LOCAL AGENCIES THE WORLD OVER



When Writing Mention Farm and Dairy

THE FARMERS' SEEDSMAN SEEDS FIFTY-TWO YEARS SERVICE

1866 1918

RUSH YOUR ORDER

Owing to the shortage of all kinds, especially corn, we advise you to rush your order before you see too late.

All orders received will be filled with the utmost care and attention from best selected stock. When buying from us you save all middleman's profits.

Send your order to-day **SURE**.

We pay railway freight to all parts of Ontario and Quebec on orders of \$25 or more.

<p>CORN.</p> <p>Seed corn now on hand—is of excellent quality, fine and dry as flint.</p> <p>Early Prince Charles (Would do as a substitute for Wisconsin No. 7)</p> <p>Early Improved Leaming. Guaranteed 90 per cent. germination, per bushel..... \$5.00</p> <p>Guaranteed 75 per cent. germination, per bushel..... 4.60</p> <p>CLOVER and TIMOTHY. Government Standard. Bushel.</p> <p>No. 1 Red Clover..... \$25.00</p> <p>No. 1 Alsike..... 16.50</p> <p>No. 2 Alsike, No. 1 for purity..... 15.50</p> <p>Sweet Clover, White Blossom..... 16.00</p> <p>O. A. C. 21 Barley..... 2.40</p> <p>O. A. C. Barley, registered 2.85</p> <p>O. A. C. 72 Oats..... 1.45</p> <p>American Banner..... 1.45</p> <p>Amber Sugar Cane, lb..... .11</p>	<p>Alfalfa, Ontario Variegated No. 2, almost No. 1 for purity..... 25.00</p> <p>No. 1 Timothy, extra No. 1 for purity..... 6.25</p> <p>No. 2 Timothy, extra No. 1 for purity..... 5.75</p> <p>No. 2 Timothy, No. 1 for purity..... 5.25</p> <p>Kentucky Blue Grass, 2½ lb. Marquis Spring Wheat (Ontario Crown)..... 3.00 Bus.</p> <p>POTATOES.</p> <p>Early Eureka..... \$3.00</p> <p>Irish Cobbler..... 3.00</p> <p>Delaware..... 3.00</p> <p>Green Mountain..... 3.00</p> <p>Empire State..... 3.00</p> <p>Davies' Warrior..... 3.50</p> <p>Bags for Clover and Timothy, 45c extra. Bags for Grain free.</p>
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GEO. KEITH & SONS SEEDS 124 KING ST. E. TORONTO

How the Y.M.C.A. Contributes to Victory

"Earn and Give" Campaign for Boys

Serve your Country by your labor and make a gift to the Red Triangle Fund from your earnings! What a fine chance to do a double service! Six thousand boys are asked to give \$10 each. Of the total, \$50,000 goes to help the soldiers, the balance for boys' work. Gifts must be at least \$10, the standard unit. A boy may subscribe more than \$10 in \$10 units but not less. A beautifully engraved certificate will be given to each subscriber. Ask your local Y. M. C. A. representative for pledge card and full information.



Y. M. C. A. man serving coffee 100 yards from German Trenches

YPRES, Langemarck, Festubert, Vimy Ridge, Paschendaele—how the very names thrill! They stand for deeds of the bravest of the brave—our own Canadian lads! They fight and win, not always by strength of numbers, but by unbeatable fighting spirit, or "morale."

Said a British Staff officer: "I have known morale to be found in a cup of hot coffee. I have seen it sustained by a man's merely writing a letter home. If you want an easy and short definition of 'morale' you will find a good one in the four letters Y.M.C.A."

Y.M.C.A.
Red Triangle Fund
\$2,250,000 May 7, 8, 9
Canada-Wide Appeal

The staff officer pointed to the men trooping into the big Y.M.C.A. hut and continued: "Those men are going to the front line to-morrow. In the Y.M.C.A. some of them will be playing games, others attending divine service, but each in his own way will find a strengthening of his 'morale' in the comradeship of his fellows under the Red Triangle. All this is a thing which is going to turn the balance in our favor."

Through the hell of battle after battle, our brave soldiers fight. Through fire, water, mud, filth and deadly danger follows the ever faithful Y.M.C.A. man, even if he can bring but a bucket of invigorating coffee to fagged fighters. Will you help us to supply the coffee—and to render the thousand and one similar services to soldiers everywhere?

The Y.M.C.A. needs at least \$2,250,000 to meet the tremendous demands. Be generous!

Bits from Soldiers' Letters

"The Hut is very well termed 'next to home.'"

"I went home for the first time in 18 years and I had not written for 13 years. I have given up my old habits of drinking and gambling and thank God for it. Thanks to a little word caught at one of your good-night services."

"From one end of the train to the other I heard nothing but good of the 'Y.' Your representative did his best to supply our needs, purchasing stuff at rock bottom prices and letting the boys have it the same way."

"They send guides out with parties of soldiers on sight-seeing tours all over London."

A German prisoner said: "The reason you fellows show such fight is easily understood. Your officers' captains, Y. M. C. A.'s and padres are backing you up."

"Who pays? I don't know. But whoever they are, God bless them. They are the fathers of thousands of boys."

Tributes

Lord Northcliffe:

"I do not think the war can be fought without the Y.M.C.A."

Maj.-General Bursall:

"The benefit to the troops is beyond calculation."

Lt. Colonel Mayes:

"Camms have a tendency to increase fighting spirit. Any efforts on your part to expedite delivery of athletic equipment will be of national service."

Harry Lander:

"We took the responsibility of sending these boys to defend us, and we must not fail them. The Y. M. C. A. huts are the soldiers' 'Home from Home.'"

Brig. Gen. Odium:

"I want to let you know how much I was impressed with the work done by the Y.M.C.A. It was simply magnificent. All ranks are enthusiastic. I have recommended one of your officers for the Military Cross. The Y.M.C.A. has endeared itself to the soldier in France as no other institution has."

National Council, Young Men's Christian Association

Campaign Directors for Red Triangle Fund:

Ontario: Dr. John Brown, Jr.,
120 Bay St., Toronto

Quebec: P. S. Dobson,
Y.M.C.A., Sherbrooke

Morale!

British Staff Officer Defines It —How Y. M. C. A. Enhances This Great Factor of Victory

"IS VICTORY always on the side of the biggest battalions?" was asked of a British staff officer, as recorded by Dr. John R. Mott in the "Ladies' Home Journal."

"It is and it isn't," he replied. "There's something else. You cannot chart it, you cannot weigh it, you cannot express it in any military figures. But Napoleon knew what it was and he called it 'morale.'"

How Morale Is Created

"I cannot define for you exactly what morale is, but I can tell you it comes in many different ways. I have known morale to be found in a cup of hot coffee. That sounds unromantic. But think what that means to a man who has had ten hours consecutive shelling.

"I have seen morale created by a man's taking a big risk; I have seen it sustained by a man's merely writing a letter home just before he went into action. You can describe morale," he continued, "in a score of ways, little and big.

"It may come from faith in a future life or from the thought that one is protecting the loved ones at

home. *But if you want an easy and short definition of morale, you will find a good one in the four letters Y. M. C. A.*"

Strengthening Morale

And he took his questioner to the window and shewed him men trooping into a Y. M. C. A. hut.

"Those are men," he said, "who will be going up to the front line to-morrow. Some of them will be playing games, others will be writing home, others will be attending divine service, but each in his own way will find a strengthening of his morale in the comradeship of his fellows beneath the symbol of the Red Triangle and the inspiration for which it stands.

Y. M. C. A. Playing Big Part

"All this is a thing which I cannot show on my charts. But it is also a thing which is going to turn the balance in our favor. Go back and tell the people at home that a dry soldier, concerned alone with military calculations, believes that the Y. M. C. A. is playing a far bigger part in winning the war than any mere civilian can recognize.

"I do not speak to you as a philanthropist. That is not my job. But I want to see the end of this horrible business, and if a soldier's words have any weight, tell them at home to help the Y. M. C. A. to carry on its work."



MORE things are wrought by prayer than this world dreams of.—Heny Ward Beecher.

The Heart of the Desert

(Continued from last week.)

“SOMETIMES you forget to act like a coldblooded Indian.” Kut-le gave his familiar chuckle.

“Well, you see, I have been contaminated by my long association with the whites!”

And so again the nights of going. During her waking hours, Rhoda spent the greater part of her time considering arguments that would have weight with Kut-le when the struggle came which she knew was imminent.

If she had suffered before, if the early part of her abduction had been agony, it had been nothing in comparison with what she was enduring now. Rhoda sat beside Kut-le, and after all, she had no final right in holding to her resolution save an instinct that told her that her course was the right one. All the arguments that she could put into words against inter-race marriage seemed inadequate. This instinct which was wordless and formless alone remained sufficient.

And with the ill logic of womankind, thence she verged on a rush with herself there flushed one glad thought, Rhoda knew that she loved him, knew that she was suffering in the thought of losing him up! His tender, half sad, half triumphant smile proved that, as did his protective air of ownership.

Rhoda noticed one condition of her keeping to her decision. She was very firm in it at night when the desert was dim. But in the glory of the dawns and the sunsets, her little arguments seemed strangely small. Sitting on a mountain-side one afternoon, Rhoda watched a rain-storm sweep across the ranges, and the sunsets, her little arguments seemed strangely small. Sitting on a mountain-side one afternoon, Rhoda watched a rain-storm sweep across the ranges, and the sunsets, her little arguments seemed strangely small.

Suddenly to Rhoda her resolution seemed small and futile, and for a long hour she reviled in the thought of belonging to the man she loved. And yet as night descended and the infinite reaches of the desert receded into darkness, the spell was broken and the old doubts and misery returned.

And so again, the nights of going. But the holiday aspect of the night was gone. Kut-le moved with a grim determination that was not to be misinterpreted. Rhoda knew that they were to reach the Mexican border with all possible speed. The young Indian drove the little party to the

limit of its endurance. Rhoda avoided talking to him as much as she could and Kut-le, seeming to understand her mood, left her much to herself.

On the fourth day they camped on a canon edge. After Rhoda had eaten she walked with Kut-le to the top edge and looked down. The canon was very deep and narrow. Some distance away, near where it opened on the desert, lay a heap of ruins. “Is that another pueblo?” asked Rhoda.

“No, it’s an old monastery. Part of the year they have a padre there. I

said Kut-le quietly, “that I am civilized.”

“You are externally, perhaps,” said the girl. “But you yourself have no proof that at heart you are not as uncivilized as your father or grandfather. Your stealing me shows that. Nothing can change our instinct. You know that you might revert at any time.”

Kut-le turned on her fiercely. “Do you love me, Rhoda?” Rhoda stood silently, her cleft chin trembling, her deep gray eyes wide and grief-stricken.

“Do you love me—and better than you do DeWitt?” insisted the man. Suddenly Rhoda lifted her head proudly.

“Yes,” she said, “I do love you, better than any one in the world; but I cannot marry you!”

Kut-le took her trembling hands in his.

“Why not, dear one?” he asked. Still the sun flickered on the pine-needles and still Molly hummed over her stew-pot. Still Rhoda stood looking into the eyes of the man she loved, her scarlet cheeks glowing each moment more deeply crimson.

“Because you are an Indian. The instinct in me against such a marriage is so strong that I dare not go against it.”

Kut-le’s mouth closed in the old way.

“And still you shall marry me, Rhoda!”

“I am a white woman, Kut-le. I

Rhoda stirred restlessly, but Kut-le held her firmly and went on.

“I tell you, if we’re not to go mad, we’ve got to believe that great things come to us for a purpose. There is no human being who has loved who does not believe that love is the greatest thing that has been given to man. The man who does not know that the biggest things in the world have been done for the love of woman. Love is bigger than nations or races. It is human, not white, or black, or yellow. It’s above all we can do to triumph it with our little prejudices. When it comes greatly, it comes supremely.”

He lifted the girl’s face and looked deeply into her eyes.

“Rhoda, if it has come as greatly to you as it has to me, you will not pause or any sorrow that your coming to me may cost you. You will come, in spite of everything. I believe that if in your smallness and ignorance you refuse this gift that has come to you and me, you will be outraging the greatest force in nature.”

Rhoda stood sorrow-stricken and confused. When the deep, quiet voice ceased, she said brokenly:

“I haven’t lived in the desert so long as you. The way does not lie so clear to me. If only I had your own conviction, I too could be strong and walk the path I saw unhesitatingly. But I see no path.”

“Then,” said Kut-le, “because I see, I’ll defend it for you. O Rhoda, you must believe in me! I have had you in my power and I have kept the faith with you. I am going to take you and marry you. I am going to make this gift that has come to you and me make us the big man and women that nature needs. Tonight we shall reach the padre who will marry us.”

He watched the girl keenly for a moment, then he again turned from her deliberately and walked to the entrance of the canon, as if he wanted her to come to her final decision unblinded by his nearness. But he turned back to her with a curious expression on his face.

“Come and take a good-by look, Rhoda! Your friends are below. I hope it will be some time before we see them again!”

Rhoda went to him. Far, far below, she saw little dots of men camping beyond the monastery near the desert. Suddenly Rhoda sank to her knees with a cry of longing that was heart-breaking. “O my people, my people!” she sobbed, creeping upon the canon edge.

Kut-le watched the little figure with inscrutable eyes. Then he lifted the girl to her feet.

“Rhoda, are you going to eat your heart out for your own kind if you marry me? Won’t it be sufficient? It hadn’t occurred to me that I might not be!”

“You haven’t given up your people,” answered Rhoda. “You are always going back to them.”

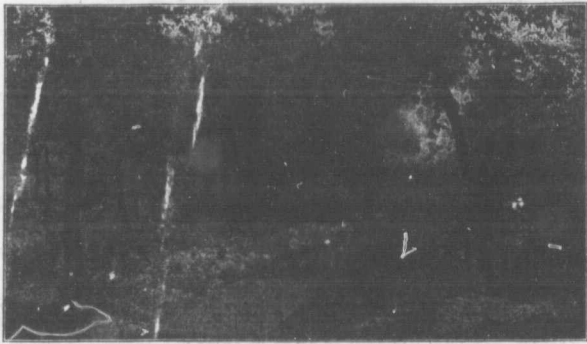
“But you aren’t really giving them up, are you? It’s really I, it’s I who make the sacrifice of my race!”

“And that is the reason for one of my fears,” cried Rhoda. “I am afraid that some day you would find the price too great and that our marriage would be wrecked.”

“Even if I went back for a few months each year, would that make you unhappy?” asked Rhoda.

“Kut-le!” exclaimed Rhoda. “I am not talking of externals. I mean that if your longing for your own kind made you lose your love for me, Oh, I can’t see any of it straight, but I’m afraid.”

“Nonsense, Rhoda! I found that” (Continued on page 21.)



A Western Canada Beauty Spot where Gardens are Scarce.

Flower gardens on the wind-swept prairies of Western Canada are scarce and for this reason they are greatly enjoyed by those who see them. This garden adjoins the C. P. R. station grounds at Moose Jaw, Sask., where people do.

wish I knew if there was one there now?”

“Why?” asked Rhoda suspiciously. “Don’t bother your dear head,” answered Kut-le. Then he went on, as if half to himself: “There’s been an awful lot of fooling on this expedition. Perhaps I ought to have made for the Mexican border the very night I took you.” He looked at Rhoda’s wide, troubled eyes. “But no, then I would have missed this wonderful desert growth of yours! But now we are going straight over the border where I know a padre that will marry us. Then we will make an Elipote at once.”

The morning sun glinted on the pine-needles. Old Molly hummed a singsong air over the stew-pot. And Rhoda stood with stormy, tear-dimmed eyes and quivering lips.

“It can never, never be, Kut-le!”

“We can’t solve the problems of race adjustment. No love is big enough for that. I have been civilized a thousand years. You have been savage a thousand years. You can’t come forward. I can’t go backward.”

“You know well enough, Rhoda,”

can’t marry an Indian. The difference is too great!”

Kut-le turned abruptly and walked to the canon edge, looking far out to the desert. Rhoda, panting and half hysterical, watched him. The moment which she had so dreaded had arrived, and she found herself, after all her planning, utterly unprepared to meet it save with backneyed phrases.

It seemed a long time that Kut-le stood staring away from her. At last Rhoda could bear the silence no longer. She ran to him and put her trembling hand on his arm. He turned his stern young face to her and her heart failed her.

“O Kut-le! Kut-le!” she cried, “if you won’t help me to do right, who will? It’s not right for us to marry! It’s not right! That’s all I know!”

Kut-le put both hands on her shoulders.

“Look here, Rhoda. What you call the ‘right’ instinct is just the remnant of the old man-made race hatred in you. It’s just a part of the old conceit of the Caucasian.”

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The Upward Look

Trusting Him to Keep You

64 FOLLOW after, if that I may apprehend that for which I also am apprehended of Christ Jesus.—Phil. III, 12.

More than one admits that it is a sacred duty and a blessed privilege to abide in Christ, but shrinks back continually before the question: Is it possible, a life of unbroken fellowship with the Saviour? Eminent Christians, to whom special opportunities of cultivating this grace have been granted, may attain to it; for the large majority of disciples, whose life, by a Divine appointment, is so fully occupied with the affairs of this life, it can scarce be expected. The more they hear of this life, the deeper their sense of His glory and blessedness, and there is nothing they would not sacrifice to be made partakers of it. But they are too weak, too unfaithful,—they never can attain to it.

Dear souls! how little they know that the abiding in Christ is just meant for the weak, and so beautifully suited to their feebleness. It is not the doing of some great thing, and does not demand that we first lead a very holy and devoted life. No, it is simply weakness entrusting itself to a Mighty One to be kept,—the unfaithful one casting self on One who is altogether trustworthy and true. Abiding in Him is not a work that we have to do as the condition for enjoying His salvation, but a consenting to let Him do all for us, and in us, and through us. It is a work He does for us,—the fruit and the power of His redeeming love. Our part is simply to yield, to trust, and to wait for what He has engaged to perform.

It is this quiet expectation and confidence, resting on the word of Christ that in Him there is an abiding place prepared, which is so sadly wanting among Christians. They scarce take the time or the trouble to realize that when He says "Abide in Me," He offers Himself, the Keeper of Israel that slumbers not nor sleeps, with all His power and love, as the living home of the soul, where the mighty influences of His grace will be stronger to keep than all their feebleness to lead astray. The idea they have of grace is this,—that their conversion and pardon are God's work, but that now, in gratitude to God, it is their work to live as Christians, and follow Jesus. There is always the thought of a work that has to be done, and even though they pray for help, still the work is theirs. They fall continually, and become Lopeites; and the dependency only increases the helplessness. No, wandering one; as it is Jesus who drew thee when He spake "Come," so it is Jesus who keeps thee when He says "Abide." The grace to come and the grace to abide are alike from Him alone.

Abide in me: These words are no law of Moses, demanding from the sinful what they cannot perform. They are the command of love, which is ever only a promise in a different shape. It is when the soul becomes feebly passive, looking and resting on what Christ is to do, that its energies are stirred to their highest activity, and that we work most effectually because we know that He works in us. It is as we see the word IN ME the mighty energies of love reaching out after us to have us and to hold us that all the strength of our will is roused to abide in Him.

This connection between Christ's work and our work is beautifully expressed in the words of Paul: "I follow after, if that I may apprehend that whereunto I also am apprehended of Christ Jesus." It was because he knew that the mighty—and the faithful One had grasped him with the glorious purpose of making him one with Himself, that he did his utmost to grasp the glorious prize. The faith, the experience, the full assurance,

"Christ hath apprehended me," gave him the courage and the strength to press on and apprehend that whereunto he was apprehended.

Paul's expression, and its application to the Christian, can be best understood if we think of a father helping his child to mount the side of some steep precipice. The father stands above and has object, the son by the hand to help him on. He points him to the spot on which he will help him to plant his feet, as he leaps upward. The leap would be too high and dangerous for the child alone; but the father's hand is his trust, and he leaps to get hold of the point for which his father has taken hold of him. It is the father's strength that secures him and lifts him up, and so urges him to use his utmost strength.

Such is the relation between Christ and thee, O weak and trembling believer! It is nothing less than a life of abiding, unbroken fellowship with Himself to which He is seeking to lift thee up. All that thou hast already received—pardon and peace, the Spirit and His grace—are but preliminary to this. And all that thou seest promised to thee in the future—holiness and fruitfulness and glory everlasting—are but its natural outcome. Union with Himself, and so with the Father, is His highest object.

And then let the second thought enter thy heart: Unto this I am apprehended of Christ. His almighty power hath laid hold on me, and offers now to lift me up to where He would have me. Fix thine eyes on Christ. Gaze on the love that beams in those eyes, and that asks whether thou canst not trust Him, who sought and found and brought thee nigh, now to keep thee. Gaze on that arm of power, and say whether thou hast not reason to be assured that He is indeed able to keep thee abiding in Him. And if ever doubts again arise, or the bitter experience of failure tempt you to despair just, remember where Paul found His strength: "I am apprehended of Jesus Christ." In that assurance you have a fountain of strength. From that you can look up to the whereabouts on which He has set His heart, and set yours there too. From that you gather confidence that the good work He hath begun He will also perform. And in that confidence you will gather courage, day by day, afresh to say, "I follow on, that I may also apprehend that for which I am apprehended of Christ Jesus." It is because Jesus has taken hold of me, and because Jesus keeps me, that I dare to say: Saviour, I abide in Thee."

HOME CLUB

"Just Me," Makes Her Debut

S MILE a smile!
When you smile, another smiles,
And soon there's miles and miles of smiles,
And life's worth while if you but smile—

Smile a smile!

That's the "advice" I have in large crayoned letters, pinned on the kitchen wall in a conspicuous place, and it usually does the job "John's wife" and "Aunt Fanny" have both lately suggested the desirability of practicing laughs and grins. Yes, and even the Book Issue says, "A merry heart doeth good like a medicine." Get the habit! Smile a smile!

"Aunt Grete" deplores the inadaptability of our men to conform to the new food conservation rules. That's where we have to tackle a problem that has its root and branch clear back to the beginning of time. We have to combat, all of a sudden, habits and desires inherited and re-inherited from generation to generation. Men are not naturally such lightning change artists as women are when you think of the long ages woman has catered to the desire of man's



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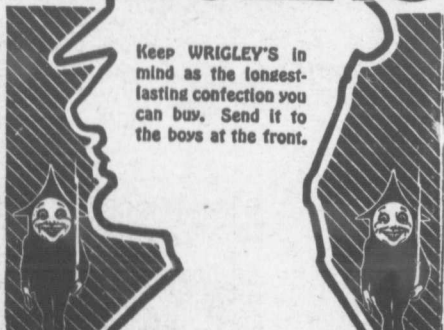
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stomach, "is a small wonder we find him clinging like a burr to a woolen sock" to the old order of things. From time immemorial it has been proven that the best conqueror and preserver of man's affections, has been the matter over with husband and the boys and asked for their cooperation? If we really study the food situation intelligently as husband and wife, there will surely be a better chance for cooperation.

"A Perplexed Housewife" brings up the question also of the objections raised by the hired men, and none of us can afford to neglect the hired men in these days of labor scarcity. It seems to me, though, that if the husband in the home sets the good example of being willing to sacrifice a little in connection with his meals, that the hired men will be almost ashamed to object.

My husband, I am thankful to say, has not raised an objection to the conservation methods up to the present, so I am fairly hopeful of the future. One of my favorite substitutes for white flour is Johnny cake, either baked in a regular cake pan or in little patty pans. We also use oatmeal cakes of various kinds, Graham biscuits and gems, buckwheat pancakes, rolled out porridge and so forth.

"John's Wife."

Oil on Troubled Waters

MAY I be permitted to fill a chair in the Home Club circle again, even though it is not long since I dropped in for a chat? I have read the letters from "Aunt Greta" and "A Perplexed Housewife," and thought I would like to have my "say" too. This subject of conserving the food supply is surely one of the vital questions of today. There is no fake about the food shortage, but the most appalling fact, and unless waste is stopped and production increased, we cannot tell what suffering will be entailed.

Regarding the contention that the loss on our farms has much to do with conserving food, I heartily agree and I am of the opinion that the objections raised by the menfolk when we endeavor to use substitutes for beef and what are called "meat" headaches. There are two of three points I would like to raise, however, in this connection.

Are we always sure when serving a substitute dish that it is both nutritious and palatable? The reason I mention this point is on account of an incident which came to my attention not long ago. A woman who was anxious to serve substitutes decided that she would try a "meat" for dinner. When her husband sat down to the meal, she proceeded to tell him that this new dish was rich in protein, carbohydrates, etc., and that it contained so many calories of energy. Her husband did not relish the dish, however, and asked her how he was going to eat enough of that "tasteless" mess to work for half a day. We must exercise considerable judgment,

therefore, when selecting absolutely new dishes in order that our men folk may have something really appetizing.

There is another point to be considered. Have we seriously taken the matter over with husband and the boys and asked for their cooperation? If we really study the food situation intelligently as husband and wife, there will surely be a better chance for cooperation.

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"John's Wife."

Planting Hints

ABOUT the second week in May is the best time to sow most flowers out of doors, except sweet peas. Dig the ground deeply and pulverize the soil for annuals. Do not dig fresh straw manure into ground where seeds are to be sown. Well rotted barnyard manure may be dug in deeply. The soil for seeds should be of a light, loamy nature, and be packed firmly before sowing the seed. It is best to sow in drills, except with fine seeds. Drills should be about eight inches apart. Thin the plants later on to about six to eight inches apart in the drills, according to the habit or growth of the variety. A little broadcast sowing in the ground where seeds are sown will act as a slight shade until the seeds are well up, and help some of the finer seeds to grow and germinate better. Remove this shading in dull weather.

What is Food Control?

By Ernest B. Roberts.

WHAT is food control, this new knowledge forced on us by war? It is the most appalling, undertaking the collective world has had. It is the fight against World Famine. Food control is no more "fixing" prices for the masses than it is spoon-feeding the individual. Price-fixing is a small, often only an insignificant part of its ramifications. Food control in its last terms is food production, food possession, food distribution and food allotment by the state. In its international aspect, food control now means or will shortly mean, the finding of food for between 400,000,000 and 500,000,000 people three times a day for seven days a week as long as the war lasts and also long afterwards as may be requisite to restore, all over the world, the disturbed means of distribution—a period put at anywhere between one and three harvests.

There is something odd and unexplained to us in Canada, living on the futility of things by the profits of war orders from the Mother Country, to be told that our neutral nations are on bread rations. Holland, Switzerland, Denmark and Sweden have less intelligently to do with the war than Canada has. Their existence is not directly at stake. Why should they have hardships, or deprivation? Switzerland is reported to be on shorter rations than even any of the warring countries, to be almost as short of food as overrun, broken Belgium. Our duty, next to that of the

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Allies, is it innocent of sharing of food of nature? Warnings clearly little Italy (in the rationing) in Canada importing in mass and down to supplies. It is, in mass, supplies, territories, localities where Control con the same as Canadian a mobility is are, as essential important alteration of their eyes on tributive anously what "We have American v appeal of M saying. The them to be lies largely with the P. In a survey administration led this: "States supply bushels abroad and the United the export b will have re 200,000,000 b if our both p pound less b and one poun The "if" of taken out a British Food Hoover on Jan "Unless you Allies at lea wheat-over a reported up tion to the Canada, I assure lity of assuril will be enoug -Extracts fr comes from Food Control

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battle long b is absolutely I am giv my life amo should'n mar would I had h to fully! Rhoda sto trouble, hove earshot. "If you ma went on, "Cough as long as nights? Forg "Oh, no! N know that i "And will offer him" basily. Rhoda wino "I wish," s never will kn had con to the sacrifice Rhoda look After the v tion, was the "I had thou you were bi test. That a heart scourg would come enough to s and fears, T

Allies, is to share our food with such innocent neutrals. This international sharing of food means a new brotherhood of nations.

Warnings are known to be singularly little use. Yet one is obligatory here. What is imperatively imposed in the United Kingdom, France and Italy (in the form of compulsory food rationing) is not now necessarily possible in Canada. Great Britain is an importing country; her supplies enter in mass and can be checked right down to the consumer. Canada has her supplies, so to speak, already distributed, or rather, not yet gathered in mass, spread over 4,900 miles of territory, most of them produced in localities where they are consumed. Control consequently is impossible in the same sense as in Great Britain. Canadian exports, where the commodity is once massed, can be, and are, as easily controlled as are British imports. Yet that is not a consideration of those who just now with their eyes only on their own little distributive and eating and ask vacuously what the Food Board is doing.

"We have but one police force, the American woman,"—is in the latest appeal of Mr. Hoover asking for food saving. The saving of foods to enable them to become exports from Canada lies largely with the consumer, not with the Food Board.

In a survey by the U. S. Food Administration the situation is summarized thus: "The Canadian and United States supplies, upon a normal export basis, fall approximately 350,000,000 bushels short of the allied needs. If by conservation measures in Canada and the United States we can increase the export by 150,000,000 bushels, we will have reduced the deficiency to 200,000,000 bushels. This we could do if our both peoples would eat one pound less of wheat flour per week and one pound of corn meal instead."

The "if" of the proposition is quite taken out now. Lord Rhonda, the British Food Controller, cabled to Mr. Hoover on January 25, 1918, as follows: "Unless you are able to send the Allies at least 75,000,000 bushels of wheat over and above what you have exported up to Jan. 1st, and in addition to the exportable surplus from Canada, I cannot take the responsibility of assuring our people that there will be enough food to win the war."

—Extracts from a pamphlet which comes from the office of the Canadian Food Controller.

The Heart of the Desert

(Continued from page 18.)

battle long before I knew you. There is absolutely no danger of my reverting. I am going to spend the rest of my life among the whites even if you shouldn't marry me, Rhoda. Rhoda, I wish I had had time to let you grow to it fully!"

Rhoda stood rigidly. Molly, sensing trouble, hovered restlessly just out of carshot.

"If you married DeWitt" Kut-le went on, "could you forget me? Forget the desert? Forget our days and nights? Forget my arms about you?"

"Oh, no! No!" cried Rhoda. "You know that I shall love you always!"

"And will DeWitt want what you offer him?" Kut-le went on, mercifully.

Rhoda winced.

"I wish," said Kut-le huskily, "you never will know how I wish that you had come to me freely, feeling that the sacrifice was worth while!"

Rhoda looked at him wonderingly. After all the weeks of iron determination was the young giant weakening, was his great heart falling him!

"I had thought," he went on, "that you were big enough to stand the test. That after the travail and the heart scourging, you would see—and would come to me freely—strong enough to smile at all your regrets and fears. That thought stole me

to put you through the torture. But if now, at the end, you are coming to me only because you must! Rhoda, I don't want you on those terms."

Rhoda gasped. She felt as one feels when in a dream one falls an unexpected and endless distance. The relief from the pressure of Kut-le's will that had forced her on, for so long, left her weak and aimless.

Yet somehow she found the strength to say:

"Kut-le, we must give each other up! I love you so that I can let you go! Oh, can't you see how I feel about it!"

Again Kut-le looked far off over vista of mountains and canon. His eyes were deep and abstracted, as if he saw into the years ahead with knowledge denied to Rhoda. Then he turned to Rhoda and searched her face with burning gaze. He eyed her hair, her lovely heart-broken face, her slender figure. For a moment his face was tortured by a look of doubt that was heart-shattering. He lifted Rhoda across his chest in the old way and held her to him with passionate tenderness. He laid his face against hers and she heard him whisper:

"O my love! Love of my youth and my manhood!" Then he set her gently to her feet. "Don't cry," he

said. "I can't bear it!"

Rhoda threw her arms above her head in an abandonment of agony.

"Oh, I cannot, cannot bear this!" Then she added more calmly: "I suffer as much as you, Kut-le!"

Again the look of unspeakable grief crossed the young Indian's face, but it immediately became inscrutable. He led Rhoda along the canon edge.

"Do you see that little trail going down?" he said.

"Yes," said Rhoda wonderingly. "Then go!" said Kut-le quietly.

Rhoda looked up at him blankly. "Go!" he said sternly. "Go back to your own kind and I will go on, alone. Don't stop to talk any more. Go now!"

Rhoda turned and looked at Cesca squatting by the horses, at Molly hovering near by with anxious eyes. Never to make the dawn camp, again—never to hear Molly humming over the stew-pot! Suddenly Rhoda felt that if she could have Molly with her she would not be so utterly separated from Kut-le.

"Let Molly go with me!" she said.

"I love Molly!" Suddenly Rhoda felt that if she could have Molly with her she would not be so utterly separated from Kut-le.

"No!" said Kut-le. "You are to forget the desert and the Indians. Go now!"

With awe and grief too deep for words, Rhoda obeyed the young chief's

stern eyes. She clambered down the rough trail to a break in the canon wall, then, clinging with hands and feet, down the sheer side. The tall figure, beautiful in its perfect symmetry, stood immovably, the face never turning from her. Rhoda knew that she never was to forget this picture of him. At the foot of the canon wall she stood long, looking up. Far, far above, the straight figure stood in lonely majesty, gazing at the life for which he had sacrificed so much. Rhoda looked until, tear-blinded, she turned away.

(Continued next week.)

The Silence of Love

O H, inexpressible as sweet, Love takes my voice away; I cannot tell thee, when we meet, What most I long to say;

But had'st thou hearing of thy heart To know what beats in mine, Then should'st thou walk, where'er thou art, In melodies divine.

So warbling birds lift higher notes Than to our ears belong, The music fills their throbbing throats, But silence steals the song.

—G. E. Woodberry.

MCLAUGHLIN

LADIES WHO DRIVE

—are unanimous in their endorsement of McLaughlin Motor Cars.

The new clutch on the larger McLaughlin models is extremely easy, responding to the gentle touch of the lady's foot.

The starting pedal, accelerator and service brake are readily accessible.

The seats are comfortable and every feature regarding control has been designed for ease and safety.

Order now as the demand will be greater than the supply.

THE MCLAUGHLIN MOTOR CAR CO., LIMITED

OSHAWA, ONT.

Branches in Leading Cities. Dealers Everywhere

See the McLaughlin line at the Local Show Room

RENNIE'S PURE SEEDS

Ensure Success

HEAVERY crops of Beans and Corn are a sure tip for this year. These necessities will bring big profits to the farmer who is foresighted enough to have planted the seeds that bring bumper yields—Rennie's Seeds.

Examine the list below and send your order right away, or owing to the shortage of seeds (especially corn) you may miss the opportunity of making the most money out of this year's crop.

Seed Corn

Customers can always depend on our Seed Corn being the best obtainable and highest germination.

SEED CORN	Bush
Selected Leaming (Yellow).....	4.85
Select Red Cob (White).....	4.85
Giant White Ensilage.....	4.85

SEED CORN—FODDER	Bush
Leaming Fodder (Yellow).....	4.70
Red Cob Fodder.....	4.70
Southern White Fodder.....	4.70

Lots of 5 bushels or over, 10c per bushel less.

BEANS	Peck
White Field (Medium).....	2.85
White Marrowfat (Large).....	3.60

Freight prepaid on orders of \$10.00 and over in Ontario.

The Stars Mean Bargains

When turning the pages of our 1918 catalogue you will notice little paragraphs with stars at the corners. These denote extra special values that defy competition. Read your catalogue closely.

When buying from dealers insist on Rennie's Seeds.

THE WILLIAM **RENNIE** COMPANY LIMITED.
KING & MARKET STS TORONTO
ALSO AT MONTREAL WINNIPEG VANCOUVER

Some Advertisers who blame advertising for poor business never think of considering their own weakness in follow up.
Moral—Attend faithfully to all correspondence.

WOULD YOUR MOTHER

Like This Set of Silverware?

We know that she would and therefore we are giving our Boy and Girl Readers an Opportunity of securing it.

All you have to do to get one of these fine chests of Silver is to send in to us Only Ten New Yearly Subscriptions to Farm and Dairy.

The chest contains 26 pieces of silver—six solid handled knives, six flat handled forks, six tea spoons, six dessert spoons, a butter knife and a sugar shell.

Go out this week and secure the Ten new subscriptions. It will not take you long to get these. Call at your neighbors on your way home from school, and on Saturday—make it a big day by securing the remainder. Send them along to us and we will immediately on receipt of same, have the silver sent forward to you in a fine hardwood chest fitted with drawers and handles.



Circulation Department Farm & Dairy Peterboro, Ont.

Spring Designs, Both Pleasing and Practical

Farm and Dairy patterns shown in these columns are especially prepared for our Women Folk. They can be relied upon to be the latest models and include the most modern features of the season's patterns. When sending your order please be careful to state bust or waist measure for adults, for children, and the number of the pattern desired. Orders are filled within one week. In days the receipt. Price of all patterns to Our Women Folk, 10 cents each. Address orders to Pattern Dept., Farm and Dairy, Peterboro, Ont.



WITH the advent of warmer weather, spring and summer fashions are also appearing to a greater degree—at least the sheer things are. In the store windows nowadays we see beautiful materials on display for making up spring and summer dresses. Crepe de chenes, foulards, and novelty voiles are probably most in evidence and the colors are numerous. Some of the new novelty voiles are printed on dark grounds. Foulards also seem to come in dark blues or blacks with light patterns and should make up nicely into serviceable dresses. Of course such dark materials might not appeal to some, but an attractive trimmings touch is being introduced by the use of bright linings for the skirt hems, sash ends or other portions of the garment.

Smocking on children's clothing is very popular. This is true also of lively coats for the grownups. And these middy coats are certainly not going out of fashion this season, as they are being shown quite extensively, many being made from white Jean cloth, trimmed with a contrasting material.

The sleeveless jacket is becoming quite popular and one may have such a jacket fashioned from the same material as skirt to wear with different blouses, or if preferred could have a dress of some sheer flowered material and wear a jacket such as this over it, fashioned from black silk or satin. It will add variety to the wardrobe.

2423—Lady's Dress—The coat dresses are still holding their own and this style is quite unique and pretty. Notice the way in which the fronts cross and join at the belt at the under arm seams. This costume has the popular shawl collar and an attractive slight seven sizes: 34 to 46 inches bust measure.

2425—Girl's Dress—This dainty summer dress will no doubt appeal to many of our young girls who are looking for something becoming. It is also very cool and comfortable looking, which should be another point in its favor. Four sizes: 10, 12, 14 and 16 years.

2426-2426—Lady's Costume—The woman on the farm needs a costume which is neat and practical and one that will always look attractive when she goes to town on business or on other occasions when she is called away from home. Such a costume as the one here shown should be chosen. It is a very valuable skirt might be made of some washable material of a pretty shade and pattern, and the blouse of white trimmed with same material as skirt. This design calls for two patterns, 10 cents for each. The blouse is cut in sizes from 34 to 46 inches bust measure and the skirt from 22 to 34 inches waist measure.

2428—Girl's Dress—This little dress might be made up so that two or three different underblouses could be worn with it and thus provide variety. Four sizes: 6, 8, 10, 12 years.

2440—A group of Dress Decorations—The various accessories of dress here shown are some of the little things that count in making up an attractive and distinctive costume. One of the popular sleeveless jackets is one feature, also a neat style of collar, and effective girde or sash. The sizes: small, medium and large.

2429—Lady's Apron—This apron could be fashioned so that it would do duty as a summer working outfit and should be very comfortable and attractive as well. Seven sizes: 34 to 46 inches bust measure.

1945—Child's Set—This set of short clothes for the small child will no doubt be of value to many of our home dress-makers who are counting on "shortening" baby noon. Five sizes: 6 mos., 1, 2, 3 and 4 years.

2025—Play Dress—This dress, as will be noted, has the lower edge arranged for romper style and should make a good play costume. Four sizes: 1, 2, 3 and 4 years.

2411—Lady's House Dress—Anyone who is looking for a plain but attractive house dress should find something to meet their needs in this design. Seven sizes: 34 to 46 inches bust measure.

EATON'S MONEY-SAVING VALUES

CORRECT STYLES AT ECONOMY PRICES

NOTE the low prices, and remember all goods are sold under the EATON guarantee. Months ago, before the present high costs, our buyers bought the materials, hence we can afford these striking values. As prices of clothing of all sorts are steadily advancing, you will be wise to buy now and buy right at EATON prices. You will have to pay more later on for goods not up to the same standard as these. But don't delay if you wish to avoid being disappointed.

Most of the merchandise below will be found in our present catalogue, which is filled with similar big money-saving values. You will be dollars in pocket by taking full advantage of the values shown here, and by making your future selections of requirements in any line from the EATON catalogue. Prices will be higher later on, so order now. If you haven't a catalogue, write to-day for your copy, so that you may share fully in the savings it presents.

Skirt of Striped Cotton Gabardine Extra Good Value at 1.95

Order: White, with Choice of Colors, from Choice of Street Stripes

88-104. This belted model has gathered back and bottom down full length of front, making lap-length at one waist. (See next) bottom like those on front and back. Lining of choice. Choice of four pure silks, Valenciennes 22 to 30 in. Choice of four lengths 35 to 48 in. Price: 1.95

For further particulars see our Catalogue, page 72.

We pay the delivery charges on all orders of \$10.00 and over in Ontario, Quebec and the Maritime Provinces.



95



Women's Plain Black Cotton Hose Remarkable Special

at 14c Per Pair

88-0628. This plain Cotton Stocking transformed heel and toes, heel top, and is perfectly seamless of those in your order. Stock only. Size 4 to 10. Price: 14c Per Pair. For further particulars see our Catalogue, page 154.



Women's Cotton Gloves Very Unusual Value

35c Per Pair

88-0122. These Gloves are made from fine selected cotton yarn, and on hand to resemble like thread. Fine lustrous, strong, work of raised pattern on back and palm. They are long in the wrist. Size: 4 to 10. Price: 35c Per Pair. For further particulars see our Catalogue, page 164.



5.90

Save Substantially on this Black Taffeta Silk Skirt 5.00

Order: Black 88-169. The model follows is constructed by rows of pleats concealed by button-pleated band. French pockets showing eyes of plating and folds fall at the top are both work and ornamental. This model shows including the side and careful attention has been paid to every detail of the workmanship. Choice of four beautiful silks. Price: 5.00 For further particulars see our Catalogue, page 64.

See page 70 of our catalogue for unusual good values in Women's Sweater Coats.



Attractive Voile Flouncing at a Remarkably Low Price

Voile Flouncing, two lovely patterns, either one of which will please you, and at a most remarkably low price. Comes in two widths. The plain material at the bottom can be hemmed on or cut at the collar. 88-222. 44 inches wide, with work 16 inches deep. Price: 44c 88-223. 22 inches wide, with work 8 inches deep. Price: 22c For further particulars see our Catalogue, page 160.



8.95 9.95



OUTFIT 1.29 DRESS & BONNET

This Set (Including Dress and Bonnet) for 1.29

Boy's Tweed Suit with Extra Bloomers 8.95 88-774. Three-Button Tweed Suit. Coat has plain front and yoke and knee plaids at back. Two pairs of four-button strap and buckle bloomers. Size 20 to 24. About 20 pieces. Price: 8.95 88-775. Same as 88-774, except trousers. Size 10 to 18 years. Price: 9.95 For further particulars see our Catalogue, page 206.

72-434. The dress has front yoke of lace trimmed as illustrated with front of lace insertion and the back yoke shows tiny tucks. Inset and lace also the neck and sleeves, and skirt is trimmed with an effective pattern. The accompanying belt of white lawn has rows of wavy-edged embroidery decorated with bands of ribbon outline in various colors. 8 months. 1.29 For further particulars see our Catalogue, page 112.

Checked Print Creepers Low-priced at 59c

72-808. Have been placed in front, and bottom to back and on inside seam in flange style. Flank persimmon shade, all-around long-sleeve belt and white knee-crease. Elastic in rim throughout outer at the knee. Size: 8 months, 1 year, 2 years. Price: 59c



59c

For further particulars see our Catalogue, page 110.



29c

Deerly Wash Dresses Specially Priced at 29c 72-282. Striped Print Dress, with perfectly colored pattern forming front collar stand and the blousey sleeves. Top of pocket and edge of skirt. Cotton. Size: 2, 3 and 4 years. Length: 18, 21, 24 inches. Price: 29c For further particulars see our Catalogue, page 111.



16.00

Men! Here's a Good-wearing and Good-looking Suit at the Money-saving Price of 16.00

44-224. The material from which this Suit is tailored is gray woaded in small check or stripe pattern. The coat is tailored in a conservative, yet decidedly dressy style, with a smartly-cut front, well-constructed collar and shoulder, breast patch, padded waist and split back, while the dinner-jacket breast patch and smart look. The vest is well cut and carefully finished. All in Double Cloth. The trousers are in the prevailing style, have belt loops, and are guaranteed to fit correctly. Price: 16.00 For further particulars see our Catalogue, page 206.

T. EATON CO LIMITED TORONTO CANADA

The quickest way to save money
to pay for an engine is
to buy an ALPHA now



PERHAPS you have been putting off buying an engine until you could lay by enough money to pay for it.

A much better way to save the money would be to install an ALPHA Gas Engine NOW and put it to work. It would soon save its own cost, as the thousands of Alpha users in Canada will tell you.

You may be able to buy engines that cost a little less than the Alpha, but bear in mind that an engine that costs you less to buy also costs the manufacturer less to build. And that can mean but one thing—inferior quality throughout the engine.

You don't want that kind of an engine. Its life will be short, its fuel and repair bills high, and you will be subject to time and money-wasting delays.

Send for our catalogue, which tells why the farmer who buys an Alpha gets the most for his money.

Alpha Gas Engines are made in 12 sizes, 1½ to 25 H. P., and are furnished in stationary, semi-portable and portable styles, with hopper or tank-cooled cylinder.

THE DE LAVAL COMPANY, Ltd.

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Sole manufacturers in Canada of the famous De Laval Cream Separator and Ideal Green Feed Silos, Alpha Gas Engines, Alpha Churns and Butter-Workers. Catalogues of any of our lines mailed upon request.

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Deposits may be made—butter and cheese cheques cashed—money withdrawn—just as easily and safely by mail as in person.

Write the manager to tell you all about this convenient plan of *Banking By Mail*—or call in and have it explained, the next time you are town.

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Columbia across Rural Canada most effectively.
WRITE OR CALL AT NEAREST BRANCH.



14

SEED GRAINS

O.A.C. No. 21 Barley, Bunker King Oats, O.A.C. No. 71 Oats, Silver Hill Buckwheat, Centennial, etc., also highest grades of Clovers and Timothy.

Ask for our prices on Mangels, turnips, Onions, Potatoes, Beans, Corn and garden seeds of all kinds. If in need of seeds write us. We can supply Linted Oil Cake Meal, Corn Oil Cake Meal, Gluten Feed, Bran, Shorts, Cornmeal, re-cleaned Standard Screenings.

Write or phone for prices.

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The Wonderful—Light-Running Gilson Thresher

"Goes like Sixty"



Save Time—Money—Labor. Be independent of the sun. Keep your farm level work. Do your threshing when you please, with 6 to 12 H. P. Engines and the Wonderful Light-Running Gilson Thresher. Furnished with or without Blower. See for full particulars. GILSON MANUFACTURING COMPANY LTD. 487 York St., Guelph, Ont.

The Home Dairy

Selling Milk as Cream Cheese

THE dairy produce from the Experimental Farm, Agassiz, B. C., has been sold in a number of different ways, one of the most satisfactory of which is in the form of cream cheese. The cream cheese appears to be the most popular soft cheese. It is easily made on the farm and requires very little special apparatus. The labor and cost of making and packing are small, so that the manufacturer is well suited for any producer within a reasonable distance from a market. It is a suitable and remunerative method of marketing cream. During cool weather we have been able to keep this cheese for a week or ten days without any appreciable deterioration in flavor, but, as evaporation is going on continually, the cheese, unless originally made overweight, will not be up to the standard weight at the end of this time. It is therefore advisable to place it on the market as soon as possible after completion.

The market as yet is limited, but the demand appears to be increasing. We have sold during the past twelve months 5,400 of these cheeses in the city of Vancouver. The wholesale price obtained is 15c each, which amounts to \$813 for the product during the past year. Each cheese weighs six ounces and approximately ten dozen are now being manufactured weekly from 170 pounds of 12 per cent. cream. This brings a return of 90 cents per pound butterfat for the cream, with the whey retained for feeding purposes.

The shape of the cheese is cylindrical from one to one and a half inches deep and three inches in diameter. When moulding the cheese is pressed into a cheesecloth cover and when ready for shipment is incased in a neat cardboard carton. It is a cheap cheese and a convenient one for table use. Picklers have found it a suitable substitute for meat as a filling for sandwiches. It is also found to be very delicious and palatable when served with lettuce, celery, or any of the various kinds of vegetable salad.

The method of manufacture is concisely described in Exhibition Circular No. 25 which may be obtained for the asking from any of the Experimental Farms.

Ripening the Cream for Churning

ON many farms it is customary to churn only two or three times a week. Where this is the case the cream from each separation should be kept in the cooling tank until about 12 hours before churning. In order that the cream may ripen uniformly, it should be placed in one receptacle, thoroughly mixed, and warmed slowly to a temperature of from 65 to 75 degrees F. Frequent stirrings with the stirring rod and the use of a thermometer are necessary to insure uniform and proper temperature throughout. Fresh cream should not be added after ripening has begun. The cream should be allowed to stand at the ripening temperature (from 65 to 75 degrees F.) until it thickens, assumes a glossy appearance, and is mildly sour, when it should be cooled quickly to churning temperature or below. (The churning temperature is usually from 52 to 60 degrees F. in the summer and 58 to 66 degrees F. in the winter.) This cooling may be done if the cream is in a can by placing it in the cooling tank and stirring it occasionally. Ice or cold water should never be put into the cream. In order that the starter may have the desired firmness of body, the cream should be held at churning temperature or slightly below for at least two hours before it is churned. Even after it is cooled the cream will con-

2 Days' Work in 1

Mr. Farmer:

We sell a farm tractor attachment for use with the Ford car. We guarantee that the Stude Motor Tractor will do any job on your farm. It will pull a double bottom plow and blacken 5 acres a day. On the disc and cultivator it makes a quick and satisfactory job. You cannot beat it on the binder or hayloader. It gives you the cheapest power available. Any buy you drive it.

This machine sells for \$240, cash, and is made to fit any year model Ford car, either roadster or touring. The equipment includes a first-class, honey-combed radiator that replaces the old one, and also water and oil pump and special fan and pulley. These become a permanent part of your Ford equipment. They keep your engine cool and alter under all conditions. The appearance of a car is not altered, save for the better.

The tractor attachment proper can be put on and taken off by any person, anytime, in a few minutes. It does not put any unusual strain on the engine or chassis of the Ford car, and any farmer who asks for it can have a guarantee from us respecting repairs that are occasioned by the use of the car for tractor purposes. You really should not "peter about" this season, trying to do work with a horse. The tractor equipment that was good enough when labor and food for man and beast were cheap a few years ago, these days should really amount to something.

You can be working with the Stude Motor Tractor on your farm in 3 days' time if you do your part now.

There is no question about this machine doing good work on your farm. We will gladly take it off your hands if it does not satisfactorily meet your expectations. We insist.

The Ontario Auto-Tractor Co.
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157 BAY STREET, TORONTO

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Therefore, with this book you have the power to overhaul and repair all parts of the Ford car. Complete instructions for driving and repairing are given. Every detail is treated in a non-technical yet thorough manner. This book is written specially for Ford drivers and owners, by a recognized authority and an expert on the Ford, who has driven and repaired Ford cars for a number of years. He writes for the average man in a quick, easy-to-understand language. All parts of the Ford Model T car are described. All repair processes are explained and fully explained. Latest edition, 2 LARGE PAGES, 112 ILLUSTRATIONS, 300 PAGES, PUBLISHED IN 1917. We will send this book prepaid, ready to ship. Write and send you free on request our special circular on AUTOMOBILE BOOKS and CHANGES. BOOK DEPARTMENT, FARM AND DAIRY, PETERBORO

When Writing Mention FARM & DAIRY

ture to sour ready for churning only mildly sour, acid acidity, as spicial care show the cream sour, which has —It gives the but cream flavor and properties.

The souring of the growth of pherteria produce lacto-producing, the desirable in butter, of bacteria, however used for ripening or cream has unclean methods utensils that have cleaned and sterilized will develop in the ing and will be rter. Undesirable veloped even in ripening temperature low or if the cream is fact, an overri ones of the most farm butter.

Star creameries control to some of cream by means which are pure cultured producing bacteria-riened milk. The is technical work undertaken unless a commercial sour cream are produced conditions, there is starters. If handle dilutions and protection, clean cream will favor when allowed naturally at the pro-

When butter is natural scale it may be control the ripening product that is m week to week.

Commercial making may be obtained from houses. Directions pay each package level carefully.

A natural or home-made is as follows: 1. Clean thorough five minutes three pint

After boiling, keep to prevent the entrance 2. Take a pint and draw from each place in the jar, degrees F., and kee- ture until curdling ce-

3. Curdling, or ce take place in about 2 card should be firm, 4. Select the sample lins, free from holes, and should show lit- tion of the whey.

clean, sharp, sour of 4. Select the samp- lymets those con- gate it, discarding selected sample is low-

(a) Clean thorough five minutes a quart 5. Peel the jar w- milk, cover loosely, boiling, and pasteuriz- ing for 30 minutes.

(c) Cool the milk and add a teaspoonf described in section to curdle at that te-

(d) Propagate the to day in the same (e), (b), and (c) is scribed in (c) is for ripening the cream, added in such quant- tenth to one-fifth of churned. Starter p- while the latter i- the ripening temper- ing process with star- same as natural sou- It takes place in a s-

time to sour somewhat, but when ready for churning it should still be only mildly sour, not to exceed 0.5 per cent acidity, as determined by the acidity test.

Special care should be taken to prevent the cream from becoming too sour, which has two harmful results—it gives the butter a sour, overripe cream flavor and injures its keeping properties.

The souring of cream is caused by the growth of bacteria, which are a simple form of plant life. Some bacteria produce lactic acid, and, as a by-product, the flavors that are desirable in butter. Many other types of bacteria, however, grow and produce bad flavors at the temperature used for ripening cream. If the milk or cream has been contaminated by unclean methods during milking or by utensils that have not been properly cleaned and sterilized, "off flavors" will develop in the cream during ripening and will be retained in the butter. Undesirable flavors may be developed even in clean cream if the ripening temperature is too high or too low or if the cream becomes overripe; in fact, an overripe cream flavor is one of the most common defects in farm butter.

Starters.

In creameries it is customary to control to some extent the ripening of cream by means of "starters," which are pure cultures of lactic-acid-producing bacteria grown in pasteurized milk. The making of starters is technical work that should not be undertaken unless butter is made on a commercial scale. If the milk and cream are produced under proper conditions, there is no need for using starters. If handled under those conditions and protected from contamination, cream will develop the desired flavor when allowed to ripen or sour naturally at the proper temperatures.

When butter is made on a commercial scale it may be advisable to control the ripening and thus make a product that is more uniform from week to week.

Commercial cultures for starter making may be obtained from culture manufacturers and from dairy-supply houses. Directions for using accompany each package and should be followed carefully.

A natural or home-made starter may be made as follows:

1. Clean thoroughly and boil for five minutes three pint fruit jars and tops. After boiling, keep the jars covered to prevent the entrance of bacteria.

2. Take a pint sample of milk freshly drawn from each of three cows, place in the jars, cover, cool to 75 degrees F., and keep at that temperature until curdling occurs.

3. Curdling, or coagulation, should take place in about 24 hours. An ideal curd should be firm, smooth, marble-like, free from holes or gas bubbles, and should show little or no separation of the whey. It should have a clean, sharp, sour or acid flavor.

4. Select the sample that most closely meets those conditions and propagate it, discarding the others. The selected sample is propagated as follows:—

(a) Clean thoroughly and boil for five minutes a quart jar, the top, and a teaspoon.

(b) Fill the jar with freshly drawn milk, cover loosely, heat slowly to boiling, and pasteurize by boiling gently for 30 minutes.

(c) Cool the milk to 75 degrees F. and add a teaspoonful of curdled milk described in section 4 and set away to curdle at that temperature.

(d) Propagate the starter from day to day in the same manner described in (a), (b), and (c). The starter described in (c) is the one to use for ripening the cream, and should be added in such quantities as to be one-tenth to one-fifth of the cream to be churned. Starter is put into the cream while the latter is being warmed to the ripening temperature. The ripening process with starter is exactly the same as natural souring except that it takes place in a shorter time.

Field Notes

By "Mac."

IT was my privilege recently to spend a pleasant hour or so with Mr. Ballantyne, Sr., of Chester-ville. This gentleman is an elder brother of Messrs. J. & C. C. Ballantyne, the proprietors of Evie Stock Farm. Mr. Ballantyne in his younger days was an engineer, but being past the allotted three score and ten he now lives a quiet retired life on his brothers' farm at Chesterville. Being naturally of a mechanical inclination he takes particular delight in looking after all the machinery about the farm, his former experience being of great value in this respect. The farm house at Evie Stock Farm, as well as the buildings, are lighted by electricity. The water is pumped by the same power plant that operates the electric plant and these are situated in an out-house connected with the farm house. The power plant is the especial care of the gentleman in question. In connection is a nicely

fitted workshop where Mr. Ballantyne spends many hours in the little necessary repair work which is constantly cropping up on the farm. Such a shop as this, to say nothing of a man of such experience in such work, is a valuable asset to any farm.

Time is Money.

How much time is lost on the average dairy farm by carrying milk from one end of the stable to the other as each cow is milked? At the Alliston Stock Farm, Chesterville, to avoid this loss of time (which would be considerable, the row of cows in their stable being 250 feet long) they use a truck large enough to hold four cans. On it there is a place to hang the scales and a place to put the milk record sheet. Those who milk the cows start at one end of the stable and as they work towards the other end the truck is moved along and the milk strained right into the cans on the truck without having to carry it to the far end of the stable.

The Right Kind of Help

THE most noticeable features about the farm of Mr. Walburn Rivers, of Ingersoll, Ont., and possibly the greatest reasons for his success

as a breeder of Holsteins are his three sons. These boys are all old enough to do their share of work about the farm, and yet not of military age. With such help as this Mr. Rivers has been able to devote his attention to his cows in a way that he would not be able to do if he were depending on the average hired help, or lads from the city. When I called at Mr. Rivers' farm recently and noticed the ease and familiarity with which the boys went about their work, it brought afresh to my mind how really a little they know about work on a farm, who believe that anybody, no matter where he had had his experience, is capable of filling a man's place on the farm. I venture to say that one of the Rivers' boys will accomplish a greater result in the course of a year, than two or three of those unfamiliar with farm conditions.

This is not written with an idea of discouraging the sending of town boys to the farms for the summer months. They are all needed, and the experience which they will gain will be much better for them, not only from a practical standpoint, but in correcting any idea they may have regarding the easiness of farming.



IMPERIAL SERVICE

If you are in doubt about the proper lubricant, ask the Imperial Oil man. He will give you courteous attention and sound advice on your lubrication problems. That is part of Imperial Service.

HUMOR YOUR MACHINERY

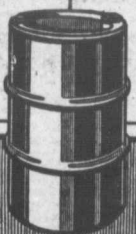
GIVE machines correct lubrication and they behave well. You get smooth-running, quiet engines and full rated horse power day in and day out. But you must humor them. If you are burning kerosene in your motor instead of gasoline, a special lubricant will probably be necessary to meet the changed conditions. A loose bearing and a tight bearing require different treatment. There is a correct lubricant for every mechanical need.

At Imperial Oil stations in every part of Canada, you can get the just-right lubricant for every need and service. All Imperial lubricating oils are sold in steel barrels and half-barrels—convenient and economical. There's no waste. You use every drop you pay for; and you are sure it is uniform and clean.

A Correct Lubricant for every Farm Machine

 <p>For Gasoline Engines, Tractor, Auto or Stationary POLARINE OIL STANDARD GAS ENGINE OIL For Kerosene Engines, Tractor or Stationary POLARINE OIL HEAVY IMPERIAL KEROSENE TRACTOR OIL (Recommended by International Harvester Co.)</p>	 <p>For Open Bearings of Farm Machinery FRASER HARTVETER OIL —very heavy body, resists cold, won't thin in winter ELBORADO CASTOR OIL —a thick oil for worn and loose bearings</p>	 <p>For Steam Cylinder Lubrication, whether Tractor or Stationary Type CAPTOL CYLINDER OIL —the standard product for steam cylinder lubrication</p>	 <p>THRASHER WARD OIL For Green Churn Lubrication of Bearings —a clean, solid, fast oil of thick, milking point</p>
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IMPERIAL OIL LIMITED
BRANCHES THROUGHOUT CANADA



The Makers' Corner

Butter and Cheese Makers are invited to send contributions to this department, to ask questions on matters relating to cheese making, and to suggest subjects for discussion.

Price of Cheese Agreed Upon

THE Dairy Produce Commission, which is constituted of members representing the British Ministry of Food, the Dominion Department of Agriculture, the Canada Food Board, the Producers and the Trade, held a session at Montreal recently. Those present were: Mr. Arthur J. Mills, representing the British Ministry of Food; Mr. J. A. Ruddick, representing the Dominion Department of Agriculture; Dr. Jas. W. Robertson, representing the Canada Food Board; Messrs. Jas. Donaldson, A. Gerin and James Alexander, representing the producers and the trade.

Mr. Mills stated that the British Ministry of Food has authorized the Dairy Produce Commission to act for them in connection with the exportable surplus of Canadian Cheese, condensed milk and butter of the make of the season of 1918.

The price authorized for cheese is 23 cents per lb. for No. 1 grade, i. e., steamer at Montreal; 22½¢ per lb. for No. 2 grade, and 22¢ for No. 3 grade.

After fully considering the whole situation, the commission unanimously approved of the proposal. A committee was appointed to work out the question of a relative price for condensed milk. The object in view is to

secure such a parity of prices that no unfair competition will arise between the manufacturers of condensed milk and the manufacturers of cheese, to secure the patronage of dairy farmers. It is expected that the price of con-

The chief advantages to the cheese industry of Canada from this arrangement are the assurance of a regular market at a fair and reasonable price for the whole output, regular shipments even under the present extreme

ties as they would require from time to time, and that without any amount that they would purchase the whole quantity available for export. At the present time, the allied buyers are being offered United States cheese of this season's make at 22¢ L. b. New York.

Now that prices have been arranged, it is hoped that final arrangements will shortly be completed to enable the Commission to accept delivery of new season's cheese.

Seed Corn Now Available

THE seed corn situation has improved sufficiently in the past two weeks that all farmers may now feel assured that plenty of seed will be available, and the manufacturers of cheese, to secure the patronage of dairy farmers. It is expected that the price of con-

Farm and Dairy has been in touch with all of the leading seed merchants in Ontario and we find that practically all of them now have considerable quantities of seed corn on hand and are experiencing no difficulty in getting additional shipments through. One seed dealer informed us that the seed corn which he now has is the best that he has handled for 35 years, and all merchants agree that the germination of the imported corn will be 90 per cent. or over. The prices quoted seem high, but they are no higher proportionately than seed corn and an acre of corn may still be seeded as cheaply as any other farm crop.

This seed is necessarily of southern origin and the question is still being asked as to the suitability of southern varieties to Ontario conditions. We can assure our folks that in practically all of the dairy districts of Ontario these southern varieties will give good satisfaction for ensilage purposes if the season is at all favorable. They will yield an immense tonnage of succulent feed, but the same degree of maturity cannot be expected as with the varieties which we have been accustomed to use in the past. Because of the longer season required to reach maturity, we would advise a little earlier seeding than has been customary with the earlier dent or single cross varieties, and we find that Ontario dairymen, who in past years have been using these southern corns with good success, have practiced this earlier seeding.

Outside of Ontario, the value of southern corn may be open to dispute. Silo owners in Quebec, in the more northerly counties of Ontario and in the provinces further east have a choice of "O. P. V." or oats and peas. The grain mixture used at about the time the silo will be filled. When blown into the silo together, the grain mixture will absorb the surplus moisture and excessive acidity of the corn and will give good quality of ensilage with ready maturity.

A final word: Even with supplies of seed corn seemingly abundant and the quality appearing good, we urge that orders be gotten in immediately and that all seed corn be tested for germination before final planting begins.

condensed milk will be determined and announced in the near future.

The price for butter will be arranged as soon as there is a surplus available for export. It also will be on a basis of parity with the prices for cheese and condensed milk.

shortage of tonnage and the financing of a trade of about 40 millions of dollars.

The only alternative method of disposing of the cheese of Canada would be to leave it open for the British Ministry of Food to purchase such quanti-

Dairy Council for Canada

A CANADIAN Press Despatch from Regina, Sask., reads as follows:

"By-laws and a constitution for a Dominion-wide organization to be known as the Dairy Council of Canada are being prepared by F. W. Logan, Dairy Commissioner of Saskatchewan. The object of the organization is to establish a medium of expression for the dairy interests, and it may also lead to the establishment of Canadian grades for cream and butter, and standard packages for marketing."

A letter from Mr. Logan was read to the men assembled at the Dairy Convention at Guelph a few weeks ago, broaching this same subject of Dominion wide organization. Definite action in Ontario is as yet impossible as a provincial dairy council has not yet been organized. Mr. Logan's intention Dairy Council will be maintained on further organization in Ontario as such a council with Ontario not properly represented could not properly call itself the "Dairy Council of Canada."

Saving Money by Spending.

"SAVING" money by continuing to use an inferior machine is like "saving at the spigot and wasting at the bung." For instance, if your machine skims down to .1 per cent. for every thousand pounds of milk skimmed, compare that result with the splendid, proven record of the Renfrew. You find by having the

Renfrew

that you will save about ¼ pound of butter-fat per vat for every cow. The Renfrew skims down to .01 per cent. That loss of ¼ pound means money! With eight cows, and butter-fat at say 30 cents per pound, you would be losing every year (40 weeks' milking) the tidy sum of \$48.

This sum saved is accepted by us as a first payment on a Renfrew. The saving soon pays for the machine—and then the \$48 per year for eight cows becomes extra profit.

Will it not pay you to discard the old machine for the Renfrew? It gets all but the last three ounces of butter-fat in a whole ton of milk skimmed. If you could reckon the losses the old machine made the last few years, wouldn't it decide you right away to get the close-skimming Renfrew?



MADE IN CANADA

Our illustrated booklet gives interesting proofs of the Renfrew's close skimming, including tests by government Dairy Schools. It also explains the Renfrew's self-oiling system, the interchangeable capacity feature, easy-to-clean advantages, etc. Send for booklet to-day.

Other Lines: Renfrew Kerosene Engine, Happy Farmer Tractors, Farmers' 2000 lb. Truck Scale.

The Renfrew Machinery Co., Limited

Head Office and Works: Renfrew, Ontario

Eastern Branch: Sussex, N.B.

U.S.A. Branch: Milwaukee, Wis.

Agencies almost everywhere in Canada

Saving per Cow per week
10 lbs. butterfat
8 Cows
80 lbs per week
30¢ per lb
\$24.00 per week
\$48.00 per year

"It Pays"



NOTICE.—The Renfrew Separator illustrated here was formerly sold under the name "Standard" which identified it as a high efficiency cream separator. The name "Renfrew" has been used on the separator for several years in our United States and foreign trade and under that name has become as popular in those markets as under the name "Standard" in Canada. The name "Renfrew" has been adopted for Canada and under that name more closely identifies the machine and so that we can sell the machine under a uniform name throughout the world.

Pasteurization in Manitoba

L. A. Gibson, Dairy Commissioner for Manitoba.

"Under that creamy butter may be found 'Government Grade Certificates' that have been made from properly pasteurized cream. This is in accordance with a resolution passed by the Manitoba Dairy Association at their annual convention, held in Winnipeg, on Friday, February 1st, 1918, which reads as follows:

"The Manitoba Dairy Association recommends to the Department of Agriculture that, owing to the uncertainty of quality of the cream, creamery butter made from raw or improperly pasteurized cream, Grade Certificates only be issued on butter made from properly pasteurized cream, showing a negative reaction to the Storck Test. Further, that a special score card be issued to the creameries on butter made from raw or improperly pasteurized cream, this card to show that the score does not indicate the quality of the butter beyond the date of issue."

To qualify for a Grade Certificate the cream must be heated to 170 degrees F. in 15 minutes, otherwise it will show a positive reaction to the Storck Test. On butter showing a positive reaction the score cards will be stamped "This score card does not indicate quality of butter beyond date of issue."

This system has been found necessary by our previous year's experience, which was clearly demonstrated by results of experiments conducted by our Dairy Bureau the last year, in regard to the keeping qualities of butter made from raw cream, cream heated to 140 degrees F. and cream heated to 120 degrees F. Three small churnings were made daily of the same vat of cream, at above temperatures, for a period extending over two weeks at different seasons. This butter was placed in cold stores and it has been found on inspection that in every case the butter made from raw cream had developed a fishy flavor, on each re-examination

"A circular letter sent to all creamery buttermakers in Manitoba.

It was also

the acidity of the butter was made pronounced. The skim fat cream heated to showed a poor result made from cream showed very especially on the

It has been pronounced will impair the quality of butter, but not overcome a cream to suit the butter will still be rancid flavor. Its deterioration will

No 1's out of the picture you receive, other equal, the better butter, therefore, that you grade pay for it accurately the produce the finest cream, finest butter, and encourage the discouragement of a better class

Wool Meeting

ONE of the meetings of the Wool Growers' Association was held in

War Trade Board. It comprised the War Trade Board, the Wool Growers' Association, the national commission in Canada

a committee of wool dealers and growers were represented. Mr. Logan, London, Wilson, Fort St. Brooks, Ont. Mr. Stanley A. NS; and T. Reg. Ont. These growers of the Canada Wool Growers' Association, Mr. Ewan and Capt. president and vice president.

The manufacture of wool have sufficient New Zealand wool by the British Government for their purposes and require American wool. The American wool manufacturer of Canada, except for manufacturer of American orders and they are most frequent of the country either direct sales, without give an opportunity.

The growers were the manufacturers fashion that at the time Canadian wool a price equal to that for this production situation strongly in an excess of sheep in the United States, prices fall below that country. They of the wool market for Canadian wares which the Canadian wool Canadian wool without the imposed by the Government option upon all imports. In 1917, prices when time they were sent their wool manufacturer before purchase at the export he desire it.

The result of the present is the following: "That the Canadian Board request the Trade Board continue free export of Canada

this flavor becoming more pronounced.

It was also found that the higher the acidity of the cream, which the butter was made from, the more pronounced the fishy and objectionable flavors. The butter made from cream heated to 140 degrees F. also showed a poor flavor, while the butter made from the higher pasteurized cream showed very little deterioration, especially on the low acidity cream.

It has been proven that pasteurization will improve the keeping qualities of butter, but pasteurization will not overcome all defects. If the cream is old, sour and rancid, the butter will still have the same old rancid flavor. In other words, pasteurization will not make Specials or No. 1's out of off flavored cream. The larger the percentage of sweet cream you receive, other conditions being equal, the better the flavor of your butter, therefore, we strongly urge that you grade all your cream and pay for it according to quality. Encourage the production of sweet, good flavored cream, that will make the finest butter, otherwise there is no encouragement to the farmer to produce a better class of cream.

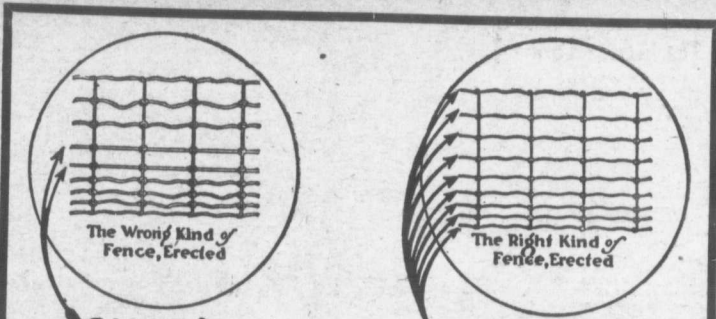
Wool Meeting at Ottawa

ONE of the most important meetings of sheep raising in Canada was held in Ottawa before the War Trade Board, Wednesday, April 11th. It comprised a conference called by the War Trade Board of a Committee of Wool Growers appointed at the national convention of sheep raisers in Canada in February, with a committee of the manufacturers, wool dealers and wool pullers. The growers were represented by Col. R. Mohwan, London, Ont.; Capt. J. D. Wilson, Fortres, Sask.; W. A. Dryden, Brantford, Ont.; H. S. Allen, Leithbridge, Alta.; Stanley A. Logan, Amherst, N.S.; and T. Rec. Arkell, Toronto, Ont. These growers are all members of the Canadian Cooperative Wool Growers, Limited, and Col. Mohwan and Capt. J. D. Wilson are president and vice-president respectively.

The manufacturers feared they may not have sufficient Australian and New Zealand wool allotted to them by the British Government to serve their purposes and consequently might require American and Canadian wool to meet their needs. At present, American wool cannot be exported to Canada, except for the purpose of manufacture of American Government orders and they claim Canadian wool was most frequently shipped out of the country either on consignment of direct sales, without themselves being given an opportunity to bid upon it.

The growers were eager to assist the manufacturers in any reasonable fashion that at the same time would insure Canadian wool being sold at a price equal to the American market for this product, and drew their attention strongly to the likelihood of an exodus of sheep from Canada to the United States, should Canadian prices fall below the level of those in that country. They, therefore, pressed the desirability of an unrestricted market for Canadian wool and the advantages which would accrue to the Canadian sheep raiser if Canadian wool went into the United States without the present restrictions imposed by the latter country, whereby the Government exercises an option upon all imported wool at July 30th, 1917, prices less 5%. At the same time they were willing to present their wool to the Canadian manufacturer before export, for his purchase at the export price should he desire it.

The result of the conference is expressed in the following resolution: "That the Canadian War Trade Board request that the U. S. War Trade Board continue to allow the free export of Canadian grown wools,



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The great big fact about Page Fence is its uniformity. Fence woven on Page Looms is sure to be uniform and that's the only kind of fence you can afford to buy. The other kind may be a little cheaper in first cost, but what a difference a few years make. Many of the first fences we made, and that's over 25 years, are still giving the best of good service.

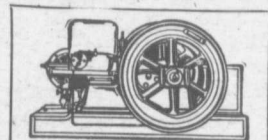
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ARE FULL No. 9 GAUGE WIRE

Even the locks are full gauge. The finest quality wire is used—extra strong, very rigid, tight-locked and evenly spaced. For a life-time security against fence troubles, get Page Fence and Gates.

There is a Page Wire Fence for every purpose. Page Gates, built as carefully as Page Wire fences, are obtainable in every regular size. Write our nearest branch for price list of all Page Products—Page Fences, Gates, Engines or Wood-saws. Information will be cheerfully given. Drop us a line to-day.

SHIPPING TERMS:—Freight allowed on all shipments of 200 pounds or more, to any place in Old Ontario or Quebec, when payment is made within thirty days.



THE BEST WORKMAN YOU CAN GET

is the one that never tires. The sturdy little Page is always on the job. It is always ready for work when you are. It will do more work than a hired man and it costs about as much to buy as one of his monthly cheques. Its running expenses only amount to about 5¢ per hour for fuel. A Page will hold hay to the mow, turn the churn, run the cream separator, the mechanical miler, and pump water for the stock, and as many other odd jobs around the farm as you can dig up. There are two types of Page engines—one burning Gasoline, the other Kerosene (or Gasoline), and 2 sizes, ranging from 1 1/2 H. P. to 7 H. P. Price list on request.

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He is a good farmer—he reads Farm and Dairy regularly.

Horse Clippers Sharpened

Don't throw away your old clippers blades. Mail them to us and we will sharpen and return them at small cost.

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both fleece and pulled, to the U.S.A. on the basis that grading is permitted in the same without exercising government import options and further encourage the import of foreign free wools that the Canadian Government remove the embargo at present in effect, which prohibits the re-export from Canada to the U.S.A. of foreign free wool now held or in future imported into Canada, the export of this to be under license."

DURHAM DUPLEX RAZOR FREE

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and we will send you ABSOLUTELY FREE at the same time a DURHAM DUPLEX RAZOR. This Big \$3.00 Worth for Only \$1 if You Send Now -- To-day



Once a year only, we make a special anniversary offer at COST PRICE. HERE IT IS—DON'T MISS IT. We have advertised these goods no more in Farm and Dairy that you all know the work they will do, and that we guarantee them to do exactly any style or length, in from 3 to 6 minutes. No experience or practice is needed. The Durham Duplex Razor is the only razor that can be held at the correct angle, and with it you can get the best shave of your life without any danger of cutting yourself.

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We just want to be sure that those two wonderful tools are placed in every locality, and then we know they will bring us in lots of orders. We have only a limited number to send at COST PRICE. MARKS SLOTS OF YOURS BY SENDING YOUR ORDER TO-DAY. Send us only \$1.00 and we will send you by registered mail, to any address. The Famous Duplex Hair Cutter and The Durham Duplex Razor. Regular Price \$3.00. Both Articles for \$1.00. DUPLEX MFG. CO., Dept. ES, BARRIE, ONT.

Does the Collar Fit?

MUCH trouble results on the average farm each year from sore shoulders on horses caused by the improper fitting of collars, and improper adjustment of harness.

The collar should fit the shoulder so that in length there is just room for the flat of one's hand between the collar and the neck at the bottom. In width the collar should fit snugly against the sides of the neck from a point three inches above the shoulder point to a point about half-way up to the top of the neck. The upper one-third to one-half of the collar should be wide enough to allow one to pass the thick of the hand between the collar and the neck at the bottom. If the upper part of the neck is thick a "Quarter Sweeney" or "Half Sweeney" collar should be used, so as not to pinch the neck. A collar too wide at the top will produce a sore neck on account of side motion of the collar as the horse walks.

Sweat pads should be avoided as they hold the heat and sweat and produce a tender shoulder, often causing a galled condition.

The harness should be adjusted so as to hold the collar snugly against the sides of the neck, and so as to bring the line of draft at right angles to the face of the shoulder as nearly as possible.

The collar should be kept clean by washing with a damp cloth each night when it is removed from the shoulder.

Washing the shoulders each evening with cold salt water will help to toughen the skin and prevent shoulder galls.—J. S. Montgomery.

The Conscription Issue

THE recent drastic action of the Government in conscripting all unmarried men between the ages of 20 and 25, irrespective of their occupation, has called forth a storm of protest from farmers all over the country, who only see in this the breaking of the promise made by the Government at the last election that farm labor would not be conscripted. At a large gathering of farmers held

in Petrolia on April 27, a resolution was passed requesting the Government to grant some form of exemption to bona fide farmers. That the war situation has entirely changed and that the changed circumstances demanded this action was made evident from a letter sent by Mr. F. E. Pardee, M.P. for West Lambton, and read at the meeting. This said in part:

Matter Entirely Changed.

"This Military Service Act was not passed without the very gravest consideration. In fact, the only certain knowledge is that at the present time it was absolutely necessary, in order to prevent the Germans breaking through the front line in France, that every ounce of man-power should be used for reinforcements to that army. I am fully well aware that during the last election the promise was made that farm labor would not be conscripted, but let me point out that from December to the first part of March there has been absolutely no face on the matter. The tremendous German drive was started with the avowed intention of breaking through

we are a part, at the present time, and which will continue no doubt for months. The whole and main object in making this drastic change is that the British Empire should retain its mainstay. Nobody regrets more than myself that this last step had to be taken, as I recognize fully that it is not a lighter matter to take a young man and send him to the battle line, but the supreme idea must be that it is for our own and the nation's self preservation, and that by warding off the terrible consequences of a German victory we are only making our own existence fit to live in. Production, of course, has been urged, but some method must be evolved whereby production shall still continue, even with the first draft."

The Cancelled Exemptions

A MEETING of the Brant County Board of Agriculture was held on the evening of April 22nd in Brantford, at which the following resolutions were unanimously agreed upon:

"Whereas the recent man power bill will, in our opinion, result in a

DON'T SCRAP

that machine just because it has a few broken parts which you cannot conveniently replace. Have them welded by the OXY-ACETYLENE process. We repair broken parts of farm machinery or engines—in fact any broken metal, whether cast iron, steel, brass, or aluminum; melting together the broken edges and making the article as strong as new.

GIVE US A TRIAL.

Send articles by express. Write or phone for time required and prices.

H. T. MILLARD, 225 HUNTER ST. Phone 1256, PETERBORO, ONT.

R. O. P. CHAMPIONS

According to the R. O. P. reports a Jersey cow produced more butter fat during last year than any other cow of any other breed. We have now for sale Twenty Cows, fresh or springing, also Young Bulls all ages, of these are closely related to the champion butter cow mentioned above.

B. H. BULL & SON, BRAMPTON, ONT.

RED CROSS BULL

Donated by C. V. Robbins

Eleven daughters and one son since December 1st, 1917. A pretty good record for their sire KING WALKER PRIZE (7088). The boy with so many young sisters is WELLSFVANKER BUTTER BOY WALKER, born February 21st, 1917. He is nicely marked and well grown. His dam is HEIDA BUTTER GIRL (28803), official record at 2 years, butter 7 days 12.21 lbs. She is one of our best cows and a daughter of GANOS FAVORITE BUTTER BOY, sire of 36 good official record daughters.

Bids for this bull must be made to me in writing before or by June 1st. After that date I will deliver or ship him, prepaid, to any address in Old Ontario. Payment must be made to H. K. Hampson, Agricultural Representative, Welland, Ont., who will hand it over to Red Cross.

WHO WANTS THIS BULL?

DAM—Butter, 7 days, 30.69; milk, 1 day, 100.3.

SIRE—Sir Lyons Hengerveld Segis, a son of King Segis and Blanch Lyons DeKot, 12.21. He is 5 years old, and an half my herd are his daughters. I must sell to avoid in-breeding. He is active and sure, half white; his calves are more white than black. His two nearest dams average 32 lbs.

A. Sherrick

Ringwood, Ontario



BRUCE'S HIGH GRADE SEED CORN

Our samples of Seed Corn will be good and of high germination; send your order now and we will ship about now and we will ship about now and we will ship about now. We offer, subject to being made, prices here, each with order.

CORN	Bushel	CLOVER SEEDS, Bushel 60 lbs
Improved Leaning, Bruce's 5 00		Alaska, Regal, No. 1 G. S. 217 80
King's Best 5 00		do Choice No. 1 G. S. 18 75
Leaning 5 00		do Prime, No. 1 G. S. 18 00
Rureka White 5 00		Alaska & Timothy No. 3 G. S. 9 00
Selected Giant 5 00		Lewers Extra Choice, No. 1 G. S. 10 00
Selected Mammoth White 5 00		do Choice No. 2 G. S. 14 00
GRASS SEEDS, Bushel, 48 lbs.		Red Fescue No. 1 G. S. 18 00
Timothy Regal, No. 1 G. S. 6 60		do Choice No. 2 G. S. 22 50
do Extra Choice No. 2 G. S. 6 00		do Prime No. 1 G. S. 18 00
do Choice No. 1 G. S. 6 00		Sweet Clover, White Blossom 12 00
do Prime No. 2 G. S. 5 00		Our Extra Choice Lewers and Timothy No. 1 Purely 24 00
do and Alaska, No. 2 G. S. 5 00		all clover bags 50c each, extra.

JOHN A. BRUCE & CO., Limited
HAMILTON ONTARIO

The Red Triangle Fund

TWO and a quarter million dollars is a goodly sum to ask from the people of Canada by voluntary contribution; but this is the amount aimed at by the Young Men's Christian Association for their Red Triangle Fund. The campaign will be conducted on May 7th to 6th, and the entire sum is to be expended on the military work of the association, principally overseas. All Canadians are asked to contribute and the appeal is based on grounds that should ensure the complete success of the campaign. Consider the following which are only a few items of Y. M. C. A. service to the boys in France:

There are ninety-six branches of the Canadian Y. M. C. A. in France and seventy-nine in England. There are dozens of Y. M. C. A. dugouts in forward trenches under fire.

Over 300,000 letters are written in Y. M. C. A. overseas buildings in one day.

The Y. M. C. A. saved hundreds of lives at Vimy Ridge by caring for the walking wounded.

More than 60,000 cups of hot tea and coffee are distributed daily in France free by the Y. M. C. A. The estimated cost for this service for eight months is \$48,000.

More than 150,000 magazines are distributed free each month by the Y. M. C. A.; estimated cost, \$15,000.

Concerts, singings, good-night services and personal interviews are energetically conducted by the Y. M. C. A. secretaries, and through this agency thousands of soldiers have decided for the better life.

The Young Men's Christian Association may not be well-known to our boys in France who benefit from its ministrations quite as much as their city cousins, who perhaps, have always been "Y" members.

We trust that the contribution to this fund from rural Canada will be a centre of activity; or contributions may be sent to the central headquarters, at 120 Bay Street, Toronto.

the British line, and it is the opinion that if that line on the Western front is broken it will go a long way towards victory to the Germans, and if a victory for the Germans come we may just as well recognize the fact that our country and farms are concerned, they would be taxed out of existence.

For Nation's Preservation.

"We cannot get away from the very stern crisis and real crisis that confronts the British nation, of which

most serious curtailment of farm production by taking away from agriculture a great many young men who have already secured exemption, and who are vitally necessary to maintain production.

"We, therefore, the Brant County Board of Agriculture, hereby request that the Government leave this help upon the farms until steps have been taken to replace it with labor from the cities, in order that the plans already made for production may be carried out. Realizing the seriousness of the situation, we are prepared to accept the Government's decision to take drastic measures, but we think it will be disastrous to take more help from the farms, particularly at this season, if you think it can be replaced; and we suggest that extra help might be got in the following ways:—

"1. By securing the release of experienced farm labor from shops and factories.

"2. By replacing male with female labor where possible, so that further man labor may be available for production.

"3. By closing up or restricting unessential industries, reducing advertising, canvassing agents, etc., so that more labor may be available for the important industries."—A. W. Pat, Sec'y.

FOR MILK, Jersey cattle, Over 100 lbs. choice. Improved Clydesdale farms with BALDWIN COATS

For MILK, Holstein cows, try just a few more of your own HOLSTEIN TOWN, W. A. St. George

CURD, SPONGE (START)

The First and last. Not an expense. Time-tried success in the cheese.

START-LACTIC ACID

A pure culture lactic-acid-producing milk and the quality and taste cheese, but

GERM (NOT A P)

A scientific Disinfectant. The ideal utensil.

The above product is dairy supply. Write to us for other desired information.

PARKE, WALKER & MOORE

TA The Large and Bull for sale. WAGNER BROS.



FOR SALE

Jersey cattle, bred in the purple. Over 100 Jerseys from which to choose. Imported and Canadian bred Clydesdales. Also, two large farms with modern buildings.

BALDWIN'S REGISTERED COATCOOK, QUEBEC

For MILK, BUTTER, CHEESE, VEAL
 Holstein cows stand supreme. If you try just one animal you will see soon what more. Write the **HOLSTEIN FRIESIEN ASSOCIATION**,
 W. A. CLEMENS, Sec.,
 St. George, Ontario

CURDALAC AND SPONGY PEPSIN

(STANDARDIZED)

The First and Original Peptic Coagulants. Not an experiment. Time-tried and a demonstrated success in the manufacture of Canadian cheese.

START-O-LAC

(LACTIC-ACID CULTURE)

A pure culture of selected and tested lactic-acid-producing bacteria for ripening milk and cream, and improving the quality and flavor of cheese, cottage cheese, butter and buttermilk.

GERMTOX

(NOT A POISON)

A scientifically prepared Germicide, Disinfectant and Detergent. The ideal sterilizer for all dairy utensils.

The above products are sold by all dealers in dairy supplies.
 Write to us for descriptive booklets and any other desired information.

PARKE, DAVIS & CO.
 WALKERVILLE, ONT.
 MONTREAL, QUE.

TANGLEWYLD AYRSHIRES

The Leading R. O. P. Herd
 Large Cows, Large Testes, Large Records, High Testes, Choice Young Bulls and Bull Calves and a few Cows for sale.
 WINDSOR HOTEL, R. R. No. 1, ABERFIELD, ONT.

SEMI-OFFICIAL RECORDS OF HOLSTEIN-FRIESIAN COWS FROM MAR. 1 TO 31

Mature Class.
 1. NATHALIE Clothing Perfection, 14873, 1y; 1748 lbs. milk, 576 lbs. fat, 720.00 lbs. butter, Colony Farm.
 2. May Belle Neuchâtel, 25556, 5y; 16486 lbs. milk, 569 lbs. fat, 711.25 lbs. butter, Wm. Grayson, Burgin, Ont.
 3. Princess Tulp, 18279, 5y; 16576 lbs. milk, 561 lbs. fat, 687.75 lbs. butter, Francis Worsell, Milner, R. C.
 4. Nellie Lane, 13161, 7y; 16093 lbs. milk, 489 lbs. fat, 611.25 lbs. butter, L. H. Delenale, Mataul, R. C.
 5. Minnie Speckle of Ferndale, 16411, 5y; 12873 lbs. milk, 477 lbs. fat, 626.25 lbs. butter, J. E. McInnis, Yanketck Hill.
 6. Elmwood DeKok, 14358, 6y; 11570 lbs. milk, 440 lbs. fat, 560.00 lbs. butter, John Hennings, Nanticoke, Ont.
 7. Lady Patricia Korndyke, 18411, 5y; 10873 lbs. milk, 408 lbs. fat, 510.00 lbs. butter, Wellington Sager & Son, St. George.

Three Year Class.
 1. Calamity Snow Mechlilde 2nd, 36707, 3y; 3644; 23274 lbs. milk, 843 lbs. fat, 1082.75 lbs. butter, Waburn Rivers, Ingersoll.
 2. Colony Payne Canary, 30123, 5y, 2nd; 11550 lbs. milk, 461 lbs. fat, 590 lbs. butter, Colony Farm.
 3. Sergis Wagon, 28757, 3y; 2144; 11573 lbs. milk, 365 lbs. fat, 466.25 lbs. butter, J. A. Sayward, Royal Oak, R. C.
 4. Ridley Alice Pierette DeKok, 27528, 2y; 214; 1154 lbs. milk, 373 lbs. fat, 445.00 lbs. butter, Dr. J. O. Miller, St. Catharines.

Two Year Class.
 1. Highlawn Helen, 15585, 2y; 3154; 12771 lbs. milk, 417 lbs. fat, 635.00 lbs. butter, W. O. Palmer, St. Sebastian, Que.
 2. Schulling Mercedes Baroness, 35297, 2y; 304; 13180 lbs. milk, 465 lbs. fat, 581.25 lbs. butter, Edsworth Plant.
 3. Favisia 2nd, 43627, 2y; 3224; 11630 lbs. milk, 452 lbs. fat, 568.00 lbs. butter, Elmsdon Manor, Royal Oak, R. C.
 4. Daisy Ormsby Duchess, 32282, 2y; 196d; 11750 lbs. milk, 397 lbs. fat, 496.25 lbs. butter, Wellington Sager & Son.
 5. Colantha Beauty Abbeokor, 30734, 2y; 178d; 8410 lbs. milk, 234 lbs. fat, 417.50 lbs. butter, F. J. Pineson, Schrippingville.
 6. Lela Korndyke Glad, 26232, 1y; 268d; 9379 lbs. milk, 327 lbs. fat, 468.75 lbs. butter, S. U. Kinross, Avonmore.

During the month of March seventeen cows and heifers qualified in the yearly Record of Performance test. In the three-year-old class a new champion comes forward in Calamity Snow Mechlilde 2nd, displacing Pierette Aris. This great heifer sets the standard at 1063.75 lbs. butter and 23.74 lbs. milk. Frothingan again holds fifteen months of the commencement of her year's work, she has made, according to preliminary reports, better than 32 lbs. butter in 7 days and over 100 lbs. milk in 1 day.—W. Clemens, Secretary.

HOLSTEIN NOTES.
 OUR representative, while going on the train from one of the sales in Western Ontario, had the privilege of spending an hour or so with Mr. Peter S. Arbogast, of Sebringville, Mr. Arbogast has been some very good sales during this past year, having disposed of 18 head in the course of the year, as a result of his advertising through "Farm and Dairy." Some of his later sales are young bulls to J. R. Girbin, Welleray, Ont.; H. B. Taylor, Mount Egira, Ont.; and A. K. Baird, Giroux, Ont. We congratulate him to be congratulated upon securing the quality of stock which Mr. Arbogast is in the habit of turning out.

LAKEVIEW NOTES.
 A NEW week ago a heifer bred by the Lakeview Dairy, owned by Mr. A. G. and now owned by Dr. M. A. Heath, of Freeman, made a record of 31.71 lbs. of butter in 7 days, 29.2 lbs. of milk in seven days, this being Canadian record for her age.
 This week comes the report of her sister, Lakeview Dutchland Queen, a mature cow, who met with an accident which injured one of her teats in such a way that no milk could be taken from it. In spite of this, and in view of the necessary inconvenience of this condition, she gave with a record of 29.25 lbs. of milk in one day, testing 4 per cent. fat, equal to 5.42 lbs. of butter in one day. Her weekly record was 706.5 lbs. milk and 34.65 lbs. of butter. This places her record with champion for butter for a cow with three quarters under, displacing Johanna Rose Laurine 4th, former champion, who was by the Lenox Park Farm at Black Creek, whose record for butter is 30.74 lbs. The latter, however, still hold the record for seven days' milk with 715.5 lbs.
 A few others who have a record for cows who are standing at the top, are Lakeview Queen, another sister, who holds the Canadian record for butter in the eight months' division, while Queen Iris DeKok, of Exeter, has been the highest producing mature cow in Canada in the eight months' division. This cow has given 100 lbs. of milk in one day, 24.27 lbs. in a year, this being the highest record in the world when made.

JERSEY SIRE
 I am now ready to dispose of a young bull from Saddle Mill Pool, record 554 lbs. fat at 2 years old. Her dam is Saddle Mac 2nd, 8,416 lbs. milk, 481 lbs. fat, 5 yearling class. Granddam 744 lbs. fat in a year. His sire is Saddle Mac, former Canadian champion and John Rose, whose granddam was 2-2 year-old record of 10,200 lbs. milk and 690 lbs. butter, and great-granddam 15,000 lbs. milk and 100 lbs. butter.
 H. H. GEE
 HAGERSVILLE, ONTARIO

THE EDGELEY CHAMPION HERD OF JERSEYS.
 Write us about your next herd sire. We now have sale of our present herd sire, Edgeley's Bright Prince, who is a son of Canada's champion bull, our sire, we have. "Try us a visit. Sunbeam of Edgeley is not the only high-record cow 15,000 lbs. milk and 100 lbs. butter."
 JAMES BAGG & SONS (Woodbridge, C.P.R., Concord, G.T.R.) EDGELEY, ONT.

CHOICE YORKSHIRE HOGS AT RIGHT PRICES
 Boars and sows, all ages, from best prize-winning strains—a few good bred and young stock. S. C. White Leghorn eggs for hatching—Baron's 282-cents variety, S. Brown Leghorns, Barred Rocks, R. I. Reds, 25 per 15; 419 per 100. Peas and White I. L. Duck eggs, 43 per 100. Chinese goose eggs, 50c each.
 T. A. KING
 MILTON, ONTARIO.

AYRSHIRES
 If you want Ayrshires of first class quality watch this space in future issues.
 PALMER BROTHERS
 NORWICH, ONTARIO

PEACH BLOW AYRSHIRES
 Young Stock for sale, always on hand (both sexes), from high-testing heavy producers. Good udders and large teats a special feature of my herd. Three fine young Sires ready for service. Get particulars of these if you need a sire. R. T. BIRNLEY, Peach Blow Farm, HEMMINGFORD, Que.

EDWARDSBURG GUINTEEN
 The feed that means more milk and richer milk. Worth its price.
 Guaranteed
23% PROTEIN
 The Canada Starch Co. Ltd.
 TORONTO Fort William
 Guelph, Brantford

A \$500 BULL AT A BARGAIN
 A rare opportunity has come to Farm and Dairy to offer one of the most highly bred Holstein bulls in Canada to the best farmer or farmers' club that takes advantage of the following excellent offer.
 While we state in the heading that this bull is worth \$500, his actuality is worth \$260. \$1,000 just according to the herd he goes into. Judge his value for yourself.

THE BULL AND HIS BREEDING
 He is 16 months old and well grown, in the pink of condition, and ready for heavy service. He is seven-eighths white and of show type—individually an ideal bull.
 His sire is Pontiac Korndyke Met Lon 17500, that noted sire who stands at the head of the Raymond and Roycroft herds and who is the sire of Het Lou Pierette with her 3 world's records; also of 3 other 3 yr. olds with records of over 20 lbs. His sire in turn is Pontiac Korndyke with 156 tested daughters and 43 proven sons.
 His dam is Pietie Korndyke Queen, a 43 lb. cow with a 29.61 lb. daughter. Her sire has 9 tested daughters, 3 of which average over 27 lbs. in a 24-lb. cow. One of her gr. sires is Pietie 22nd Wood De. He, also 13 proven sons; and the other is Belle Korndyke Beryl Wayne, 43 tested daughters, three with averages over 24 lbs., and 15 proven sons.
 His dam and sire's dam, one a 4-year-old, average over 30 lbs. and with these facts before you, you will see that we are justified in placing the value upon him that we have done. The opportunity of securing him, someone, who has had an unusual opportunity to inspect the best bulls available, and who after seeing him certifies as to his worth.

FARM AND DAIRY'S OFFER
 Here is our offer:—
 We will send this bull to the first person who sends us at least 75 subscriptions by farmers to Farm and Dairy at \$1 each and \$250 in cash. If more than 75 subscriptions are sent \$1 each will be deducted from the cash amount to be sent, for every extra subscription this sent. Thus if 100 subscriptions are sent only \$250 in cash need be forwarded. Or we will send the bull free for 125 subscriptions at \$1 each.
 We want these, however, to be bona fide subscriptions by farmers who know about the great offer we have here made, and why you should send these to members of Farm and Dairy, Canada's only dairy farm paper. Further particulars about this great bull and his extended pedigree will be mailed on application, but do not take too long to respond. There is some one else interested in this great bull, and the opportunity will be gone. You may send the money for him, and your names later if you prefer, but we must receive at least 75 subscriptions.

THINK IT OVER
 This is a chance that doesn't come along every day, so get busy and secure him for the coming season. If you don't feel like undertaking it alone, talk it over with your neighbor. You may have been thinking of getting a real bull for some time. When you get a better chance?
 Write or wire
 H. BRONSON COWAN, MANAGING DIRECTOR.
The Rural Publishing Co., Ltd., Peterboro, Ont.

Wonderful Individuality

combined with the World's greatest milk and butter records, makes Premier Louise DeKok, No. 23890, who was born Dec. 21, 1917, one of the greatest bargains of the year. I guarantee him in every way. Our herd is regularly tuberculin tested, thus assuring a healthy calf. Don't delay write at once for an extended pedigree and my price on him. Markings more white than black. Sire, Sir Lyons Patriotic, whose dam and sire's dam average 21.01 lbs. butter with 679.5 lbs. milk. By a brother to the sire or dam of the above, Sir Lyons Patriotic, also 45 cows with, re- 62.84 lbs., and Noble Segis Korndyke, 40.82 lbs. Pancher Farm Marie, cords over 30 lbs. SOME BREEDING. Dam, Bes DeKok Schulting, with a record of 212 lbs. of milk with 12.83 lbs. of butter, best day's milk 91.4 lbs. She will undoubtedly increase her record greatly at next freshening. One daughter milked on official test as at Jr. 3, 71.4 lbs.

COME AND SEE HIM

W. G. Bailey, Oak Park Stock Farm, Paris, Ont.

CHOICE BULLS READY FOR SERVICE

No. 1.—By a son of MAY ECHO SYLVIA. His two nearest dams (both Canadian champions), average 32.5 lbs. butter in seven days. Price \$1,000.

No. 2.—By a son of MAY ECHO SYLVIA. His two nearest dams (one a four-year-old), average 34.17 lbs. butter in seven days. Price \$800. Some extra choice young bull calves from \$200 to \$1,000. We have sold thirty-five bulls this winter.

R. W. E. BURNABY, Highland Lake Farm (Farm at Step 15 Tracy Street East) Jefferson Ont.

HOLSTEINS

One 2-year-old bull; 1 bull 18 months, out of a 23 1/2-lb. 3-year-old dam; 1 bull 13 months; others younger.

R. M. Holtby R.R. No. 4 Port Perry, Ont

CHOICE BULL FIT FOR SERVICE

SIRE—Francy 3rd's Hating 2nd, whose two nearest dams average 31.87 lbs. butter in 7 days, and 106 lbs. milk in 1 day. DAM—Minnie Paladin Wayne at 3 year old, butter in 7 days, 34.96 lbs. milk, in 1 day, 96.3 lbs. Write for Description and Price. P. SMITH, R. R. No. 3, Stratford, Ontario.

FAIRMONT FARM

offers a bull bargain, born June 28th, 1917, nicely marked, straight and ready for light service. Dam, now 18 lbs. butter at 35 months, a good prospect for a large record at next freshening. Write for photo and price. Also bring for a large lot of 5 months old. P. S. ARBOGAST, R. 2, Mitchell, Ontario; Springville Station.

KORNGOLD FARM

offer for sale a choice bull, Sire, a son of a 21-lb. dam, well grown, ready for service, and a good individual. Write for Extended Pedigree and Price. R. A. McALPINE R. R. No. 1 BLOOMFIELD, ONT.

THE NOTED DON HERD

are at present offering a fine lot of young bulls and from R.O.P. dams. Also a few females, from eight to fourteen months old. For particulars and prices write R. R. No. 1. TODMORDEN, ONTARIO.

STOP! LOOK! LISTEN!

What DUTCHLAND COLANTHA SIB MONA'S DAUGHTERS are doing. Lakeview Dutchland Arlie, 667.9 lbs. milk, 24.86 lbs. butter, Canada Champion, Sen. 3 yr. old. Lakewview Dutchland Queen, 708 lbs. milk, 23.45 lbs. butter; one day's milk 106.3. Lakeview Dutchland Calamity Rose, 510 lbs. milk, 21.71 lbs. butter; Canadian Champion and world's record for 2 yrs. and 6 months old, an whom in 1 lb. of milk, 2.95 lbs. moisture, 741.9 lbs. milk, 39.6 lbs. butter, one day's milk 112 lbs. Also several young bulls by same sire.

Major E. F. Osler, Prop., T. A. Dawson, Mgr.

Lakeview Farms, Bronte, Ont.

LAKEVIEW CALAMITY RATTLE

is sire of every female at "Sunnybrae", over one year. His sire has 29 tested daughters up to 38.06 butter, 735.1 milk in 7 days. His dam has one daughter a 755.1 milk in 7 days; she a daughter, World's Champion two-year-old, 31.71 butter, 510.6 milk in 7 days, test 4.97% fat.

We have for sale two very choice light colored bull calves, 1 and 3 months old. Will double in value when dams are tested. Their sire carries champion blood also.

L. Rogers, "Sunnybrae" Manvers Sta., Ont.

SUNNYBROOK NOTES.

WHEM Farms and Dairy's representative called recently at Sunnybrook Farm, Burlington, he found the Holstein in A1 condition. Mr. Kigour is to be congratulated on the nice bunch of stuff which he has gathered together in a short while.

He has at present the noted bull, King Loran, 3-year-old, whose dam has about 27 head now bred to him. Mr. Kigour has been doing some testing and has now some very good results to his credit.

Lady Inka Mieselins has now a record of our visit had in 7 days, and at the time of our visit she was 60 days and running over 60 lbs. per day. Another cow that is to be congratulated is her present record is Coral DeKok 2nd, 23.60 lbs. She has a two year and yearling daughter in the herd.

Lillian Haram is a 1875 lbs. 3 yr. old, who was promoter of her own record, later on.

These are they have a fine lot of various ages which they are counting on having tested as soon as they freshen again.

At the time of our visit they had still a few choice young bulls ranging in age from a year to a few months. These are being sold, but there are still one or two left for some fortunate buyer.

HOLSTEINS AT UNIONVILLE.

W HILLS in Toronto recently, Farm and Dairy's representative took the opportunity to run out to Unionville and see the Holstein herd of Mr. W. P. Elliott near there. Mr. Elliott has a nice bunch of calves from the syndicate bull and a few from May Echo Champion, both bred by Echo Sylvia.

A few of the more noticeable of the females which he has now on hand are Picola Korndyke Queen, a 27.42-lb. cow with a 28-lb. dam, and 23.28 lbs. 3 year old daughter. Another cow of which Mr. Elliott is justly proud is his daughter of Calamity Johanna. Nice work.

A CORRECTION

Through a printer's error in our issue of last week the date of the York Co. Breeders' sale at Richmond Hill was given as May 1st, instead of May 15. This should have been May 15. I should have please note this correction and note the advertisement in this week's issue.

King Payne Segis Childs. Another in Lala Queen, No. 2645, from a 28.3 lb. dam; King Payne, 35.20 lbs. and Carmen Sylvia 4th DeKok, 25.2, from a 25.43 dam.

CANBORG HOLSTEINS.

OUR representative recently paid a visit to the farm of J. E. Mooke, of Canboro. Mr. Mooke has now a nice bunch of Holsteins. He is particularly careful in regard to the selection of his herd sires. The one he is now using came from the herd of W. H. Chubb of Hagerstown. His dam is Johanna Netherlands Best, with milk for 1400 at the recent contest sale at Hagerstown. Mr. Mooke was fortunate at that sale to secure a splendid bull calf, also bred by Mr. Cherry, which he intends to use on the daughters of his present sire. On the daughters of King Payne, who is a son of King Pontiac Arrie Canada and May Echo Sylvia, he has a pair, Snow Ball, milk 834 lbs., butter 29 lbs. in 7 days.

Among the most noticeable of Mr. Mooke's females are Liszoo Lucy Ormiston, who was 19 lbs. at the noon milking in the day our representative was there. This is one of the cows which Mr. Mooke bought from the Messrs. Hoek, of 3 Black Creek, at the Welland sale. She is about as near the ideal dairy type as one could find.

He has a couple of very fine 2-year-olds from a bull which he got from Laidlaw Bros, the dam of one of them being Howden DeKok, the first 20 lb. cow in Canada. Another cow which he has sold, is a 18-lb. Jersey three-year-old, but capable of even better work. She is the most striking female in the herd; she is doing 30 lbs. and 30 lbs. of milk of great size, an under "like a wash-tub" and a record of 31.67 lbs. butter and 835 lbs. milk.

THE ORMSTOWN SHOW.

THE Ninth Annual Ormstown Spring Show, under the auspices of the Live Stock Breeder's Association of the District of Beausabrou, will be held at Ormstown, June 4-7, inclusive. The show is open to all of the Dominion, and is held at the home of Messrs. A. C. Frankin and S. L. Lawrence (Laidlaw), New York. This spring fair is now recognized as one of Canada's leading daily exhibitions and horse shows. The prices for admission are very low. Additional accommodations is being provided for the expected innumerable entries. For fuller information apply to W. G. McGerrige, Ormstown, Que.

Cutter's Germ Free Blackleg Filtrate and Blackleg Tissue Aggressin The New, Safe and Efficient Agents for Protecting Calves from Blackleg.

Cutter's Blackleg Filtrate positively protects against Blackleg. Cutter's Blackleg Aggressin, made directly from animal tissues, affords even greater protection and is recommended for Pure Breeds. Neither the Filtrate nor the Aggressin can possibly cause Blackleg in even the most susceptible animals since both are germ free. Both have given 100% protection.

There is little oratory in any way on the part of those who do not change their minds. In the farmers' grass as yet been established that it intends to pay, that it intends to crop and any other new price might be offered. It has helped the price per cent. crop may have received prices. Manitoba's average, 1000 nominal (incl. 1 Northern, \$2.25; 2 Northern, \$2.19; crop, No. 2, \$2.25, red.

CUTTER'S BLACKLEG PILLS "California's Favorite" for nearly 20 years. Year in and Year out they have given better satisfaction than any other Blackleg pills. Cutter's Pill Tester... 4.00. Inset on Cutter products. If unavailable, order direct. We buy shipping charges.

POTATOES A Potato for or purpose are at \$1 per bag has had lots at country. The demand for new early New Brunswick, Green Mountains, of the potato market has been the result of a campaign of the Agriculture is bearing a large proportion of its weight in Ontario this year. \$1.25 per bag. Green selected Ontario \$1 wholesale price on 800 per bag, delivered to \$1.45; Delaware,

THE CANADIAN HOLSTEIN SALE Co. SIMCOE, ONT. BELL PHONE 136.

MARKET REVIEW AND FORECAST

TORONTO, Apr. 29.—The spring drive is now on in head earnest, and farmers are busy on the land that there is a corresponding quietness in produce markets. Steadiness is general throughout Ontario and is starting in Quebec also further east. Prospects are for a good normal acreage of coarse grains with a decided increase in spring wheat. A considerable portion of the spring wheat crop will be seeded on land where fall wheat failed. The weather of the past week or two has been more favorable to fall wheat than the dry weather that prevailed earlier in the season, and fields which their owners had planned to plow up next spring a 50 or 60 per cent. crop. At the best, however, the fall wheat crop of 1918 must be recorded as a failure in Ontario. In the Canadian West soil conditions are now said to be ideal, and the West confidently expects the biggest crop in its history. Alberta claims an increase in the wheat area of 20 per cent, and Saskatchewan, which is suffering from a greater scarcity of labor than either of the other two provinces, expects an increase of 10 per cent. United States weather conditions have been favorable to a revival of fall wheat and to the seeding of the big acreage of spring grains now under way.

The Cheese Commission has finally announced prices for this season. The price authorized for No. 1 grade, f.o.b., stamper at Montreal is \$2.15; No. 2, 2.12; and No. 3, 2.08. The question of a relative price for condensed milk has not yet been settled, but a committee has been appointed to work out the question of setting prices that will present an unfair competition. The suggestion that the Commission might set the price of butter this year has not yet been acted upon, and the members of the Commission have made no public announcement that would even indicate that they consider such a move.

WHEAT.

There is little wheat offering, either at country or terminal points. Farmers are busy on the land, and quotations do not change from week to week, there is no incentive to make a special effort to market the wheat, which is still in the farmers' granaries. No action has yet been taken on the suggestion that it intends to pay for this year's wheat that it intends to pay for this season's wheat, and any attempt to effect that the new price might have had on wheat sales has been defeated. The recent rains have helped the fall wheat, and a 20 per cent. crop may be harvested where the average yield of 40 per cent. is usually secured.

Manitoba wheat-in store, For William, nominal (including 15c tax); No. 1 Northern, \$2.24; No. 2 Northern, \$2.18; No. 3 Northern, \$2.12; Ontario wheat—new crop, No. 2, \$2.22, basis in store, Montreal.

COARSE GRAINS.

Two factors explain the quietness of the grain market at Toronto. In the first place, higher prices are being realized on local trade; and in the second place, the hand-to-mouth buying which high prices produce is still stimulating the market. Some barley is moving, but here prices are on the down grade, \$2 to \$1.50 a bushel. Some buckwheat is still offering at country points at \$1.25 to \$1.20. As for the local demand for "breakfast bread," the price on this has advanced to \$2.65. Toronto quotations follow: Oats, C.W. No. 2, in store, Port William, \$1.60; No. 1, \$1.65; No. 1 feed, \$1.65; Ontario oats, No. 2, \$1.60; American corn, K.W. dried, No. 3, \$1.40; No. 4, \$1.35; \$1.30 to \$1.37; Montreal oats, C.W. No. 2, \$1.02; extra No. 1, feed, \$1.02; No. 2, local white, \$1.

MILFEEDS.

Milfeeds are still as scarce as ever. Toronto quotes car lots delivered, Montreal freights, bags included: bran, per \$12.00; shorts, \$10.40. Montreal quotations, bran, \$23.40; shorts, \$19.40; middlings, \$18 to \$20; meal, \$17.

HAY AND STRAW.

Hay is quoted in Toronto at \$17 to \$17 for No. 1, with mixed, \$14 to \$16 on track; straw, \$10.50 to \$11; Montreal quotes No. 2 hay, car lots, \$17.

POTATOES AND BEANS.

Prices for ordinary consumptive purposes are in large supply, and as low as \$1 per bag has been paid for car lots at country points. In Ontario, the demand for seed potatoes, particularly New Brunswick Irish Cobblers and Green Mountains, is the active feature of the potato market. Orders call for some selected seed, and apparently the campaign of the local Department of Agriculture is bearing fruit, and quite a large proportion of the best potatoes used in Ontario this year will come from the seed Irish Cobbyler seed sold at \$2.25 per bag. Green Mountains, Ontario, selected Ontario \$1.45 to \$1.85. A few thousands of Ontario potatoes per bag, delivered Toronto, is \$1.00 to \$1.45; Delaware, \$1.75.

Very few Ontario beans are coming forward, and stocks are light. Montreal quotes hand-picked, double beans, \$7.75 to \$8; and other grades, \$5.25 to \$7.25. Toronto quotes Canadian prime, \$6.25 to \$8; foreign hand-picked, \$6.75 to \$7.

EGGS AND POULTRY.

A determined effort was made by certain dealers in the early part of last week to force a market. They complained that last year they had been able to buy at least some of their storage eggs at a low rate, ignoring the fact that the cost of producing eggs has increased at least 50 to 60 per cent. in the last year. The market, however, is stronger than a week ago. Montreal dealers have paid as high as 55c at country points, and the egg circles are receiving as high as 40c. Storing is becoming general, and receipts concern egg. Several carloads of waxy tern eggs are coming east, and just what effect this will have on the market is problematical. One carload was shipped to Vancouver, 250,000 56c f.o.b. Toronto wholesale dealers are quoting 35c to 36c at country points and 32c to 45c to one trade.

Receipts of live and fresh-killed poultry are extremely small, and the market is firm but quiet. Weekly prices. Storage stocks are moving out rapidly.

Chickens, Lc weight, dressed, 20c to 22c	Hens, 2 1/2 lbs., 20c to 22c	Hens, 2 1/2 lbs., 20c to 22c	Hens, 2 1/2 lbs., 20c to 22c
Roosters, 20c to 22c	Ducklings, 25c to 30c	Turkeys, 1.00 to 1.20	

DAIRY PRODUCTS.

No radical change in the butter market, one way or the other, is expected for some time to come, as demand is strong all over the continent. Toronto wholesale producers are quoting creamery solids at country points, 45c; dairy prints, 45c to 50c, and fat, dairy butter is selling higher than the prices quoted last week. There is a local outlet for Toronto where the larger proportion of farmers now shipping cream also helps to explain the favorable local market for dairy butter. Montreal reports local finest creamery butter in the country producing at 45c to 48c per lb. f.o.b., and the same grade is disposed of at a jobbing way at 51c to 52c for one pound blocks.

The Cheese Commission allows an advance of one and one-quarter cents a pound for cheese this year as compared with last year, and prices at the end of last week at Montreal were 22 1/2c to 23c.

CHEESE BRANDS.

Striking, Oct. Apr. 25—340 boxes sold at \$1 11-16 cents.

LIVE STOCK.

Though the offerings of cattle on the market during the past week were by no means heavy, the quotations were strong and showed on Wednesday an advance of from 15c to 25c per cwt. on all cattle as compared with the prices on the same day of the previous week. Choice to good steers, yearlings, calves and heifers sold at from \$12.75 to \$16, and well-finished steers and heifers at from \$13.25 to \$17.75 per cwt.


Choice veal calves were selling at from \$14 to \$16.

The hog market was weak during the former part of the week, but prices returned to 22 to 25c, finding some a decline of 25 cents from the close of the previous week.

Heavy steers, choice, 13.25 to 15.00	do, good, 12.75 to 13.75	Butchers' heavy, choice, 12.50 to 13.00	do, medium, 11.75 to 12.25	do, common, 10.50 to 11.50
Butchers' calves, 8.50 to 10.50	do, good, 9.50 to 10.25	do, medium, 8.25 to 9.00	do, common, 7.50 to 8.25	Feeders, best, 9.50 to 10.75
Stockers, best, 7.00 to 8.00	Grass cow, 7.00 to 7.75	Milkers and springers, 10.00 to 10.00	do, com. to medium, 6.75 to 9.00	do, choice, 11.00 to 15.00
do, medium, 14.00 to 15.50	do, common, 8.50 to 10.50	do, heavy, fed, 12.50 to 12.75	do, common, 8.50 to 10.50	do, heavy, fed, 12.50 to 12.75
Lamb, choice hand, 12.50 to 13.75	Sheep, choice hand, 12.50 to 13.75	do, heavy and fat but, 10.00 to 11.00	Hogs, fed and watered, 10.00 to 10.75	do, heavy and fat but, 10.00 to 11.00
do, f.o.b., 23.50 to 20.75	Less \$1 to \$3 on hives; to thin hogs; less \$1 to \$1.50 on average; less \$4 on stags; less 50c to \$1 on heifers.			

York County Holsteins

at auction
In Their Annual "Quality" Sale
at RICHMOND HILL FAIR BUILDINGS
Wednesday, May 15th, 1918



60 HEAD **60 HEAD**

Nearly all females fresh or due to freshen soon. A number of choice young heifers. A few bulls of excellent quality.

York County is well known as a Holstein center. Our herd sires include a 33-lb. son of the great King Siga, a son, a full brother, half brothers and grandsons of the sire's record cow, May Echo Sylvia, and sons of King P. A. Canada.

York County has probably more thirty-pound cows than any other county in Canada, as well as several world's record cows.

We feel sure the satisfied buyers at previous sales, and the determination of York County breeders to give satisfaction will, as before, insure the success of this sale.

Sole Committee:
R. W. E. BURNABY
R. F. HICKS
W. F. ELLIOTT.

SEND FOR CATALOGUE TO
R. W. E. BURNABY,
Jefferson, Ont.

SUNNYBROOK FARM HOLSTEINS

Get them while they last! We have only 3 of our young bulls of serviceable age left. Do not miss this opportunity. You will never get finer individuals, with such official backing, so reasonable.

Jos. Kilgour Eglington P.O. North Toronto

Four 30 lb. Cows this Winter at VILLA VIEW

We have for sale the best lot of bull calves that we have ever been able to offer from dams with records up to 28 1/2; many of them good prospects for 30 lbs. Also one bull ready for service from a 15-lb. two-year-old. Buy your next bull when 30-lb. cows are being developed, and in any other herd in Canada. Write to-day.

ARBAGAST BROTHERS SEBRINGVILLE, ONT.

A RARE BARGAIN

Registered Holstein bull, yearling, sired by a half brother of Totilla of Riverside, 24994 lb. milk, 1067 lb. butter in one year. Record of sire's dam's milk 584, butter 23.42. Dam's record milk 479, butter 23.42. Straight and well grown.

LANINGDALE STOCK FARM VILLA NOVA, ONT.

SUNNYSIDE STOCK FARM HOLSTEINS

BUCHO SIGEIS PAYNE, our herd sire, is by a brother of the world's 50-lb. cow, Segis Fayna Johanna. He is a grand bull in every way, and is not yet 4 years old. To avoid in-breeding would sell him at a price. Also have bulls from one month to seventeen months old for sale, sired by Echo Segis Payne and out of grand producing cows. If you need a well backed bull, write or come and see them.

JOHN M. MONTLE, Prop. Sunnyside Stock Farm, STANSTEAD, QUE.

ELMCREST STOCK FARM

Offers for Sale

No. 1.—Bull, 1 month old—Dam Jeanie Fairfort, 36410—record at 3 1/2 years, 407 lbs. milk, 37.05 lbs. butter. She is a daughter of the beautiful Rosie Pouch, grand champion at Guelph Dairy Test, 1914. Sire—Also a few fresh cows, splendid producers with world's record breeding. Prices Very Reasonable.

W. H. CHERY Hagersville, Ont.
Bell Phone

AVONDALE FARM OFFERS

1. A choice young bull, born Nov. 2, 1917, sired by "Woodcrest Sir Clyde," dam's 2 1/2-lb. daughter of "Prince Hensley Pistle"; 2nd dam, 27.63-lb. A bargain for immediate sale.

2. A heavy and fat bull, born Oct. 6, 1917, light in color, sired by "King Echo Sylvia Johanna," This is the 35,000 yearling son of "Bessie Model Johanna," the twice 27-lb. cow. Dam of calf is a 16-lb. two-year-old daughter of "K. F. A. Canada"; 2nd dam, 29.96-lb.; 3rd dam, 31.70-lb. A bargain.

H. LYNN, Avondale Farm, Brockville, Ont.

Market Your Wool This Year Co-operatively

What co-operation is doing to raise prices and stabilize the market in Ontario

LAST YEAR—

About 300,000 pounds of wool were sold cooperatively in June at Guelph at new, high record prices for Ontario. Before the sale wool was ranging anywhere from 5c to 20c per pound less than the average Guelph price. The very fact that a cooperative sale was in prospect, of course, tended to stiffen the market prices. It is safe and fair to say that the sale influenced the wool prices at least 10c per pound in favor of the Ontario wool grower, who sold through the Ontario Sheep Breeders' Association. That means \$30,000 more cash on the 300,000 pounds.

And that isn't all—as soon as the cooperative sale took place it fixed new high prices from which every grower benefitted. Ontario wool growers who sold their clip independently, after July, certainly got a higher price than they would if there had been no sale—at least 10c per pound more. On a total of say, another 300,000 pounds of wool, that means extra cash amounting to another \$30,000.

If enriching the wool growers of Ontario in one season to the tune of \$60,000 isn't evidence of the value of cooperative wool selling then what could be?

Ontario Wool Growers—to a man, you are invited to send your wool to Guelph for cooperative sale this year. If every one will get behind this movement it will simplify and encourage wool buying and put every one of you in touch with your final customer—and you know that always means more profits for you.

THIS YEAR—

With the experience of last year behind us we believe the farmers are justified in selling their wool cooperatively through the Ontario Sheep Breeders' Association.

All Provincial wool growers associations are now united, forming the Canadian Cooperative Wool Growers', Limited. This company will sell wool direct to the manufacturers thus bringing the farmer in direct touch with his final customer without the intervention of several middlemen—who, of course, must always have their profits.

If the bulk of the wool in Ontario is marketed in this way there is an added inducement for buyers to bid on Ontario wool.

The method of preparing the wool for market by using paper twine in jute sacks ensures to the manufacturer a product put up in the best possible condition.

The fact that the wool is graded gives the buyer full information as to the product offered; he knows exactly what he is getting and is willing to pay full value for it.

By making application, the farmer can get full supplies and he can ship his wool without pre-paying the freight. As soon as the wool is received in Guelph it will be weighed and an advance payment of about 75 per cent. of the estimated value will be sent at once and the balance after the sale of the wool.

Application form and full information, also twine and sacks will be furnished by your district representative or by the Secretary of the Ontario Sheep Breeders' Association, R. W. Wade, Parliament Buildings, Toronto, Ontario.

SOME POINTERS TO BE OBSERVED WHEN SHIPPING WOOL TO THE ONTARIO SHEEP BREEDERS' ASSOCIATION.

The fleece should be placed with the clipped surface down. Then fold in the sides and roll from each end to the centre, after having carefully removed the dung locks, and then tie with paper wool twine. Never tie the fleeces with sisal or ordinary binder twine, and avoid tying with neck portion. The dung locks should be placed in a separate sack from the fleeces.

The fleeces should then be packed in wool sacks, or in case of small shipments of 15 fleeces or less use ordinary jute bran sacks being certain the inside surface is clean.

The wool will be graded by wool experts of the Live Stock Branch, Ottawa, and will be sold through the medium of the Canadian Cooperative Wool Growers, Limited, which insures all profits to you.

A CHEQUE REPRESENTING AN ADVANCE OF ABOUT 75 PER CENT. OF THE APPRAISED MARKET VALUE OF THE WOOL WILL BE SENT IMMEDIATELY UPON RECEIPT OF THE WOOL. THE REMAINDER WILL BE SENT UPON COMPLETION OF THE SALE.

The Canadian Cooperative Wool Growers, Limited, in selling the wool will charge only actual operating expenses.

For your information, the following are the directors of the Ontario Sheep Breeders' Association:—J. D. Brien, Ridgetown; James Douglas, Caledonia; E. Robson, Denfield; J. E. Cousins, Harrison; W. H. Beattie, Wilton Grove; Cecil Stobbs, Leamington; George L. Telfer, Paris; James Bowman, Guelph; H. M. Lee, Highgate; W. Whitelaw, Guelph; J. W. Springstead, Abingdon. The officers are:—President, James Douglas, Caledonia; Vice-President, George L. Telfer, Paris; Secretary, R. W. Wade, Parliament Buildings, Toronto.

THE ONTARIO DEPARTMENT OF AGRICULTURE

Parliament Buildings, Toronto

SIR WM. H. HEARST,
Minister of Agriculture.

DR. G. C. CREELMAN,
Commissioner of Agriculture.

